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Our Business
In operation since 2002, Intratec is a leading provider of chemicals and utilities pricing data and production cost reports.

We are a group of process engineers, market researchers and cost estimators with extensive industry experience. In a nutshell, our business is about providing up-to-date and independent studies detailing production costs of chemicals and utilities, as well as chemical commodities and utilities pricing data.

With a set of well-designed and cost-effective offerings, we serve a diverse group of customers from all over the world. Small companies and independent consultants often choose our +900 reports to ascertain the costs of a specific production process. By utilizing our reports subscription plans, leading global companies have a repository of reliable and easy-to-compare process economic analyses. Subscribers to our chemical pricing data monitor monthly prices of +40 chemical commodities and utilities.

Intratec also supports clients needing more tailored analyses and data. We provide customized and yet cost-effective services through a structured work methodology, refined over 15 years and based on pillars like conducting services remotely, objective communications and no confidential data exchange.

Our studies and data have been used by our clients in multiple ways, such as:

* To obtain estimates of capital and operating costs of chemical plants
* To learn about the economic potential of R&D breakthroughs
* To screen and assess industrial investment options
* To monitor chemicals and utilities prices

We pride ourselves on being the originator and editor of the Chemical Engineering Magazine’s monthly “Technology Profile” column, which helps readers gain a better understanding of critical aspects of specific chemical process technologies.

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**About this Portfolio**

This portfolio presents reports and data offered by Intratec, for the analyses of chemical markets and production processes economics.

With more than 900 up-to-date reports for the chemical, petrochemical, oil, energy, plastic, renewables & allied sectors, Intratec portfolio is in fact constantly growing - for a complete and updated portfolio, the reader is encouraged to visit [www.intratec.us](http://www.intratec.us).
PRODUCTION COST REPORTS

About our Reports

Intratec offers more than 900 up-to-date reports examining production costs of chemicals and utilities. In short, each report examines the economics of one specific production process, presenting key information such as:

* All costs involved in starting a new industrial plant (capital investment):
  - Cost of construction:
    - Main production units
    - Surrounding infrastructure
    - Contingency
  - Working capital
  - Plant commissioning and start-up
* All costs surrounding the production of Butadiene:
  - Raw materials acquisition & utilities generation (manufacturing variable costs)
  - Labor wages, maintenance, operating charges, overhead, taxes and insurance (manufacturing fixed costs)
  - Administration, research and product distribution (corporate overhead costs)
* Relevant technical coefficients:
  - Raw materials consumption & products generation
  - Labor requirements
* Process block flow diagram
* Description of the industrial plant:
  - Main production units
  - Site infrastructure

Optional Analyses & Data

For each report, Intratec also offers the following optional analyses:

Capital Investment Details

* Plant Construction Cost Breakdown per Discipline
* Plant Construction Cost for Different Capacities
* Production Unit Cost Breakdown per Pieces of Equipment
* Infrastructure Cost Breakdown per Pieces of Equipment
* Project & Construction Implementation Schedule
* Cash Flow & Profitability Analysis
Free Sample Reports

We strongly encourage potential customers to download samples of our reports, optional analyses and data at www.intratec.us.

Report Subscription Plans

Intratec report subscribers have access to new and updated Production Cost Reports every month, according to their interest: (1) basic chemicals & inorganics; (2) plastics, fibers & rubbers or (3) green chemicals & biofuels.

Intratec subscription plans are the best value for price in the market, offering:

* Up-to-date analyses (with the most recent economic data available) every month
* Professional, structured, independent and easy-to-understand reports
* Huge discounts on report store listed price - as much as 90%!
* The possibility to compare the economics of distinct industrial processes on a uniform basis
CHEMICALS & UTILITIES PRICING DATA

Intratec offers online charts comprising current and historical pricing data for chemical commodities and utilities, across several world regions.

Our clients can choose among very cost-effective subscription plans, designed not only for professionals interested in having a reliable source of chemical commodities pricing data, but also users needing information on prices of a specific chemical. Learn why our offer is the best value for price in the market:

* Access up-to-date monthly prices of the chemical of your interest
* Monitor price trends in the main world regions
* Export pricing data into Excel format
* Reliable information obtained from governmental agencies and official sources
* Extremely affordable - as low as USD 14.99 per month!

Available Online Data

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Free Pricing Data Sample

You can access for free historical pricing data for chemical commodities and utilities, across several world regions, at www.intratec.us.
Our Portfolio
BUTYL ACRYLATE

See below Intratec’s reports related to Butyl Acrylate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

BUTYL ACRYLATE PRODUCTION FROM ACRYLIC ACID AND BUTANOL - COST ANALYSIS | REPORT BUTYL ACRYLATE E11A
This report approaches the production of n-Butyl Acrylate from acrylic acid and n-butanol. The process examined is a typical esterification process. The economic analysis performed assumes a plant located in the USA.
www.intratec.us/analysis/butyl-acrylate-e11a

BUTYL ACRYLATE PRODUCTION FROM PROPYLENE AND BUTANOL - COST ANALYSIS | REPORT BUTYL ACRYLATE E21A
This study concerns the production of n-Butyl Acrylate, starting from propylene and n-butanol. Chemical grade propylene is converted to acrylic acid, which is then fed to an esterification reaction, along with n-butanol to generate Butyl Acrylate. The economic analysis performed is based on a plant located in the United States.
www.intratec.us/analysis/butyl-acrylate-e21a

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ACROLEIN

See below Intratec’s reports related to Acrolein.

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ACROLEIN PRODUCTION FROM PROPYLENE - COST ANALYSIS | REPORT ACROLEIN E11A
This report presents the economics of Acrolein production from propylene in the USA, via a typical process.
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METHIONAL

See below Intratec’s reports related to Methional.

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METHIONAL PRODUCTION FROM ACROLEIN AND METYL MERCAPTAN - COST ANALYSIS | REPORT METHIONAL E11A
This report presents the economics of Methional production from acrolein and methyl mercaptan in the USA, via a typical process.
www.intratec.us/analysis/methional-e11a

METHIONAL PRODUCTION FROM PROPYLENE AND METYL MERCAPTAN - COST ANALYSIS | REPORT METHIONAL E21A
This report presents the economics of Methional production from propylene and methyl mercaptan in the USA, via a typical process.
www.intratec.us/analysis/methional-e21a
11-AMINOUNDECANOIC ACID

See below Intratec’s reports related to Aminoundecanoic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

11-AMINOUNDECANOIC ACID PRODUCTION - COST ANALYSIS | REPORT AUN ACID E11A
This report presents the economics of 11-Aminoundecanoic Acid production from castor oil. The process examined is similar to the one developed by Arkema. The economic analysis performed assumes a plant located in the USA.

www.intratec.us/analysis/aun-acid-e11a

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2-ETHYLHEXANOL

See below Intratec’s reports related to 2-EH.

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2-ETHYLHEXANOL PRODUCTION PROCESS - COST ANALYSIS | REPORT 2-EH E11A
This report presents the economics of 2-Ethylhexanol (2-EH) production from propylene and syngas. The process under analysis is a conventional OXO-alcohol technology for obtaining butyraldehyde, which is then converted to 2-Ethylhexanol. The economic assessment assumes a plant located in the United States.
www.intratec.us/analysis/2-eh-e11a

2-ETHYLHEXANOL PRODUCTION FROM BUTYRALDEHYDE - COST ANALYSIS | REPORT 2-EH E21A
This report presents the economics of 2-ethylhexanol (2-EH) production from propylene and syngas. The process under analysis dehydrates n-butyraldehyde to obtain 2-ethylpropilacrolein, which is then hydrogenated to form the 2-ethylhexanol. The economic assessment assumes a plant located in the United States.
www.intratec.us/analysis/2-eh-e21a

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2-ETHYLHEXYL ACRYLATE

See below Intratec’s reports related to 2-Ethylhexyl Acrylate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

2-ETHYLHEXYL ACRYLATE PRODUCTION PROCESS - COST ANALYSIS | REPORT 2-EHA E11A
Techno-economic analysis of 2-Ethylhexyl Acrylate (2-EHA) production from acrylic acid and 2-ethylhexanol in the United States.
www.intratec.us/analysis/2-eha-e11a
2-PROPYLEPTANOL

See below Intratec’s reports related to 2-PH.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

2-PROPYLEPTANOL PRODUCTION PROCESS - COST ANALYSIS | REPORT 2-PH E11A

Feasibility analysis of 2-Propyleptanol (2-PH) production from butenes and syngas. The process under analysis is a conventional OXO-alcohol technology employing bisphosphite-modified rhodium catalyst. In this study, it is assumed a plant operating on the US Gulf Coast.

www.intratec.us/analysis/2-ph-e11a
3-HYDROXYPROPIONIC ACID

See below Intratec’s reports related to 3-HP.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

3-HYDROXYPROPIONIC ACID FROM GLUCOSE - COST ANALYSIS | REPORT 3-HP E11A
This report presents the economics of 3-Hydroxypropionic Acid (3-HPA) production from glucose syrup using a fermentation process similar to the one developed by Cargill. The economic analysis provided assumes a plant located in the USA.
www.intratec.us/analysis/3-hp-e11a

3-HYDROXYPROPIONIC ACID FROM RAW SUGAR - COST ANALYSIS | REPORT 3-HP E12B
The process reviewed in this study is the same as the examined in the report “3-HPA E11A” except that in this case, raw sugar is used as the feedstock used in the fermentation. The economic assessment developed in this report is based on the construction of a plant in Germany.
www.intratec.us/analysis/3-hp-e12b

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See below Intratec’s reports related to ABS.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**ABS PRODUCTION VIA EMULSION PROCESS - COST ANALYSIS | REPORT ABS E11A**
This report presents the economics of Acrylonitrile Butadiene Styrene (ABS) polymer production in the USA using an emulsion process.
[www.intratec.us/analysis/abs-e11a](http://www.intratec.us/analysis/abs-e11a)

**ABS PRODUCTION VIA MASS PROCESS - COST ANALYSIS | REPORT ABS E12A**
Differently from the report “ABS E11A”, the process examined in this report is a mass polymerization process. This report also assesses the construction of an industrial plant in the USA.
[www.intratec.us/analysis/abs-e12a](http://www.intratec.us/analysis/abs-e12a)

**ABS PRODUCTION VIA HYBRID PROCESS - COST ANALYSIS | REPORT ABS E13A**
In this report the process examined for the ABS production is a hybrid polymerization process in the USA.
[www.intratec.us/analysis/abs-e13a](http://www.intratec.us/analysis/abs-e13a)

See below data offered by Intratec related to ABS

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See below Intratec’s reports related to Acetaldehyde.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**ACETALDEHYDE PRODUCTION FROM ACETIC ACID - COST ANALYSIS | REPORT ACETALDEHYDE E21A**
This report presents the economics of Acetaldehyde production from acetic acid in the USA using a typical oxidation process.
www.intratec.us/analysis/acetaldehyde-e21a

**ACETALDEHYDE PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT ACETALDEHYDE E11A**
This report presents a techno-economic analysis of Acetaldehyde production from ethylene in the USA using a typical Hoechst-Wacker oxidation process.
www.intratec.us/analysis/acetaldehyde-e11a

**ACETALDEHYDE PRODUCTION FROM ACETYLENE - COST ANALYSIS | REPORT ACETALDEHYDE E31A**
This study also concerns Acetaldehyde production in the USA. The process reviewed in the study is an acetylene hydration technology similar to the one developed by Chisso.
www.intratec.us/analysis/acetaldehyde-e31a
See below Intratec's reports related to Acetic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**ACETIC ACID PRODUCTION FROM ACETALDEHYDE - COST ANALYSIS | REPORT ACETIC ACID E11A**
This report presents the economics of Acetic Acid production from acetaldehyde in the USA using a typical liquid-phase oxidation process.

[www.intratec.us/analysis/acetic-acid-e11a](http://www.intratec.us/analysis/acetic-acid-e11a)

**ACETIC ACID PRODUCTION FROM METHANOL - COST ANALYSIS | REPORT ACETIC ACID E21A**
This feasibility study refers to Acetic Acid production from methanol and carbon monoxide in the USA using a typical rhodium-catalyzed carbonylation process.

[www.intratec.us/analysis/acetic-acid-e21a](http://www.intratec.us/analysis/acetic-acid-e21a)

**ACETIC ACID PRODUCTION FROM ETHANE - COST ANALYSIS | REPORT ACETIC ACID E31A**
Techno-economic analysis of Acetic Acid production via ethane oxidation in the United States.

[www.intratec.us/analysis/acetic-acid-e31a](http://www.intratec.us/analysis/acetic-acid-e31a)

**ACETIC ACID PRODUCTION FROM BUTANE - COST ANALYSIS | REPORT ACETIC ACID E41A**
This study also approaches the economics of Acetic Acid production in the USA. The process reviewed is an n-butane oxidation process.

[www.intratec.us/analysis/acetic-acid-e41a](http://www.intratec.us/analysis/acetic-acid-e41a)
See below Intratec’s reports related to Acetic Anhydride.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ACETIC ANHYDRIDE PRODUCTION FROM ACETIC ACID - COST ANALYSIS | REPORT ACETIC ANHYDRIDE E11A
This report presents the economics of Acetic Anhydride production from acetic acid in the USA via a ketene process. In the process, acetic acid is first dehydrated to ketene using triethylphosphate as catalyst in a cracking furnace. Ketene reacts with acetic acid in a series of scrubbers, producing Acetic Anhydride. www.intratec.us/analysis/acetic-anhydride-e11a

ACETIC ANHYDRIDE FROM ACETIC ACID AND ACETONE - COST ANALYSIS | REPORT ACETIC ANHYDRIDE E21A
This feasibility study reviews the Acetic Anhydride production from acetone and acetic acid. The economic analysis presented assumes a plant located in the USA. www.intratec.us/analysis/acetic-anhydride-e21a
See below Intratec's reports related to Acetone.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ACETONE PRODUCTION FROM PROPYLENE - COST ANALYSIS | REPORT ACETONE E11A
This report presents the economics of a two-step process for Acetone production from propylene in the USA. In the process examined, propylene is directly hydrated in a catalytic reactor, producing isopropanol. Then, isopropanol is dehydrogenated in a fixed bed catalyst reactor to produce Acetone.
www.intratec.us/analysis/acetone-e11a

ACETONE PRODUCTION FROM ISOPROPA NOL - COST ANALYSIS | REPORT ACETONE E21A
This feasibility study presents the economics of Acetone production from isopropanol using a liquid phase dehydrogenation process. The economic analysis presented in the study assumes a plant located in the USA.
www.intratec.us/analysis/acetone-e21a

ACETONE PRODUCTION FROM PROPYLENE - COST ANALYSIS | REPORT ACETONE E12A
This report also approaches the economics of Acetone production from propylene in the USA. However, Differently from the report "Acetone E11A", this study reviews a direct propylene oxidation process.
www.intratec.us/analysis/acetone-e12a
ACETYLENE

See below Intratec’s reports related to Acetylene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ACETYLENE PRODUCTION FROM NATURAL GAS - COST ANALYSIS | REPORT ACETYLENE E11A
This report presents the economics of Acetylene production from natural gas using a partial combustion process similar to that developed by BASF. The economic analysis developed is based on a plant constructed in the USA.
www.intratec.us/analysis/acetylene-e11a

ACETYLENE PRODUCTION FROM COAL - COST ANALYSIS | REPORT ACETYLENE E21A
It presents the costs associated with the construction and operation of a plant located in the USA for Acetylene production from coal using a typical calcium carbide process. In the process depicted calcium oxide (lime) is reduced by carbon in an electric furnace, generating calcium carbide, which then hydrolyzed to produce Acetylene and calcium hydroxide.
www.intratec.us/analysis/acetylene-e21a

ACETYLENE PRODUCTION FROM NATURAL GAS - COST ANALYSIS | REPORT ACETYLENE E12A
This feasibility study also presents the economics of Acetylene production from natural gas. Different from the report “Acetylene E11A”, this study reviews a typical arc process, which employs a high-power electric arc furnace to crack natural gas. The economic analysis also assumes a plant located in the USA.
www.intratec.us/analysis/acetylene-e12a

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See below Intratec’s reports related to Acrylic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**ACRYLIC ACID PRODUCTION FROM PROPYLENE - COST ANALYSIS | REPORT ACRYLIC ACID E11A**
This report presents the economics of Ester-Grade Acrylic Acid (EAA) production from chemical grade (CG) propylene in the USA using a typical propylene oxidation process.
[www.intratec.us/analysis/acrylic-acid-e11a](http://www.intratec.us/analysis/acrylic-acid-e11a)

**ACRYLIC ACID PRODUCTION FROM GLYCEROL - COST ANALYSIS | REPORT ACRYLIC ACID E21A**
It presents the economics of Ester-Grade Acrylic Acid (EAA) production from crude glycerol in the USA using a two-step process similar to Arkema technology. In the process examined, crude glycerol, obtained from biodiesel plants, is dehydrated to acrolein and subsequently oxidized to Acrylic Acid.
[www.intratec.us/analysis/acrylic-acid-e21a](http://www.intratec.us/analysis/acrylic-acid-e21a)

**BIO-ACRYLIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT ACRYLIC ACID E31A**
This report shows a feasibility study of bio-based Acrylic Acid production from glucose syrup using in the USA using a fermentation process similar to the speculative process proposed by the Delft University of Technology.
[www.intratec.us/analysis/acrylic-acid-e31a](http://www.intratec.us/analysis/acrylic-acid-e31a)

**BIO-ACRYLIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT ACRYLIC ACID E41B**
The process examined in this report is the same process as the examined in the report “Acrylic Acid E31A” with two exceptions: (1) the plant is constructed in Germany, and (2) the raw material used in the fermentation is raw sugar.
[www.intratec.us/analysis/acrylic-acid-e41b](http://www.intratec.us/analysis/acrylic-acid-e41b)

**ACRYLIC ACID PRODUCTION FROM PROPANE - COST ANALYSIS | REPORT ACRYLIC ACID E91A**
This report presents the economics of Ester-Grade Acrylic Acid (EAA) production from propane in the USA.
[www.intratec.us/analysis/acrylic-acid-e91a](http://www.intratec.us/analysis/acrylic-acid-e91a)

**BIO-ACRYLIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT ACRYLIC ACID E32A**
It presents the economics of bio-based Acrylic Acid production from glucose syrup in the USA using a fermentation process similar to Cargill process. Differently from the process examined in the report “Acrylic Acid E31A”, this process is carried in two steps: glucose is fermented to produce 3-hydroxypropionic acid (3-HPA), which is then dehydrated to produce Acrylic Acid.
[www.intratec.us/analysis/acrylic-acid-e32a](http://www.intratec.us/analysis/acrylic-acid-e32a)

**BIO-ACRYLIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT ACRYLIC ACID E42B**
This feasibility study analyses bio-based Acrylic Acid production from raw sugar. The process depicted is the same as the examined in the report “Acrylic Acid E32A”, with two exceptions (1) the plant is constructed in Germany; and (2) the raw material used in the fermentation is raw sugar.
[www.intratec.us/analysis/acrylic-acid-e42b](http://www.intratec.us/analysis/acrylic-acid-e42b)

**GLACIAL ACRYLIC ACID FROM CRUDE ACRYLIC ACID - COST ANALYSIS | REPORT ACRYLIC ACID E51A**
This report presents the costs associated with the construction of an industrial plant, in the USA, for crude acrylic acid purification to
produce Glacial Acrylic Acid. The purification process examined is based on crude acrylic acid crystallization.

www.intratec.us/analysis/acrylic-acid-e51a

GLACIAL ACRYLIC ACID FROM CRUDE ACRYLIC ACID - COST ANALYSIS | REPORT ACRYLIC ACID E52A
Differently from the report "Acrylic Acid E51A", this report examines a crude acrylic acid purification process via distillation.

www.intratec.us/analysis/acrylic-acid-e52a

ACRYLIC ACID PRODUCTION FROM ETHYLENE OXIDE - COST ANALYSIS | REPORT ACRYLIC ACID E71A
This study presents an economic analysis of Ester-Grade Acrylic Acid (EAA) production from ethylene oxide in the USA using a carbonylation process similar to Novomer process.

www.intratec.us/analysis/acrylic-acid-e71a

ACRYLIC ACID PRODUCTION FROM NATURAL GAS - COST ANALYSIS | REPORT ACRYLIC ACID E81A
This report presents the economics of Ester-Grade Acrylic Acid (EAA) production from natural gas in the USA using a typical acetylene-based process. In the process examined, Acrylic Acid is produced from acetylene in a plant integrated upstream with a plant for acetylene production from natural gas.

www.intratec.us/analysis/acrylic-acid-e81a

ACRYLIC ACID PRODUCTION FROM ACETYLENE - COST ANALYSIS | REPORT ACRYLIC ACID E61A
This study reviews the economics of a process for Ester-Grade Acrylic Acid (EAA) production from acetylene. The economic analysis performed is based on a plant constructed in the USA.

www.intratec.us/analysis/acrylic-acid-e61a

See below data offered by Intratec related to Acrylic Acid

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ACRYLIC ACID PRICES
Online database presenting the following information:
* Acrylic Acid Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:

www.intratec.us/chemical-markets/acrylic-acid-prices
ACRYLIC MALEIC COPOLYMER

See below Intratec’s reports related to Acrylic/Maleic Copolymer.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ACRYLIC/MALEIC COPOLYMER PRODUCTION - COST ANALYSIS | REPORT AMC E11A

This report presents an economic analysis of Acrylic Acid Maleic Anhydride Copolymer production. The analysis, reflecting the economics of a United States-based plant, approaches an industrial process in that maleic anhydride is first hydrolyzed before being reacted with acrylic acid to form an Acrylic/Maleic Copolymer that is usually employed in detergents.

www.intratec.us/analysis/amc-e11a
See below Intratec’s reports related to Acrylonitrile.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**ACRYLONITRILE PRODUCTION FROM PROPYLENE - COST ANALYSIS | REPORT ACRYLONITRILE E11A**
This report presents the economics of Acrylonitrile production from chemical grade (CG) propylene in the USA. The process reviewed is a propylene ammonoxidation technology using fluidized bed reactor.
www.intratec.us/analysis/acrylonitrile-e11a

**ACRYLONITRILE PRODUCTION FROM PROPANE - COST ANALYSIS | REPORT ACRYLONITRILE E21A**
This study presents the economics of Acrylonitrile production from propane in the USA using a propane ammonoxidation process similar to the one proposed by PTT Asahi Chemical (PTTAC).
www.intratec.us/analysis/acrylonitrile-e21a

**ACRYLONITRILE PRODUCTION FROM PROPYLENE - COST ANALYSIS | REPORT ACRYLONITRILE E12A**
This report also approaches the economics of Acrylonitrile production from chemical grade (CG) propylene in the USA. Differently from the report “Acrylonitrile E11A”, this study analyzes a fixed bed reactor ammonoxidation process.
www.intratec.us/analysis/acrylonitrile-e12a

See below data offered by Intratec related to Acrylonitrile

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**ACRYLONITRILE PRICES**
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* Acrylonitrile Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  www.intratec.us/chemical-markets/acrylonitrile-prices
ACTIVATED CARBON

See below Intratec’s reports related to Activated Carbon.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ACTIVATED CARBON PRODUCTION PROCESS - COST ANALYSIS | REPORT ACTIVATED CARBON E11A
This report presents the economics of a typical activation/oxidation process for Activated Carbon production from coconut shell in the USA.

www.intratec.us/analysis/activated-carbon-e11a
See below Intratec’s reports related to Adipic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ADIPIC ACID PRODUCTION FROM CYCLOHEXANE - COST ANALYSIS | REPORT ADIPIC ACID E11A
This report presents the economics of Adipic Acid production from cyclohexane in the USA using a two-stage oxidation process similar to the one proposed by Invista. In the process examined cyclohexane is oxidized with air to produce KA oil, which is then oxidized with nitric acid to produce Adipic Acid.
www.intratec.us/analysis/adipic-acid-e11a

BIO-ADIPIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT ADIPIC ACID E22A
This report shows a feasibility study of Bio-Adipic Acid production from glucose syrup in the USA. The process examined is a two-step catalytic process similar to Rennovia process.
www.intratec.us/analysis/adipic-acid-e22a

BIO-ADIPIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT ADIPIC ACID E23A
This report assesses the economics of bio-based Adipic Acid in the USA. Differently from the report “Adipic Acid E22A”, the process examined in this report is a fermentation process similar to BioAmber process.
www.intratec.us/analysis/adipic-acid-e23a

BIO-ADIPIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT ADIPIC ACID E31B
This feasibility study is about bio-based Adipic Acid production from raw sugar. The process depicted is the same as the examined in the report “Adipic Acid E23A”, with two exceptions (1) the plant is constructed in Germany, and (2) the raw material used in the fermentation is raw sugar.
www.intratec.us/analysis/adipic-acid-e31b

ADIPIC ACID PRODUCTION FROM BENZENE - COST ANALYSIS | REPORT ADIPIC ACID E41A
This report presents the economics of Adipic Acid production from benzene in the USA using a two-stage oxidation process similar to Invista process. In this process, the Adipic Acid plant is integrated upstream with a plant for cyclohexane production from benzene.
www.intratec.us/analysis/adipic-acid-e41a

ADIPIC ACID PRODUCTION FROM PHENOL - COST ANALYSIS | REPORT ADIPIC ACID E51A
It presents the economics of Adipic Acid production from phenol in the USA using a typical hydrogenation process. In the process examined, phenol is hydrogenated to produce KA oil, which is then oxidized with nitric acid to produce Adipic Acid.
www.intratec.us/analysis/adipic-acid-e51a

ADIPIC ACID FROM BENZENE AND PROPYLENE - COST ANALYSIS | REPORT ADIPIC ACID E61A
This feasibility study assesses the production of Adipic Acid from benzene and propylene in the USA. The process depicted in this report is the same as the examined in the report “Adipic Acid E51A“ for Adipic Acid production from phenol integrated upstream with a plant for phenol production from benzene and propylene.
www.intratec.us/analysis/adipic-acid-e61a

ADIPIC ACID PRODUCTION FROM BENZENE - COST ANALYSIS | REPORT ADIPIC ACID E44A
This report presents the costs associated with the construction of an industrial plant, in the USA, for Adipic Acid production from benzene. Differently from the report “Adipic Acid E41A”, the process examined in this report is similar to Asahi Kasei process, which involves the generation of cyclohexene and cyclohexanol as intermediates.

www.intratec.us/analysis/adipic-acid-e44a
ALLYL ALCOHOL

See below Intratec’s reports related to Allyl Alcohol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ALLYL ALCOHOL PRODUCTION FROM PROPYLENE - COST ANALYSIS | REPORT ALLYL ALCOHOL E11A

This report presents the economics of Allyl Alcohol production from propylene using a process similar to Showa Denko process. The economic analysis is based on the construction of a plant located in the USA.

www.intratec.us/analysis/allyl-alcohol-e11a
ALLYL CHLORIDE

See below Intratec’s reports related to Allyl Chloride.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ALLYL CHLORIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT ALLYL CHL E11A
This report presents a techno-economic analysis of a typical chlorination process for Allyl Chloride production from chlorine and propylene considering a plant constructed in the United States.

www.intratec.us/analysis/allyl-chl-e11a

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ALLYL PEG

See below Intratec’s reports related to Allyl PEG.

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ALLYL POLYETHYLENE GLYCOL PRODUCTION - COST ANALYSIS | REPORT ALLYL PEG E11A
This report presents the economics of Allyl Polyethylene Glycol (PEG) production in the United States. The analysis assumes an industrial plant that generates Allyl PEG starting from PEG and allyl chloride.
www.intratec.us/analysis/allyl-peg-e11a
Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**ALPHA-CYCLODEXTRIN PRODUCTION FROM CORN - COST ANALYSIS | REPORT ALPHA-CYCLODEXTRIN E11A**
This report presents the economics of alpha-Cyclodextrin production from corn in the USA, using a solvent process.
[www.intratec.us/analysis/alpha-cyclodextrin-e11a](http://www.intratec.us/analysis/alpha-cyclodextrin-e11a)

**ALPHA-CYCLODEXTRIN PRODUCTION FROM CORN - COST ANALYSIS | REPORT ALPHA-CYCLODEXTRIN E12A**
It presents the economics of alpha-Cyclodextrin production from corn in the USA. Differently from the report "Alpha-Cyclodextrin E11A", the process examined in this report is a non-solvent process.
[www.intratec.us/analysis/alpha-cyclodextrin-e12a](http://www.intratec.us/analysis/alpha-cyclodextrin-e12a)
See below Intratec’s reports related to Aluminum Chloride.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ALUMINUM CHLORIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT ALUMINUM CHLORIDE E11A
This report presents the economics of Aluminum Chloride production from aluminum metal and chlorine in the USA.
www.intratec.us/analysis/aluminum-chloride-e11a
ALUMINUM HYDROXIDE

See below Intratec’s reports related to Aluminum Hydroxide.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ALUMINUM HYDROXIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT ALUMINUM HYDROXIDE E11A
This report presents the economics of a typical aluminum Hydroxide Gel production process from aluminum sulfate and soda ash in the USA.

www.intratec.us/analysis/aluminum-hydroxide-e11a
See below Intratec’s reports related to Aluminum Sulfate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ALUMINUM SULFATE PRODUCTION PROCESS - COST ANALYSIS | REPORT ALUMINUM SULFATE E11A
This report presents the economics of a typical Aluminum Sulfate production process from bauxite and sulfuric acid in the USA.
www.intratec.us/analysis/aluminum-sulfate-e11a
AMMONIA

See below Intratec’s reports related to Ammonia.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

AMMONIA PRODUCTION FROM SYNGAS - COST ANALYSIS | REPORT AMMONIA E11A
This report presents the economics of Ammonia production from syngas (synthesis gas). The economic analysis performed assumes a plant located in the USA.
www.intratec.us/analysis/ammonia-e11a

AMMONIA PRODUCTION FROM NATURAL GAS - COST ANALYSIS | REPORT AMMONIA E21A
It presents the economics of Ammonia production from natural gas in the USA using a process similar to KBR Purifier process. In the process examined, syngas is initially produced from natural gas. Then, hydrogen, recovered from syngas feedstock, and nitrogen, recovered from air, react producing Ammonia.
www.intratec.us/analysis/ammonia-e21a

See below data offered by Intratec related to Ammonia

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AMMONIUM CHLORIDE

See below Intratec’s reports related to Ammonium Chloride.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

AMMONIUM CHLORIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT AMMONIUM CHLORIDE E11A
This report presents the economics of a typical Ammonium Chloride production process from ammonia and hydrogen chloride in the USA.

www.intratec.us/analysis/ammonium-chloride-e11a

Purchase & pricing info: www.intratec.us
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See below Intratec’s reports related to ALS.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

AMMONIUM LAURYL SULFATE PRODUCTION - COST ANALYSIS | REPORT ALS E11A
This report presents the economics of Ammonium Lauryl Sulfate (ALS) production from chlorosulfonic acid, lauryl alcohol, and ammonium hydroxide in the USA.

www.intratec.us/analysis/als-e11a
AMMONIUM NITRATE SOLUTION PRODUCTION PROCESS - COST ANALYSIS | REPORT AMMONIUM NITRATE E11A

This report presents the economics of a typical neutralization under vacuum process for the production of Ammonium Nitrate solution. The study examines a plant located in the USA using ammonia and nitric acid as raw materials.

www.intratec.us/analysis/ammonium-nitrate-e11a

AMMONIUM NITRATE POROUS PRILLS PRODUCTION PROCESS - COST ANALYSIS | REPORT AMMONIUM NITRATE E21A

In this study, the production costs of Ammonium Nitrate porous prills (AN-PP) are reviewed. The process examined is a typical process using ammonia and nitric acid for AN-PP production via neutralization/evaporation/prilling. The economic analysis presented assumes a plant constructed in the USA.

www.intratec.us/analysis/ammonium-nitrate-e21a

AMMONIUM NITRATE EMULSION GRADE PRODUCTION PROCESS - COST ANALYSIS | REPORT AMMONIUM NITRATE E31A

This assessment approaches the cost associated with the construction and operation of a plant producing granulated Ammonium Nitrate in the USA. The starting materials used in the plant are ammonia and nitric acid. The granulated Ammonium Nitrate generated as the final product is also known as emulsion grade Ammonium Nitrate.

www.intratec.us/analysis/ammonium-nitrate-e31a

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AMOXICILLIN

See below Intratec’s reports related to Amoxicillin.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

AMOXICILLIN PRODUCTION PROCESS - COST ANALYSIS | REPORT AMOXICILLIN E11A
This report presents the economics of Amoxicillin production from p-hydroxy phenylglycine in the USA.

www.intratec.us/analysis/amoxicillin-e11a

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ANILINE

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Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ANILINE PRODUCTION FROM NITROBENZENE - COST ANALYSIS | REPORT ANILINE E11A
This report presents the economics of Aniline production from nitrobenzene and hydrogen in the USA through a process similar to BASF’s vapor phase nitrobenzene hydrogenation.
www.intratec.us/analysis/aniline-e11a

ANILINE PRODUCTION FROM NITROBENZENE - COST ANALYSIS | REPORT ANILINE E12A
This study presents the economics of Aniline production from nitrobenzene and hydrogen in the USA. Differently from the report "Aniline E11A", the process depicted in this report is similar to Dupont’s liquid phase nitrobenzene hydrogenation.
www.intratec.us/analysis/aniline-e12a

ANILINE PRODUCTION FROM NITROBENZENE - COST ANALYSIS | REPORT ANILINE E13A
This report examines the costs related to the Aniline production from nitrobenzene and hydrogen in the USA. Differently from the report "Aniline E12A", the process examined in this report is similar to Chematur’s liquid phase nitrobenzene hydrogenation.
www.intratec.us/analysis/aniline-e13a

ANILINE PRODUCTION FROM BENZENE - COST ANALYSIS | REPORT ANILINE E21A
This report presents the economics of Aniline production from benzene, nitric acid and hydrogen in the USA. In this report, a process producing mononitrobenzene (MNB) from benzene is integrated with a process which produces Aniline from MNB (as the process depicted in the report "Aniline E12A").
www.intratec.us/analysis/aniline-e21a

ANILINE PRODUCTION FROM PHENOL - COST ANALYSIS | REPORT ANILINE E31A
This study reviews the economics of a typical ammonolysis process for Aniline production from phenol. The economic analysis performed is based on a plant constructed in the USA.
www.intratec.us/analysis/aniline-e31a

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See below Intratec’s reports related to Argon.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ARGON PRODUCTION - COST ANALYSIS | REPORT ARGON E11A
This report presents the economics of Argon recovery from atmospheric air in the USA. The process examined is a typical cryogenic distillation process for production of Argon also generating nitrogen and oxygen as products in large amounts.

www.intratec.us/analysis/argon-e11a
See below Intratec’s reports related to Azodicarbonamide.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

AZODICARBONAMIDE PRODUCTION - COST ANALYSIS | REPORT AZODICARBONAMIDE E11A
This report presents the economics of a typical Azodicarbonamide production process from urea, hydrazine hydrate, and sodium dichromate in the USA.

www.intratec.us/analysis/azodicarbonamide-e11a
BARIUM CHLORIDE

See below Intratec’s reports related to Barium Chloride.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

BARIUM CHLORIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT BARIUM CHLORIDE E11A

This report presents the economics of a typical Barium Chloride production process from baryte, calcium chloride, and coke in the USA.

www.intratec.us/analysis/barium-chloride-e11a
BARIUM NITRATE

See below Intratec’s reports related to Barium Nitrate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

BARIUM NITRATE PRODUCTION PROCESS - COST ANALYSIS | REPORT BARIUM NITRATE E11A
This report analyses the economics of a typical Barium Nitrate production process from barium carbonate and dilute nitric acid in the USA.

www.intratec.us/analysis/barium-nitrate-e11a
See below Intratec’s reports related to Benzene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**BENZENE PRODUCTION FROM REFORMATE - COST ANALYSIS | REPORT BENZENE E21A**
This report presents the economics of Benzene production from reformate in the USA using a typical sulfolane liquid-liquid extraction process.
[www.intratec.us/analysis/benzene-e21a](http://www.intratec.us/analysis/benzene-e21a)

**BENZENE PRODUCTION FROM PYGAS - COST ANALYSIS | REPORT BENZENE E13A**
This study presents the economics of Benzene production from pyrolysis gasoline (pygas) in the USA. Differently from the report “Benzene E11A”, this study reviews a typical liquid-liquid extraction process.
[www.intratec.us/analysis/benzene-e13a](http://www.intratec.us/analysis/benzene-e13a)

**BENZENE PRODUCTION FROM PYGAS - COST ANALYSIS | REPORT BENZENE E11A**
This report examines the costs related to Benzene production from pyrolysis gasoline (pygas) in the USA using a typical extractive distillation process.
[www.intratec.us/analysis/benzene-e11a](http://www.intratec.us/analysis/benzene-e11a)

**BENZENE PRODUCTION FROM PYGAS - COST ANALYSIS | REPORT BENZENE E12A**
It presents the economics of Benzene production from pyrolysis gasoline (pygas) in the USA using a typical hydrodealkylation process.
[www.intratec.us/analysis/benzene-e12a](http://www.intratec.us/analysis/benzene-e12a)

**BENZENE PRODUCTION FROM LIGHT OIL - COST ANALYSIS | REPORT BENZENE E41A**
This study shows a techno-economic analysis of Benzene production from light oil using a hydrodealkylation process similar to CB&I Lummus Litol technology. The light oil feedstock used is a product from coal coking process.
[www.intratec.us/analysis/benzene-e41a](http://www.intratec.us/analysis/benzene-e41a)

**BENZENE PRODUCTION FROM TOLUENE - COST ANALYSIS | REPORT BENZENE E32A**
This report presents the economics of Benzene production from toluene in the USA. Differently from the report “Benzene E31A”, the process reviewed in this study is a typical toluene hydrodealkylation (THDA) process.
[www.intratec.us/analysis/benzene-e32a](http://www.intratec.us/analysis/benzene-e32a)

**BENZENE PRODUCTION FROM TOLUENE - COST ANALYSIS | REPORT BENZENE E33A**
This report also presents the economics of Benzene production from toluene in the USA. However, Differently from the report “Benzene E31A” this assessment depicts a conventional toluene disproportionation process (TDP).
[www.intratec.us/analysis/benzene-e33a](http://www.intratec.us/analysis/benzene-e33a)

**BENZENE PRODUCTION FROM TOLUENE - COST ANALYSIS | REPORT BENZENE E31A**
It presents the economics of a selective toluene disproportionation process (STDP) for Benzene production in the USA.
[www.intratec.us/analysis/benzene-e31a](http://www.intratec.us/analysis/benzene-e31a)

**BENZENE PRODUCTION FROM HEAVY AROMATICS - COST ANALYSIS | REPORT BENZENE E61A**

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For further questions: sales@intratec.us
This report shows the costs associated with Benzene production from heavy aromatics in the USA using a typical transalkylation process.

www.intratec.us/analysis/benzene-e61a

BENZENE PRODUCTION FROM TOLUENE - COST ANALYSIS | REPORT BENZENE E34A
This study presents the economic analysis for the construction of an industrial plant for Benzene production from toluene in the USA. Different from the report “Benzene E33A” this study reviews a toluene hydrodealkylation (THDA) technology similar to Houdry’s Detol.

www.intratec.us/analysis/benzene-e34a

See below data offered by Intratec related to Benzene

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BENZENE PRICES
Online database presenting the following information:

* Benzene Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  www.intratec.us/chemical-markets/benzene-prices
See below Intratec’s reports related to Biodiesel.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

BIODIESEL PRODUCTION FROM ALGAE - COST ANALYSIS | REPORT BIODIESEL E21A
Economics of Biodiesel production from carbon dioxide in the USA using a three-step process: an algae cultivation step similar to Simgae; an extraction step similar to OriginOil Single Step Extraction; and a typical transesterification step. Crude glycerol is generated as by-product.
www.intratec.us/analysis/biodiesel-e21a

BIODIESEL PRODUCTION FROM SOYBEAN OIL - COST ANALYSIS | REPORT BIODIESEL E14A
The process analyzed in this report is the same examined in the report “Biodiesel E11A” with the exception that pharmaceutical grade glycerol is generated as by-product.
www.intratec.us/analysis/biodiesel-e14a

BIODIESEL PRODUCTION FROM SOYBEAN OIL - COST ANALYSIS | REPORT BIODIESEL E11A
This report presents the economics of Biodiesel production from soybean oil in the USA using a typical alkaline catalysis process. In this process, crude glycerol is generated as by-product.
www.intratec.us/analysis/biodiesel-e11a

BIODIESEL PRODUCTION FROM SOYBEAN OIL - COST ANALYSIS | REPORT BIODIESEL E15A
This report presents an economic analysis for the same process studied in the report “Biodiesel E13A” with the difference that the by-product generated is pharmaceutical grade glycerol.
www.intratec.us/analysis/biodiesel-e15a

BIODIESEL PRODUCTION FROM SOYBEAN OIL - COST ANALYSIS | REPORT BIODIESEL E13A
Feasibility analysis of Biodiesel production from soybean oil also considering a plant located in the United States. This process is a heterogeneous catalysis process similar to Axens Esterfip-H process. Crude glycerol is generated as by-product.
www.intratec.us/analysis/biodiesel-e13a

BIODIESEL PRODUCTION FROM SOYBEAN OIL - COST ANALYSIS | REPORT BIODIESEL E12A
Techno-economic study of Biodiesel production from soybean oil in the USA. Differently from the report "Biodiesel E11A", in this report, Biodiesel is produced via a process similar to Conнемann process. Pharmaceutical grade glycerol by-product is generated.
www.intratec.us/analysis/biodiesel-e12a

BIODIESEL PRODUCTION FROM SOYBEAN OIL - COST ANALYSIS | REPORT BIODIESEL E16A
Techno-economic analysis of Biodiesel production from soybean oil in the United States using a supercritical fluid technology.
www.intratec.us/analysis/biodiesel-e16a

BIODIESEL PRODUCTION FROM SOYBEAN OIL - COST ANALYSIS | REPORT BIODIESEL E17A
Techno-economic analysis of Biodiesel production from soybean oil in the United States using a catalytic distillation process.
www.intratec.us/analysis/biodiesel-e17a
BPA PRODUCTION PROCESS - COST ANALYSIS | REPORT BPA E11A
This report presents the economics of Bisphenol A (BPA) production in the USA via a condensation reaction of acetone with phenol catalyzed by hydrogen chloride.
www.intratec.us/analysis/bpa-e11a

BPA PRODUCTION PROCESS - COST ANALYSIS | REPORT BPA E12A
This report presents a techno-economic analysis of BPA production in the USA. Differently from the report “BPA E11A”, the process analyzed in this report is similar to Dow’s QBIS technology. In this process, BPA is produced by the reaction of acetone with phenol catalyzed by a cation-exchange resin.
www.intratec.us/analysis/bpa-e12a
BRONOPOL

See below Intratec’s reports related to Bronopol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

BRONOPOL PRODUCTION PROCESS - COST ANALYSIS | REPORT BRONOPOL E11A
This report presents the economics of a typical Bronopol production process from sodium hydroxide, calcium chloride, nitromethane, and liquid bromine in the USA.
www.intratec.us/analysis/bronopol-e11a
AROMATICS BTX

See below Intratec’s reports related to BTX.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

GREEN BTX PRODUCTION FROM WOOD CHIPS - COST ANALYSIS | REPORT BTX E11A
This report presents the economics of the production of a mixture of Benzene, Toluene and Xylenes (BTX) from wood chips. The economic analysis is based on a plant located in the USA using a catalytic fast pyrolysis (CFP) process for the conversion of biomass into the BTX product.
www.intratec.us/analysis/btx-e11a

BTX PRODUCTION FROM ETHANE - COST ANALYSIS | REPORT BTX E21A
In this study, the process reviewed is typical aromatization process producing a mixture of Benzene, Toluene and Xylenes (BTX) from ethane. The economic assessment assumes a plant located in the USA.
www.intratec.us/analysis/btx-e21a
**BUTADIENE**

See below Intratec’s reports related to Butadiene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**BUTADIENE PRODUCTION FROM N-BUTANE - COST ANALYSIS | REPORT BUTADIENE E11A**
This report presents the economics of 1,3-Butadiene (BD) production from n-butane in the USA, using a dehydrogenation process similar to CB&I Lummus Catadiene.
www.intratec.us/analysis/butadiene-e11a

**BUTADIENE PRODUCTION FROM BUTENES - COST ANALYSIS | REPORT BUTADIENE E21A**
This study presents the economics of 1,3-Butadiene (BD) production from mixed butenes in the USA, using an oxidative dehydrogenation process similar to TPC/UOP Oxo-D.
www.intratec.us/analysis/butadiene-e21a

**BUTADIENE PRODUCTION FROM ETHANOL - COST ANALYSIS | REPORT BUTADIENE E31A**
This report examines the costs related to 1,3-Butadiene (BD) production from hydrous ethanol in the USA using a process similar to the one proposed by American Process (Carbide and Carbon Chemicals Corporation).
www.intratec.us/analysis/butadiene-e31a

**BIO-BUTADIENE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT BUTADIENE E41A**
It presents the economics of bio-based 1,3-Butadiene (BD) production from glucose syrup in the USA using a direct aerobic fermentation process similar to the one proposed by Global Bioenergies.
www.intratec.us/analysis/butadiene-e41a

**BIO-BUTADIENE PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT BUTADIENE E51B**
The process examined in this report is the same process as the examined in the report “Butadiene E41A” with two exceptions: (1) the plant is constructed in Germany, and (2) the raw material used in the fermentation is raw sugar.
www.intratec.us/analysis/butadiene-e51b

**BUTADIENE PRODUCTION FROM CRUDE C4S - COST ANALYSIS | REPORT BUTADIENE E61A**
This report analyses the economics of 1,3-Butadiene production from a crude C4s stream in the USA using an extraction process similar to BASF NMP. Raffinate-1 is generated as by-product in the process.
www.intratec.us/analysis/butadiene-e61a

**BUTADIENE PRODUCTION FROM CRUDE C4S - COST ANALYSIS | REPORT BUTADIENE E62A**
It presents the economics of 1,3-Butadiene extraction from a crude C4s stream in the USA. Differently from the report “Butadiene E61A”, the process examined in this report is similar to Nippon Zeon.
www.intratec.us/analysis/butadiene-e62a

**BUTADIENE PRODUCTION FROM CARBON MONOXIDE - COST ANALYSIS | REPORT BUTADIENE E71A**
This report presents the costs associated with 1,3-Butadiene production from carbon monoxide in the USA using a process similar to LanzaTech/Invista.
www.intratec.us/analysis/butadiene-e71a

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BIO-BUTADIENE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT BUTADIENE E42A
It presents the economics of bio-based 1,3-Butadiene (BD) production from glucose syrup in the USA using a fermentation process. Different from the report “Butadiene E41A”, this report examines an anaerobic fermentation process.
www.intratec.us/analysis/butadiene-e42a

BIO-BUTADIENE PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT BUTADIENE E52B
This study refers to bio-based 1,3-Butadiene production from raw sugar in Germany. The process examined is the same as the depicted in the report “BD E42A”, which consists of an anaerobic fermentation process.
www.intratec.us/analysis/butadiene-e52b

BUTADIENE PRODUCTION FROM CRUDE C4S - COST ANALYSIS | REPORT BUTADIENE E63A
It presents the economics of an extraction process for 1,3-BD production from crude C4s in the USA. Differently from reports “Butadiene E61A” and “Butadiene E62A” the process examined in this report is similar to UOP KLP, which involves a selective acetylenes hydrogenation step followed by extractive distillation.
www.intratec.us/analysis/butadiene-e63a

See below data offered by Intratec related to Butadiene

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BUTADIENE PRICES
Online database presenting the following information:
* Butadiene Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  www.intratec.us/chemical-markets/butadiene-prices
BUTANEDIOL PRODUCT FROM BIOTECHNOLOGY - COST ANALYSIS | REPORT BUTANEDIOL E11A
This report presents the economics of bio-based 1,4-Butanediol (BDO) production from glucose syrup in the USA using a direct fermentation process similar to the one proposed by Genomatica.
www.intratec.us/analysis/butanediol-e11a

BUTANEDIOL PRODUCT FROM BIOTECHNOLOGY - COST ANALYSIS | REPORT BUTANEDIOL E12A
Differently from report "Butanediol E11A", the process examined in this report consists of a two-step process: a fermentation step for succinic acid production similar to Korea Advanced Institute of Science & Technology (KAIST) process and a succinic acid hydrogenation step similar to Invista process. The economic analysis also is based on a plant constructed in the USA.
www.intratec.us/analysis/butanediol-e12a

BUTANEDIOL PRODUCT FROM SUCCHINIC ACID - COST ANALYSIS | REPORT BUTANEDIOL E21A
This feasibility study examines 1,4-Butanediol (BDO) production from succinic acid in the USA using a hydrogenation process similar to the one proposed by BioAmber.
www.intratec.us/analysis/butanediol-e21a

BUTANEDIOL PRODUCT FROM ACETYLENE - COST ANALYSIS | REPORT BUTANEDIOL E31A
This report presents the economics of an 1,4-Butanediol (BDO) production process from acetylene and formaldehyde in the USA. The process examined is a typical acetylene-based process (Reppe process).
www.intratec.us/analysis/butanediol-e31a

BUTANEDIOL PRODUCT FROM MALEIC ANHYDRIDE - COST ANALYSIS | REPORT BUTANEDIOL E61A
This report presents an economic analysis of 1,4-Butanediol (BDO) production from maleic anhydride in the USA using a process similar to the one proposed by JM Davy.
www.intratec.us/analysis/butanediol-e61a

BUTANEDIOL PRODUCT FROM PROPYLENE - COST ANALYSIS | REPORT BUTANEDIOL E41A
This feasibility analysis is about 1,4-Butanediol (BDO) production from propylene in the USA using an allyl alcohol process. Propanol and 2-methyl-1,3-propanediol are generated as by-products in the process.
www.intratec.us/analysis/butanediol-e41a

BUTANEDIOL PRODUCT FROM PROPYLENE OXIDE - COST ANALYSIS | REPORT BUTANEDIOL E71A
This report shows a techno-economic analysis related to the construction of an industrial plant in the USA for 1,4-Butanediol (BDO) production from propylene oxide via a process similar to the process proposed by LyondellBasell.
www.intratec.us/analysis/butanediol-e71a

BUTANEDIOL PRODUCT FROM BUTADIENE - COST ANALYSIS | REPORT BUTANEDIOL E51A
This assessment examines a technology similar to the process proposed by Mitsubishi Chemical for 1,4-Butanediol (BDO) production from butadiene (BD) in the USA.

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BIO-BUTANEDIOL PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT BUTANEDIOL E13A
This report also concerns the bio-based BDO production in the USA. However, differently from the report “Butanediol E12A”, in this report, BDO is produced using a two-step process similar to Myriant/JM Davy technology. In this process, ammonium sulfate and tetrahydrofuran (THF) are generated as by-products.

BIO-BUTANEDIOL PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT BUTANEDIOL E83B
This feasibility study analyses the same process examined in the report “Butanediol E13A”, with two exceptions (1) the plant is constructed in Germany; and (2) the raw material used in the fermentation is raw sugar.

BIO-BUTANEDIOL PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT BUTANEDIOL E81B
It examines bio-based BDO production using a fermentation process similar to the one proposed by Genomatica. Differently from the report “Butanediol E11A”, this report presents an economic analysis for a plant constructed in Germany using raw sugar as feedstock in the fermentation.

BIO-BUTANEDIOL PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT BUTANEDIOL E82B
This report presents the economics of bio-based 1,4-Butanediol production from raw sugar in Germany. The process examined is the same process as depicted in the report “Butanediol E12A”, involving two steps with succinic acid being an intermediate.
BUTANOL

See below Intratec’s reports related to Butanol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**BUTANOL PRODUCTION FROM ETHANOL - COST ANALYSIS | REPORT BUTANOL E31A**
The report shows an economic analysis of the construction of an industrial plant in the USA for n-Butanol production. In the process reviewed ethanol is dimerized into n-Butanol via the Guerbet reaction.

[www.intratec.us/analysis/butanol-e31a](www.intratec.us/analysis/butanol-e31a)

**BIO-BUTANOL PRODUCTION FROM CORN - COST ANALYSIS | REPORT BUTANOL E11A**
This report presents the economics of bio-based Butanol production from corn. The process under analysis is a conventional Acetone-Butanol-Ethanol (ABE) fermentation process. The economic assessment assumes a plant located in the USA.

[www.intratec.us/analysis/butanol-e11a](www.intratec.us/analysis/butanol-e11a)

**BIO-BUTANOL PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT BUTANOL E41B**
This report examines a conventional Acetone-Butanol-Ethanol (ABE) fermentation process. Differently from the report “Butanol E11A”, the economic analysis presented in this report assumes a plant located in Germany using raw sugar as feedstock.

[www.intratec.us/analysis/butanol-e41b](www.intratec.us/analysis/butanol-e41b)

**BUTANOL PRODUCTION FROM PROPYLENE AND SYNGAS - COST ANALYSIS | REPORT BUTANOL E21A**
This report presents an economic analysis of n-Butanol production from propylene and syngas, assuming a plant located on the US Gulf Coast. The process under analysis is similar to the LP OXO technology jointly licensed by JM Davy and Dow, employing Selector 30 catalyst.

[www.intratec.us/analysis/butanol-e21a](www.intratec.us/analysis/butanol-e21a)

**BUTANOL PRODUCTION FROM BUTYRALDEHYDE - COST ANALYSIS | REPORT BUTANOL E51A**
This study analyzes the costs for n-Butanol production from butyraldehyde. The economic analysis is based on a plant constructed in the USA.

[www.intratec.us/analysis/butanol-e51a](www.intratec.us/analysis/butanol-e51a)

**BUTANOL PRODUCTION FROM PROPYLENE AND SYNGAS - COST ANALYSIS | REPORT BUTANOL E61A**
This feasibility study also approaches n-Butanol production from propylene and syngas, assuming a plant located on the US Gulf Coast. The process under analysis is similar to the LP OXO technology jointly developed by JM Davy and Union Carbide, employing Selector 10 catalyst.

[www.intratec.us/analysis/butanol-e61a](www.intratec.us/analysis/butanol-e61a)

**BUTANOL PRODUCTION FROM PROPYLENE AND SYNGAS - COST ANALYSIS | REPORT BUTANOL E71A**
This report also concerns the costs associated with the production of n-Butanol from propylene and syngas. The process under analysis is similar to the technology jointly developed by Rhodia (former Rhône-Poulenc) and Ruhrchemie. The economic analysis presented assumes a plant located on the US Gulf Coast.

[www.intratec.us/analysis/butanol-e71a](www.intratec.us/analysis/butanol-e71a)

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INTRATEC'S REPORTS ON BUTENE

See below Intratec's reports related to Butenes.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

BUTENES PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT BUTENE E11A
This report presents the economics of Butenes production from ethylene using a dimerization process similar to CB&I Lummus process. In the process under analysis, gasoline and fuel oil are generated as by-products. The economic analysis assumes a plant constructed in the USA.

www.intratec.us/analysis/butene-e11a

1-BUTENE PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT BUTENE E12A
This study presents the costs associated with the construction of an industrial plant producing 1-Butene from ethylene in the USA. This study analyzes a process similar to the Axens/SABIC AlphaButol technology. In the process under analysis, raffinate-2 is generated as by-product.

www.intratec.us/analysis/butene-e12a

1-BUTENE FROM RAFFINATE-2 VIA EXTRACTIVE DISTILLATION - COST ANALYSIS | REPORT BUTENE E21A
In this report, the economic analysis concerns a plant, also located in the USA, producing 1-Butene using a conventional industrial approach for extractive distillation of raffinate-2, which also generates raffinate-3 as by-product.

www.intratec.us/analysis/butene-e21a

BUTENES PRODUCTION FROM PROPYLENE - COST ANALYSIS | REPORT BUTENE E41A
This report shows the economics of Butenes production from propylene via a metathesis process. In the process examined, ethylene is generated as by-product. The economic assessment assumes a plant located in the USA.

www.intratec.us/analysis/butene-e41a

1-BUTENE FROM RAFFINATE-2 VIA SUPERFRACTIONATION - COST ANALYSIS | REPORT BUTENE E22A
This study also approaches 1-Butene production from raffinate-2 in the USA. However, different from the report "Butene E21A", this report reviews a typical superfractionation process. Raffinate-3 is also generated as by-product in this process.

www.intratec.us/analysis/butene-e22a

1-BUTENE FROM RAFFINATE-2 VIA FRACTIONATION - COST ANALYSIS | REPORT BUTENE E23A
This feasibility study is also about 1-Butene production from raffinate-2. However, in this study, raffinate-2 is first subjected to a hydrogenation step before fractionation. Raffinate-3 is generated as by-product. The economic analysis is also based on a plant located in the USA.

www.intratec.us/analysis/butene-e23a

1-BUTENE FROM RAFFINATE-2 VIA FRACTIONATION - COST ANALYSIS | REPORT BUTENE E24A
In the process reviewed in this report, raffinate-2 is sent to a fractionation step and further subjected to an isomerization step to produce 1-Butene. The economic analysis is based on a plant located in the USA.

www.intratec.us/analysis/butene-e24a

1-BUTENE FROM RAFFINATE-2 VIA ADSORPTION - COST ANALYSIS | REPORT BUTENE E26A
This report also presents a techno-economic analysis about 1-Butene production from raffinate-2 in the USA. Differently from the other reports, in this study, a molecular sieve adsorption process similar to the UOP Sorbutene technology is used to extract 1-butene from the raffinate stream.

See below data offered by Intratec related to Butenes

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BUTENES PRICES
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  www.intratec.us/chemical-markets/butenes-prices
See below Intratec’s reports related to Butyraldehyde.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

BUTYRALDEHYDE PRODUCTION FROM PROPYLENE AND SYNGAS - COST ANALYSIS | REPORT BUTYRALDEHYDE E11A
This report presents an economic analysis of n-Butyraldehyde production from propylene and syngas, assuming a plant located on the US Gulf Coast. The process under analysis is similar to the LP OXO technology jointly licensed by JM Davy and Dow, employing Selector 30 catalyst.
www.intratec.us/analysis/butyraldehyde-e11a

BUTYRALDEHYDE PRODUCTION FROM PROPYLENE AND SYNGAS - COST ANALYSIS | REPORT BUTYRALDEHYDE E21A
This feasibility study also approaches n-Butyraldehyde production from propylene and syngas, assuming a plant located on the US Gulf Coast. The process under analysis is similar to the LP OXO technology jointly developed by JM Davy and Union Carbide, employing Selector 10 catalyst.
www.intratec.us/analysis/butyraldehyde-e21a

BUTYRALDEHYDE PRODUCTION FROM PROPYLENE AND SYNGAS - COST ANALYSIS | REPORT BUTYRALDEHYDE E31A
This report also concerns the costs associated with the production of n-Butyraldehyde from propylene and syngas. The process under analysis is similar to the technology jointly developed by Rhodia (former Rhône-Poulenc) and Ruhrchemie. The economic analysis presented assumes a plant located on the US Gulf Coast.
www.intratec.us/analysis/butyraldehyde-e31a
CAFFEINE

See below Intratec’s reports related to Caffeine.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

CAFFEINE PRODUCTION PROCESS - COST ANALYSIS | REPORT CAFFEINE E11A

This report presents the economics of a typical Caffeine production process from tea waste in the USA.

www.intratec.us/analysis/caffeine-e11a

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CALCIUM AMMONIUM NITRATE

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CALCIUM AMMONIUM NITRATE PRODUCTION PROCESS - COST ANALYSIS | REPORT CAN E11A

This report presents the economics of Calcium Ammonium Nitrate production from ammonia, nitric acid, and lime meal in the USA, via a typical neutralization under pressure process.

www.intratec.us/analysis/can-e11a
CALCIUM CARBIDE

See below Intratec’s reports related to Calcium Carbide.

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CALCIUM CARBIDE PRODUCTION FROM LIMESTONE - COST ANALYSIS | REPORT CALCIUM CARBIDE E11A

This report examines the costs related to Calcium Carbide production process from limestone and coke in the USA, using a typical electric arc furnace process.

www.intratec.us/analysis/calcium-carbide-e11a
See below Intratec’s reports related to Calcium Carbonate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

CALCIUM CARBONATE PRODUCTION FROM LIMESTONE - COST ANALYSIS | REPORT CALCIUM CARBONATE E11A
This report presents the economics of Calcium Carbonate production from limestone in the USA, via a typical process.
www.intratec.us/analysis/calcium-carbonate-e11a

CALCIUM CARBONATE PRODUCTION FROM LIME - COST ANALYSIS | REPORT CALCIUM CARBONATE E21A
This report presents the economics of Calcium Carbonate production from lime in the USA, via a typical process.
www.intratec.us/analysis/calcium-carbonate-e21a
CALCIUM GLUCONATE

See below Intratec’s reports related to Calcium Gluconate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

CALCIUM GLUCONATE PRODUCTION PROCESS - COST ANALYSIS | REPORT CALCIUM GLUCONATE E11A

This report presents the economics of a typical Calcium Gluconate production process from glucose, sodium bromide, and calcium carbonate in the USA.

www.intratec.us/analysis/calcium-gluconate-e11a

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CALCIUM HYPOCHLORITE

See below Intratec’s reports related to Calcium Hypochlorite.

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CALCIUM HYPOCHLORITE PRODUCTION VIA SODIUM METHOD - COST ANALYSIS | REPORT CALCIUM HYPOCHLORITE E11A
This report presents the economics of Calcium Hypochlorite (70 wt%) production from slaked lime, sodium hydroxide and chlorine via a typical sodium process. The economic analysis is based on a plant located in the USA.
www.intratec.us/analysis/calcium-hypochlorite-e11a

CALCIUM HYPOCHLORITE PRODUCTION VIA CALCIUM METHOD - COST ANALYSIS | REPORT CALCIUM HYPOCHLORITE E21A
This report presents the economics of Calcium Hypochlorite production from slaked lime and chlorine via a typical calcium process. In this process, a mixture of Calcium Hypochlorite, calcium chloride, and calcium hydroxide (also known as bleaching powder) is obtained as the final product. The economic analysis is based on a plant located in the USA.
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CALCIUM SULFATE

See below Intratec’s reports related to Calcium Sulfate.

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CALCIUM SULFATE PRODUCTION PROCESS - COST ANALYSIS | REPORT CALCIUM SULFATE E11A
This report analyses the economics of a Calcium Sulfate production process from gypsum in the USA, via a typical dehydration process.

www.intratec.us/analysis/calcium-sulfate-e11a
See below Intratec's reports related to Caprolactam.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**CAPROLACTAM PRODUCTION FROM BENZENE - COST ANALYSIS | REPORT CAPROLACTAM E11A**
This report presents the economics of a conventional Capropol process for Caprolactam production from benzene, sulfuric acid, ammonia and oleum. The economic analysis presented assumes a plant located in the USA.
[www.intratec.us/analysis/caprolactam-e11a](http://www.intratec.us/analysis/caprolactam-e11a)

**CAPROLACTAM PRODUCTION FROM BUTADIENE - COST ANALYSIS | REPORT CAPROLACTAM E21A**
This feasibility study shows the economics of a Caprolactam production process from butadiene and hydrogen cyanide based on an industrial plant located in the USA. Hexamethylenediamine (HMDA) is generated as by-product in the process under analysis.
[www.intratec.us/analysis/caprolactam-e21a](http://www.intratec.us/analysis/caprolactam-e21a)

**CAPROLACTAM PRODUCTION FROM BUTADIENE - COST ANALYSIS | REPORT CAPROLACTAM E31A**
This report presents the cost associated with a plant located in the USA producing Caprolactam from butadiene, carbon monoxide, hydrogen, and ammonia. The process under analysis involves the following steps: reaction of carbon monoxide with butadiene; hydrocarbonylation; amination and cyclization.
[www.intratec.us/analysis/caprolactam-e31a](http://www.intratec.us/analysis/caprolactam-e31a)

**CAPROLACTAM PRODUCTION FROM CYCLOHEXANE - COST ANALYSIS | REPORT CAPROLACTAM E41A**
This report presents the economics of Caprolactam production from cyclohexane. The process examined is a conventional technology, which involves the generation of cyclohexanone intermediate. The economic analysis performed assumes a plant located in the USA.
[www.intratec.us/analysis/caprolactam-e41a](http://www.intratec.us/analysis/caprolactam-e41a)

**CAPROLACTAM PRODUCTION FROM PHENOL - COST ANALYSIS | REPORT CAPROLACTAM E51A**
This feasibility study examines the economics of a process producing Caprolactam from phenol. The economic analysis performed is based on a plant constructed in the USA.
[www.intratec.us/analysis/caprolactam-e51a](http://www.intratec.us/analysis/caprolactam-e51a)

**CAPROLACTAM PRODUCTION FROM CYCLOHEXANE - COST ANALYSIS | REPORT CAPROLACTAM E42A**
This report also concerns the production of Caprolactam from cyclohexane in the USA. However, Differently from the report "Caprolactam E11A", this report reviews a cyclohexane photonitrozation process (PNC).
[www.intratec.us/analysis/caprolactam-e42a](http://www.intratec.us/analysis/caprolactam-e42a)

**CAPROLACTAM PRODUCTION FROM TOLUENE - COST ANALYSIS | REPORT CAPROLACTAM E61A**
This study reviews the economics of a process for Caprolactam production from toluene. The economic analysis performed is based on a plant constructed in the USA.
[www.intratec.us/analysis/caprolactam-e61a](http://www.intratec.us/analysis/caprolactam-e61a)

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**CARBON FIBER PRODUCTION FROM PAN - COST ANALYSIS | REPORT CARBON FIBER E11A**
Techno-economic analysis of a typical Carbon Fiber production process starting from polyacrylonitrile (PAN) fiber in the United States.
www.intratec.us/analysis/carbon-fiber-e11a

**CARBON FIBER PRODUCTION FROM PITCH - COST ANALYSIS | REPORT CARBON FIBER E21A**
Feasibility study of a process for Carbon Fiber production from petroleum pitch in the USA.
www.intratec.us/analysis/carbon-fiber-e21a
This report presents the economics of a typical cryogenic partial condensation process for Carbon Monoxide (CO) production from synthesis gas in the USA.

www.intratec.us/analysis/carbon-monoxide-e11a
CARBOXYMETHYL CELLULOSE

See below Intratec’s reports related to CMC.

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SODIUM CARBOXYMETHYL CELLULOSE PRODUCTION - COST ANALYSIS | REPORT CMC E11A

This report presents the economics of Sodium Carboxymethyl Cellulose production, starting from cotton linter, employing monochloroacetic acid and caustic soda. The analysis approaches a plant in the United States using a process similar to the one developed by Hoechst.

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CARRAGEENAN

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CARRAGEENAN PRODUCTION VIA EXTRACTION - COST ANALYSIS | REPORT CARRAGEENAN E11A
Economics of Carrageenan production starting from seaweed, using a batch extraction process in the presence of calcium hydroxide. This analysis considers a United States-based facility.

www.intratec.us/analysis/carrageenan-e11a
CEFALOTIN

See below Intratec’s reports related to Cefalotin.

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CEFALOTIN PRODUCTION PROCESS - COST ANALYSIS | REPORT CEFALOTIN E11A
This report presents the economics of a typical Cefalotin production process in the USA.
www.intratec.us/analysis/cefalotin-e11a
CHLORINE

See below Intratec’s reports related to Chlorine.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

CHLORINE PRODUCTION FROM SODIUM CHLORIDE - COST ANALYSIS | REPORT CHLORINE E11A
This report presents the economics of Chlorine production from sodium chloride via a membrane plant located in the USA. In the process under analysis, an aqueous solution of sodium chloride (brine) is decomposed electrolytically in a membrane cell, producing Chlorine, sodium hydroxide and hydrogen.
[www.intratec.us/analysis/chlorine-e11a](http://www.intratec.us/analysis/chlorine-e11a)

CHLORINE PRODUCTION FROM SODIUM CHLORIDE - COST ANALYSIS | REPORT CHLORINE E12A
As in the report “Chlorine E11A”, this study also presents the economics of Chlorine production in the USA, except that the process reviewed is a diaphragm technology.
[www.intratec.us/analysis/chlorine-e12a](http://www.intratec.us/analysis/chlorine-e12a)

CHLORINE PRODUCTION FROM SODIUM CHLORIDE - COST ANALYSIS | REPORT CHLORINE E13A
Different from reports “Chlorine E11A” and “Chlorine E12A”, this report shows the economics of Chlorine production in the USA using a mercury process.
[www.intratec.us/analysis/chlorine-e13a](http://www.intratec.us/analysis/chlorine-e13a)

CHLORINE PRODUCTION FROM HYDROGEN CHLORIDE - COST ANALYSIS | REPORT CHLORINE E21A
This report presents the economics of secondary Chlorine production from hydrogen chloride. The analysis approaches a plant in the United States using a process similar to the Kel-Chlor process, proprietary technology based on the Deacon process. In this process, anhydrous hydrogen chloride is subjected to an oxidation reaction in the presence of catalysts producing Chlorine.
[www.intratec.us/analysis/chlorine-e21a](http://www.intratec.us/analysis/chlorine-e21a)

CHLORINE PRODUCTION FROM HYDROGEN CHLORIDE - COST ANALYSIS | REPORT CHLORINE E22A
It presents the costs associated with Chlorine production in the USA. Differently from the report “Chlorine E21A”, the process reviewed in this study is similar to the ThyssenKrupp Uhde hydrogen chloride electrolysis process. In this process HCl aqueous solution is decomposed electrolytically in a diaphragm cell, producing Chlorine and hydrogen.
[www.intratec.us/analysis/chlorine-e22a](http://www.intratec.us/analysis/chlorine-e22a)

CHLORINE PRODUCTION FROM HYDROGEN CHLORIDE - COST ANALYSIS | REPORT CHLORINE E23A
As in the report “Chlorine E22A”, this report also evaluates Chlorine production from HCl in the USA. However, the process examined in this report is similar to the Dupont hydrogen chloride dry electrolysis process. In this process, anhydrous hydrogen chloride is decomposed electrolytically in gaseous phase.
[www.intratec.us/analysis/chlorine-e23a](http://www.intratec.us/analysis/chlorine-e23a)

CHLORINE PRODUCTION FROM HYDROGEN CHLORIDE - COST ANALYSIS | REPORT CHLORINE E24A
Differently from the report “Chlorine E22A”, the process depicted in this report is based on an early stage process described on patents assigned to the University of Southern California. In this process, anhydrous hydrogen chloride is subjected to a two stage catalytic oxidation, yielding gaseous Chlorine and water. The economic analysis presented is also based on a plant constructed in the USA.
[www.intratec.us/analysis/chlorine-e24a](http://www.intratec.us/analysis/chlorine-e24a)

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CHLORINE DIOXIDE VIA SULFURIC ACID PROCESS - COST ANALYSIS | REPORT CHLORINE DIOXIDE E11A
This report presents the economics of Chlorine Dioxide production from sodium chlorate via a sulfuric acid-based reduction process. The economic analysis approaches a plant located in the USA.
www.intratec.us/analysis/chlorine-dioxide-e11a

CHLORINE DIOXIDE VIA HYDROCHLORIC ACID PROCESS - COST ANALYSIS | REPORT CHLORINE DIOXIDE E21A
This study presents the costs associated with the construction of a plant for Chlorine Dioxide production from chlorine in the USA. The plant analyzed uses a typical hydrochloric acid-based reduction process integrated with a sodium chlorate production process via electrolysis.
www.intratec.us/analysis/chlorine-dioxide-e21a
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See below Intratec’s reports related to Chloroprene.

**CHLOROPRENE PRODUCTION FROM ACETYLENE - COST ANALYSIS | REPORT CHLOROPRENE E21A**
This report presents the economics of Chloroprene production from acetylene and hydrogen chloride in the USA.
www.intratec.us/analysis/chloroprene-e21a

**CHLOROPRENE PRODUCTION FROM BUTADIENE - COST ANALYSIS | REPORT CHLOROPRENE E11A**
This report analyses the economics of Chloroprene production from butadiene and chlorine in the USA, via a typical vapor phase butadiene chlorination process.
www.intratec.us/analysis/chloroprene-e11a
CHLOROSILANES

See below Intratec's reports related to Chlorosilanes.

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MIXED METHYLCHLOROSILANES PRODUCTION - COST ANALYSIS | REPORT CHLOROSILANES E11A
This report presents the economics of Mixed Methylchlorosilanes (mostly dimethyldichlorosilanes) production, starting from silicon and methyl chloride. The economic analysis approaches a plant located on the US Gulf Coast. In this process, methyl chloride and silicon powder are reacted in a fluid bed reactor with copper catalyst.
www.intratec.us/analysis/chlorosilanes-e11a

PHENYLCHLOROSILANES PRODUCTION PROCESS - COST ANALYSIS | REPORT CHLOROSILANES E21A
Feasibility analysis of Phenylmethyldichlorosilanes production starting from benzene and methyldichlorosilanes. The study assumes a plant located on the US Gulf Coast.
www.intratec.us/analysis/chlorosilanes-e21a

VINYLCHLOROSILANES PRODUCTION PROCESS - COST ANALYSIS | REPORT CHLOROSILANES E31A
Techno-economic study of Vinylmethyldichlorosilane production using a conventional industrial process based on high temperature condensation of vinyl chloride with methyldichlorosilane. The economic analysis is based on a US Gulf Coast-based plant.
www.intratec.us/analysis/chlorosilanes-e31a
This report presents the economics of Chromium(III) Oxide production from sodium dichromate and sulfur in the USA, via a typical reduction process.

www.intratec.us/analysis/chromium(iii)-oxide-e11a
CITRIC ACID

See below Intratec’s reports related to Citric Acid.

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CITRIC ACID PRODUCTION FROM CORN - COST ANALYSIS | REPORT CITRIC ACID E11A
This report presents the economics of Citric Acid production from corn via a fermentation process. The economic analysis is based on a plant constructed in the USA.

www.intratec.us/analysis/citric-acid-e11a
CO2 CAPTURE STRATEGIES

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CO2 CAPTURE BY CHEMICAL ABSORPTION WITH MEA - COST ANALYSIS | REPORT CO2 CAPTURE E11A

www.intratec.us/analysis/co2-capture-e11a
COPPER(II) SULFATE

See below Intratec's reports related to Copper(II) Sulfate.

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COPPER(II) SULFATE PRODUCTION PROCESS - COST ANALYSIS | REPORT COPPER(II) SULFATE E11A

This report analyses the economics of a typical Copper(II) Sulfate production process from copper metal and sulfuric acid in the USA.

www.intratec.us/analysis/copper(ii)-sulfate-e11a
CUMENE

See below Intratec’s reports related to Cumene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

CUMENE PRODUCTION PROCESS - COST ANALYSIS | REPORT CUMENE E11A
This report presents the economics of Cumene production from benzene and polymer grade (PG) propylene using a typical alkylation process. The economic assessment assumes a plant located in the USA.
www.intratec.us/analysis/cumene-e11a

CUMENE PRODUCTION PROCESS - COST ANALYSIS | REPORT CUMENE E15A
This feasibility study reviews Cumene production from benzene and refinery grade (RG) propylene via an alkylation process. Differently from the report “Cumene E14A”, the alkylation step is carried out using a zeolite catalyst. The economic assessment also assumes a plant located in the USA.
www.intratec.us/analysis/cumene-e15a

CUMENE PRODUCTION PROCESS - COST ANALYSIS | REPORT CUMENE E21A
The process examined in this study is the same as the report “Cumene E15A”, except that in the raw material used is chemical grade (CG) propylene.
www.intratec.us/analysis/cumene-e21a

CUMENE PRODUCTION PROCESS - COST ANALYSIS | REPORT CUMENE E12A
This study presents the economics of a typical Cumene production process from benzene and refinery grade (RG) propylene via alkylation using a solid phosphoric acid (SPA) catalyst. The analysis is based on a plant constructed in the USA.
www.intratec.us/analysis/cumene-e12a

CUMENE PRODUCTION PROCESS - COST ANALYSIS | REPORT CUMENE E13A
This study reviews Cumene production from benzene and refinery grade (RG) propylene. Different from report “Cumene E12A”, this study examines a process that involves alkylation using a solid phosphoric acid (SPA) catalyst and transalkylation using a zeolite catalyst.
www.intratec.us/analysis/cumene-e13a

CUMENE PRODUCTION PROCESS - COST ANALYSIS | REPORT CUMENE E14A
It presents the economics of Cumene production process from benzene and refinery grade (RG) propylene. Differently from the report “Cumene E12A”, the process reviewed is an alkylation technology using an aluminum chloride (AlCl3) catalyst.
www.intratec.us/analysis/cumene-e14a

See below data offered by Intratec related to Cumene

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See below Intratec’s reports related to Cyclohexane.

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**CYCLOHEXANE FROM BENZENE AND HYDROGEN - COST ANALYSIS | REPORT CYCLOHEXANE E11A**
This feasibility study shows the economics of Cyclohexane production from benzene using a liquid phase hydrogenation process. The economic analysis presented is based on a plant constructed in the USA.

[www.intratec.us/analysis/cyclohexane-e11a](http://www.intratec.us/analysis/cyclohexane-e11a)

**CYCLOHEXANE FROM BENZENE AND HYDROGEN - COST ANALYSIS | REPORT CYCLOHEXANE E12A**
This report also concerns the production of Cyclohexane from benzene and hydrogen in the USA. However, Differently from the report "Cyclohexane E11A", this report reviews a vapor phase hydrogenation process.

[www.intratec.us/analysis/cyclohexane-e12a](http://www.intratec.us/analysis/cyclohexane-e12a)
See below Intratec’s reports related to DAP.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

DIAMMONIUM PHOSPHATE PRODUCTION - COST ANALYSIS | REPORT DAP E11A
This feasibility study shows the economics of Diammonium Phosphate (DAP formulation 18-46-0) production from phosphate rock and ammonia via a typical ammoniation process. The economic analysis presented is based on a plant constructed in the USA.
www.intratec.us/analysis/dap-e11a
DIBUTYL KETONE

See below Intratec’s reports related to Dibutyl Ketone.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

DIBUTYL KETONE PRODUCTION PROCESS - COST ANALYSIS | REPORT DBK E11A
Techno-economic analysis of Dibutyl Ketone (DBK) production from levulinic acid in the United States. In this process, Fuel Grade DBK (90 wt% purity) is generated.
www.intratec.us/analysis/dbk-e11a

DIBUTYL KETONE PRODUCTION PROCESS - COST ANALYSIS | REPORT DBK E12A
Techno-economic analysis of Dibutyl Ketone (DBK) production from levulinic acid in the United States. Differently from the report “DBK 11A”, in this case, Chemical Grade DBK (99.5 wt% purity) is produced, as well as valeric acid (86 wt% purity) by-product.
www.intratec.us/analysis/dbk-e12a
See below Intratec’s reports related to DDVP.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

DICHLORVOS PRODUCTION - COST ANALYSIS | REPORT DICHLORVOS E11A
This report presents the economics of a typical Dichlorvos (DDVP) production process from trimethyl phosphite and chloral in the USA.
www.intratec.us/analysis/dichlorvos-e11a
See below Intratec’s reports related to DCPD.

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DICYCLOPENTADIENE PRODUCTION PROCESS - COST ANALYSIS | REPORT DCPD E11A

This report presents the economics of Dicyclopentadiene (DCPD) production from a crude C5s stream, generating C5 raffinate as by-product. The economic analysis is based on the construction of a plant in the USA.

www.intratec.us/analysis/dcpd-e11a
See below Intratec’s reports related to Diesel.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**DIESEL PRODUCTION FROM ALGAE - COST ANALYSIS | REPORT DIESEL E31A**
Feasibility analysis of Diesel production from carbon monoxide using an algae cultivation process in the United States using a three-step process: an algae cultivation step similar to Simgae; an extraction step similar to OriginOil Single Step Extraction; and a typical hydrotreating step.
www.intratec.us/analysis/diesel-e31a

**RENEWABLE DIESEL FROM SOYBEAN OIL - COST ANALYSIS | REPORT DIESEL E12A**
The process analyzed in this report is the same examined in the report “Diesel E11A” with the exception that purchased hydrogen is utilized.
www.intratec.us/analysis/diesel-e12a

**RENEWABLE DIESEL FROM SOYBEAN OIL - COST ANALYSIS | REPORT DIESEL E11A**
Techno-economic analysis of Renewable Diesel production from soybean oil in the United States using a typical hydroprocessing process presenting an integrated hydrogen production plant.
www.intratec.us/analysis/diesel-e11a

**RENEWABLE DIESEL FROM WOOD - COST ANALYSIS | REPORT DIESEL E21A**
Economics of Fischer-Tropsch (FT) Diesel production from wood chips via syngas in the USA. This process consists of two steps: a gasification step similar to Linde Carbo-V Technology and a Fischer-Tropsch synthesis step similar to Shell GTL process.
www.intratec.us/analysis/diesel-e21a

**RENEWABLE DIESEL FROM SOYBEAN OIL - COST ANALYSIS | REPORT DIESEL E61A**
Techno-economic analysis of Renewable Diesel production from soybean oil in the United States. Differently from the report “Diesel E11A”, this report analyzes a process similar to Neste Oil NExBTL. In this case, propane is generated as by-product.
www.intratec.us/analysis/diesel-e61a

**RENEWABLE DIESEL PRODUCTION FROM CORN STOVER - COST ANALYSIS | REPORT DIESEL E41A**
Techno-economic analysis of Renewable Diesel production from corn stover in the United States using a catalytic conversion process.
www.intratec.us/analysis/diesel-e41a

**RENEWABLE DIESEL PRODUCTION FROM CORN STOVER - COST ANALYSIS | REPORT DIESEL E42A**
Techno-economic analysis of Renewable Diesel production from corn stover in the United States. Differently from the report “Diesel E41A”, in this report a bioconversion process is evaluated.
www.intratec.us/analysis/diesel-e42a

**RENEWABLE DIESEL FROM WOOD - COST ANALYSIS | REPORT DIESEL E22A**
www.intratec.us/analysis/diesel-e22a

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Techno-economic analysis of Renewable Diesel production from algae in the United States. In this process, lipids extracted from the algal biomass are converted to Diesel.

www.intratec.us/analysis/diesel-e51a
See below Intratec’s reports related to Diethyl Sulfate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

DIETHYL SULFATE PRODUCTION PROCESS - COST ANALYSIS | REPORT DIETHYL SULFATE E11A
This report analyses the economics of a Diethyl Sulfate production process from rectified spirit and chlorosulfonic acid in the USA.

www.intratec.us/analysis/diethyl-sulfate-e11a
DIMETHYL CARBONATE

See below Intratec’s reports related to DMC.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

DIMETHYL CARBONATE PRODUCTION PROCESS - COST ANALYSIS | REPORT DMC E11A
This report presents the economics of a non-phosgene process for Dimethyl Carbonate (DMC) production from methanol in the USA. This process is a typical oxidative carbonylation process.

www.intratec.us/analysis/dmc-e11a
See below Intratec’s reports related to DMT.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

DIMETHYL TEREPTHALATE FROM P-XYLENE AND METHANOL - COST ANALYSIS | REPORT DMT E11A
This report examines the costs related to Dimethyl Terephthalate (DMT) production from p-xylene and methanol in the USA, via a typical oxidation and esterification processes.
www.intratec.us/analysis/dmt-e11a

DIMETHYL TEREPTHALATE FROM TOLUENE AND METHANOL - COST ANALYSIS | REPORT DMT E21A
It presents the economics of Dimethyl Terephthalate (DMT) production from toluene and methanol. Toluene is converted to p-xylene, which is combined with methanol to generate DMT.
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See below Intratec’s reports related to DMF.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

DIMETHYLFURAN PRODUCTION PROCESS - COST ANALYSIS | REPORT DMF E11A
Techno-economic analysis of Dimethylfuran (DMF) production from glucose syrup in the United States via hydroxymethylfurfural (HMF) intermediate.
www.intratec.us/analysis/dmf-e11a
DINITROTOLUENE

See below Intratec’s reports related to DNT.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

DINITROTOLUENE PRODUCTION FROM TOLUENE - COST ANALYSIS | REPORT DNT E11A
Feasibility analysis of Dinitrotoluene (DNT) production from toluene and nitric acid in the United States via a two-step nitration process.

www.intratec.us/analysis/dnt-e11a
DIPHENYL CARBONATE

See below Intratec’s reports related to DPC.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

DIPHENYL CARBONATE FROM PHOSGENE AND PHENOL - COST ANALYSIS | REPORT DPC E11A
This report presents the economics of Diphenyl Carbonate (DPC) production from phosgene and phenol using a typical interfacial process. The economic assessment assumes a plant located in the USA.
www.intratec.us/analysis/dpc-e11a

DIPHENYL CARBONATE FROM ETHYLENE OXIDE AND PHENOL - COST ANALYSIS | REPORT DPC E21A
This study reviews the costs associated with Diphenyl Carbonate (DPC) production from ethylene oxide and phenol in the USA. The process examined is similar to Asahi Kasei process, which involves the generation of dimethyl carbonate (DMC) intermediate.
www.intratec.us/analysis/dpc-e21a

DIPHENYL CARBONATE FROM PHENOL AND METHANOL - COST ANALYSIS | REPORT DPC E31A
This report presents a techno-economic study about Diphenyl Carbonate (DPC) production from phenol and methanol in the USA. The process under analysis is similar to Ube process, which involves: production of dimethyl oxalate (DMO) intermediate from methanol; DMO reaction with phenol to produce diphenyl oxalate (DPO); and decarbonylation of DPO to DPC.
www.intratec.us/analysis/dpc-e31a

DIPHENYL CARBONATE FROM PHENOL AND METHANOL - COST ANALYSIS | REPORT DPC E41A
It presents the economics of Diphenyl Carbonate (DPC) production from phenol and methanol using a process similar to the one proposed by SABIC. In this process, methanol undergoes an oxidative carbonylation to form dimethyl carbonate (DMC), which reacts with phenol to produce DPC. The economic analysis presented is based on the construction of an industrial plant in the USA.
www.intratec.us/analysis/dpc-e41a

DIPHENYL CARBONATE PRODUCTION FROM PHENOL - COST ANALYSIS | REPORT DPC E51A
This feasibility study reviews Diphenyl Carbonate (DPC) production from phenol. The process under analysis is an oxidative carbonylation process, which involves the direct reaction of phenol with carbon monoxide to form DPC. The economic analysis is based on a plant constructed in the USA.
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ELECTRICITY GENERATION

See below Intratec’s reports related to Electricity Generation.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ELECTRICITY GENERATION FROM COAL - COST ANALYSIS | REPORT ELECTRICITY E11A
This report presents the economics of Electricity generation from coal in the USA using an advanced pulverization coal process. In the process under analysis, coal is burned to produce steam in a supercritical pulverized coal boiler (SCPC).
www.intratec.us/analysis/electricity-e11a

ELECTRICITY GENERATION FROM COAL - COST ANALYSIS | REPORT ELECTRICITY E12A
The process examined in this study is the same as the analyzed in the report “Electricity E11A”, except it includes a carbon capture and sequestration (CCS) system. The economic assessment also assumes a plant located in the USA.
www.intratec.us/analysis/electricity-e12a

ELECTRICITY GENERATION FROM NATURAL GAS - COST ANALYSIS | REPORT ELECTRICITY E21A
This report examines the costs associated to Electricity generation from natural gas in the USA via conventional natural gas combined cycle. In this process F-class combustion turbines (CT) are employed to Electricity generation.
www.intratec.us/analysis/electricity-e21a

ELECTRICITY GENERATION FROM NATURAL GAS - COST ANALYSIS | REPORT ELECTRICITY E22A
This study also provides a techno-economic analysis about Electricity generation from natural gas in the USA. Differently from the report “Electricity E21A”, in this study, high efficiency H-class combustion turbines (CT) are employed to Electricity generation.
www.intratec.us/analysis/electricity-e22a

ELECTRICITY GENERATION FROM NATURAL GAS - COST ANALYSIS | REPORT ELECTRICITY E23A
The process examined in this report is the same as the reviewed in the report “Electricity E22A”, with the exception that a carbon capture and sequestration (CCS) system is employed. The economic assessment is also based on a plant located in the USA.
www.intratec.us/analysis/electricity-e23a

ELECTRICITY GENERATION FROM NATURAL GAS - COST ANALYSIS | REPORT ELECTRICITY E24A
This report also provides a feasibility study about Electricity generation from natural gas in the USA. The process under analysis employs a conventional E-class combustion turbine (CT).
www.intratec.us/analysis/electricity-e24a

ELECTRICITY GENERATION FROM NATURAL GAS - COST ANALYSIS | REPORT ELECTRICITY E25A
Differently from the other reports related to Electricity generation from natural gas, this report reviews the use of advanced F-class combustion turbine in a simple-cycle mode. The economic analysis is also based on a plant constructed in the USA.
www.intratec.us/analysis/electricity-e25a

ELECTRICITY GENERATION FROM COAL - COST ANALYSIS | REPORT ELECTRICITY E13A
In this report, the process reviewed is an integrated gasification combined cycle (IGCC) for Electricity generation from coal. The economic analysis is based on a plant located in the USA.
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ELECTRICITY GENERATION FROM COAL - COST ANALYSIS | REPORT ELECTRICITY E14A
The process examined in this report is the same as the report “Electricity E13A”, with the exception that it uses a carbon capture and sequestration (CCS) system. The economic analysis performed also assumes a plant located in the USA.
www.intratec.us/analysis/electricity-e14a

ELECTRICITY GENERATION FROM WOOD - COST ANALYSIS | REPORT ELECTRICITY E31A
It presents the economics of Electricity generation from wood in the USA via a gasification process. In the process examined, wood feedstock is converted to syngas via a gasification step, and the syngas is used as fuel to Electricity generation via a traditional combined-cycle.
www.intratec.us/analysis/electricity-e31a

ELECTRICITY GENERATION FROM WOOD - COST ANALYSIS | REPORT ELECTRICITY E32A
Differently from the report “Electricity E31A”, the process reviewed in this study employs a biomass bubbling fluidized bed (BFB) boiler to burn wood. The economic analysis performed also assumes a plant located in the USA.
www.intratec.us/analysis/electricity-e32a
EPICHLOROHYDRIN

See below Intratec’s reports related to Epichlorohydrin.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

EPICHLOROHYDRIN FROM CHLORINE AND ALLYL CHLORIDE - COST ANALYSIS | REPORT ECH E11A
Economic analysis of Epichlorohydrin production from chlorine and allyl chloride in the USA using a typical hypochlorination process.
www.intratec.us/analysis/ech-e11a

EPICHLOROHYDRIN PRODUCTION FROM PROPYLENE - COST ANALYSIS | REPORT ECH E21A
Feasibility study of Epichlorohydrin production from propylene and chlorine via allyl chloride intermediate in the USA using a typical dehydrochlorination process.
www.intratec.us/analysis/ech-e21a

EPICHLOROHYDRIN PRODUCTION FROM PROPYLENE - COST ANALYSIS | REPORT ECH E22A
Techno-economic analysis of Epichlorohydrin production from propylene and chlorine in the USA. Differently from the process examined in report “ECH E21A”, this process is conducted via allyl alcohol intermediate.
www.intratec.us/analysis/ech-e22a

EPICHLOROHYDRIN PRODUCTION FROM GLYCEROL - COST ANALYSIS | REPORT ECH E31A
Economics of Epichlorohydrin production from glycerin in the USA using a typical hypochlorination process.
www.intratec.us/analysis/ech-e31a

EPICHLOROHYDRIN PRODUCTION FROM ACROLEIN - COST ANALYSIS | REPORT ECH E41A
Techno-economic study of an early stage process for Epichlorohydrin production from acrolein in the USA. The process examined is a non-commercial route based on Dow Chemical patents.
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See below data offered by Intratec related to Epichlorohydrin

Chemicals Pricing Data. Intratec offers online up-to-date and historical prices of chemical commodities and utilities, across several world regions. To know more about Intratec Chemicals Pricing Data, go to page 11

EPICHLOROHYDRIN PRICES
Online database presenting the following information:
* Epichlorohydrin Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  www.intratec.us/chemical-markets/epichlorohydrin-prices
See below Intratec’s reports related to Epoxy Resins.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**LIQUID AND SOLID EPOXY RESINS PRODUCTION PROCESS - COST ANALYSIS | REPORT EPOXY RESINS E11A**

This report presents the economics of Liquid and Solid Epoxy Resins production from epichlorohydrin and bisphenol A (BPA) considering a United States-based facility.

www.intratec.us/analysis/epoxy-resins-e11a

**LIQUID EPOXY RESIN PRODUCTION PROCESS - COST ANALYSIS | REPORT EPOXY RESINS E12A**

In this report, epichlorohydrin and bisphenol A (BPA) are used in the production of Liquid Epoxy Resin (LER) only. The economic analysis also considers a plant located in the United States.

www.intratec.us/analysis/epoxy-resins-e12a

**SOLID EPOXY RESIN PRODUCTION PROCESS - COST ANALYSIS | REPORT EPOXY RESINS E21A**

Feasibility analysis of Solid Epoxy Resin (SER) production from liquid epoxy resin (LER) and bisphenol A (BPA) in the USA.

www.intratec.us/analysis/epoxy-resins-e21a

**EPOXY PHENOL NOVOLAC RESIN PRODUCTION - COST ANALYSIS | REPORT EPOXY RESINS E31A**

This report presents a techno-economic study of a process for Epoxy Phenol Novolac Resin production from epichlorohydrin and phenol in a plant constructed in the United States.

www.intratec.us/analysis/epoxy-resins-e31a

**EPOXY CRESOL NOVOLAC RESIN PRODUCTION - COST ANALYSIS | REPORT EPOXY RESINS E41A**

Economic analysis of Epoxy Cresol Novolac Resin production from epichlorohydrin and o-cresol for a plant also located in the USA.

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See below Intratec's reports related to Ethanol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

CELLULOSIC ETHANOL FROM CORN STOVER - COST ANALYSIS | REPORT ETHANOL E11A
Economics of second generation Ethanol production from corn stover in the USA via a biochemical conversion process composed of the following steps: corn stover pretreatment with dilute acid and ammonia conditioning; enzymatic hydrolysis; and fermentation.

www.intratec.us/analysis/ethanol-e11a

CELLULOSIC ETHANOL FROM CORN STOVER - COST ANALYSIS | REPORT ETHANOL E12A
Economic analysis of Ethanol production from corn stover in the USA. Differently from the report "Ethanol E11A", the process examined in this report presents a corn stover pretreatment step with dilute acid and overliming.

www.intratec.us/analysis/ethanol-e12a

ETHANOL PRODUCTION FROM CORN DRY MILLING - COST ANALYSIS | REPORT ETHANOL E41A
Economics of hydrous Ethanol production from corn in the USA using a typical dry milling process.

www.intratec.us/analysis/ethanol-e41a

CELLULOSIC ETHANOL FROM WOOD CHIPS - COST ANALYSIS | REPORT ETHANOL E51A
Economic analysis of second generation Ethanol production from wood chips via a thermochemical process in the USA.

www.intratec.us/analysis/ethanol-e51a

ETHANOL AND SUGAR FROM SUGARCANE - COST ANALYSIS | REPORT ETHANOL E71F
Techno-economic study of hydrous Ethanol and raw sugar production from sugarcane using a typical process in Brazil.

www.intratec.us/analysis/ethanol-e71f

ETHANOL PRODUCTION FROM SUGARCANE - COST ANALYSIS | REPORT ETHANOL E72F
Economic analysis of hydrous Ethanol production in Brazil using a typical process based on sugarcane feedstock.

www.intratec.us/analysis/ethanol-e72f

CELLULOSIC ETHANOL FROM SWITCHGRASS - COST ANALYSIS | REPORT ETHANOL E81A
This report presents the economics of second generation Ethanol production from switchgrass in the USA via a biochemical conversion process composed of the following steps: biomass pretreatment with dilute acid and ammonia conditioning; enzymatic hydrolysis; and fermentation.

www.intratec.us/analysis/ethanol-e81a

CELLULOSIC ETHANOL FROM CORN STOVER - COST ANALYSIS | REPORT ETHANOL E13A
Techno-economic analysis of second generation Ethanol production from corn stover in the USA using a biochemical conversion process similar to AVAP technology, developed by American Process.

www.intratec.us/analysis/ethanol-e13a

CELLULOSIC ETHANOL FROM WOOD CHIPS - COST ANALYSIS | REPORT ETHANOL E52A
Techno-economic analysis of Ethanol production from wood chips in the USA. Differently from the report "Ethanol E51A", the process

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examined is a biochemical conversion process similar to AVAP technology, developed by American Process.

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CELLULOSIC ETHANOL FROM SUGARCANE BAGASSE - COST ANALYSIS | REPORT ETHANOL E62F
Economics of second generation Ethanol production from sugarcane bagasse in Brazil using a biochemical conversion process similar to AVAP technology, developed by American Process.

www.intratec.us/analysis/ethanol-e62f

CELLULOSIC ETHANOL FROM CORN STOVER - COST ANALYSIS | REPORT ETHANOL E14A
Feasibility study of Ethanol production from corn stover in the USA. Differently from the report "Ethanol E13A", the process examined is similar to GreenPower, also developed by American Process.

www.intratec.us/analysis/ethanol-e14a

CELLULOSIC ETHANOL FROM WOOD CHIPS - COST ANALYSIS | REPORT ETHANOL E53A
Feasibility analysis of second generation Ethanol production from wood chips in the USA. Differently from the report "Ethanol E52A", the process examined is similar to GreenPower, also developed by American Process.

www.intratec.us/analysis/ethanol-e53a

CELLULOSIC ETHANOL FROM SUGARCANE BAGASSE - COST ANALYSIS | REPORT ETHANOL E63F
The process examined in this report is the same examined in the report "Ethanol E53A", with two exceptions: (1) the plant is constructed in Brazil, and (2) the raw material used is sugarcane bagasse.

www.intratec.us/analysis/ethanol-e63f

ETHANOL FROM MUNICIPAL SOLID WASTE - COST ANALYSIS | REPORT ETHANOL E32A
Techno-economic study of Ethanol production from municipal solid waste (MSW) in the USA using the same process analyzed in the report "Ethanol E13A".

www.intratec.us/analysis/ethanol-e32a

CELLULOSIC ETHANOL FROM SWITCHGRASS - COST ANALYSIS | REPORT ETHANOL E82A
Feasibility analysis of Ethanol production from switchgrass in the USA. Differently from the report "Ethanol E81A", the process examined is a biochemical conversion process similar to AVAP technology, developed by American Process.

www.intratec.us/analysis/ethanol-e82a

ETHANOL PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT ETHANOL E91A
Economics of Ethanol production from ethylene in the USA using a typical direct hydration process.

www.intratec.us/analysis/ethanol-e91a

ETHANOL PRODUCTION FROM SORGHUM - COST ANALYSIS | REPORT ETHANOL E21A
Economic analysis of hydrous Ethanol production in the United States using a typical process based on sorghum feedstock.

www.intratec.us/analysis/ethanol-e21a

ETHANOL PRODUCTION FROM WOOD CHIPS - COST ANALYSIS | REPORT ETHANOL E54A
Techno-economic study of cellulosic Ethanol production from wood chips in the USA. Similarly to the process presented in the report "Ethanol E51A", the process analyzed in this report is also a thermochemical process, but in this case a dimethyl ether (DME) intermediate is produced from syngas, being then converted to Ethanol.

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**ETHANOL PRICES**

Online database presenting the following information:

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ETHYL ACRYLATE

See below Intratec’s reports related to Ethyl Acrylate.

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ETHYL ACRYLATE FROM ACRYLIC ACID - COST ANALYSIS | REPORT ETHYL ACRYLATE E11A
This report presents the economics of Ethyl Acrylate production from acrylic acid and ethanol in the USA, via a typical esterification process.

www.intratec.us/analysis/ethyl-acrylate-e11a
See below Intratec’s reports related to Ethylbenzene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ETHYLBENZENE PRODUCTION FROM BENZENE AND ETHYLENE - COST ANALYSIS | REPORT EB E11A
Economics of a liquid-phase alkylation process using zeolite catalyst for Ethylbenzene production from benzene and polymer grade ethylene in the USA.
www.intratec.us/analysis/eb-e11a

ETHYLBENZENE PRODUCTION FROM BENZENE AND ETHYLENE - COST ANALYSIS | REPORT EB E12A
Techno-economic study of a catalytic distillation process similar to CDTECH for Ethylbenzene production from benzene and dilute ethylene in the USA.
www.intratec.us/analysis/eb-e12a

ETHYLBENZENE PRODUCTION FROM BENZENE AND ETHYLENE - COST ANALYSIS | REPORT EB E13A
This study also approaches the economics of Ethylbenzene production from benzene and polymer grade ethylene in the USA. Differently from the report "EB E11A", the process examined in this study is a conventional liquid-phase alkylation process using a aluminum chloride catalyst.
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ETHYLBENZENE PRICES
Online database presenting the following information:
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Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ETHYLENE PRODUCTION VIA STEAM CRACKING OF NAPHTHA - COST ANALYSIS | REPORT ETHYLENE E72A
The process examined in this report is the same examined in the report “Ethylene E71A”, with the exception that this process is conducted at low severity conditions, maximizing propylene to Ethylene ratio. The economic analysis presented is also based on a plant located in the USA.
www.intratec.us/analysis/ethylene-e72a

ETHYLENE PRODUCTION VIA STEAM CRACKING OF ETHANE - COST ANALYSIS | REPORT ETHYLENE E11A
Economics of a steam cracking process for Polymer Grade (PG) Ethylene production from ethane in the USA.
www.intratec.us/analysis/ethylene-e11a

ETHYLENE PRODUCTION VIA CRACKING OF ETHANE/PROPANE - COST ANALYSIS | REPORT ETHYLENE E21A
This study also concerns Polymer Grade (PG) Ethylene production in the USA. The process examined in this report uses a mixture of ethane and propane as raw material.
www.intratec.us/analysis/ethylene-e21a

ETHYLENE PRODUCTION VIA STEAM CRACKING OF PROPANE - COST ANALYSIS | REPORT ETHYLENE E31A
Techno-economic study of a steam cracking process for PG Ethylene production in the USA. The process reviewed uses propane as the only feedstock.
www.intratec.us/analysis/ethylene-e31a

ETHYLENE PRODUCTION VIA STEAM CRACKING OF N-BUTANE - COST ANALYSIS | REPORT ETHYLENE E41A
Economic analysis of n-butane steam cracking for Polymer Grade Ethylene production in the USA.
www.intratec.us/analysis/ethylene-e41a

ETHYLENE PRODUCTION VIA STEAM CRACKING OF ISOBUTANE - COST ANALYSIS | REPORT ETHYLENE E51A
The process examined in this report is the same examined in the report “Ethylene E41A”, but isobutane is used as feedstock. The economic analysis presented is also based on a plant located in the USA.
www.intratec.us/analysis/ethylene-e51a

ETHYLENE PRODUCTION FROM ATMOSPHERIC GAS OIL - COST ANALYSIS | REPORT ETHYLENE E61A
Feasibility analysis of a steam cracking process for Polymer Grade Ethylene production from atmospheric gas oil (AGO) feedstock in the USA.
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ETHYLENE PRODUCTION VIA STEAM CRACKING OF NAPHTHA - COST ANALYSIS | REPORT ETHYLENE E71A
Economics of Polymer Grade (PG) Ethylene production from light naphtha feedstock in the USA using a steam cracking process at high severity conditions to maximize Ethylene yield.
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ETHYLENE PRODUCTION VIA ETHANOL DEHYDRATION - COST ANALYSIS | REPORT ETHYLENE E81A
Techno-economic analysis of Green PG Ethylene production from hydrous ethanol in the USA using a dehydration process similar to the one proposed by BP Chemicals.
www.intratec.us/analysis/ethylene-e81a

ETHYLENE PRODUCTION VIA ETHANOL DEHYDRATION - COST ANALYSIS | REPORT ETHYLENE E82A
Economics of Green Polymer Grade (PG) Ethylene production from hydrous ethanol in the USA. Differently from the report “Ethylene E81A”, the dehydration process examined in this report is similar to the processes developed by Chematur and Petron.
www.intratec.us/analysis/ethylene-e82a

ETHYLENE PRODUCTION FROM METHANE - COST ANALYSIS | REPORT ETHYLENE EA1A
Economic analysis of Ethylene production from methane in the USA using an oxidative coupling of methane (OCM) process.
www.intratec.us/analysis/ethylene-ea1a

ETHYLENE PRODUCTION FROM METHANOL - COST ANALYSIS | REPORT ETHYLENE E91A
This report analyses the economics of Ethylene production from methanol in the USA. The process examined in this report is similar to UOP/Norsk Hydro (now Ineos) MTO (Methanol-to-Olefins) process. Polymer grade propylene is also generated as co-product in the process.
www.intratec.us/analysis/ethylene-e91a

ETHYLENE PRODUCTION FROM VACUUM GAS OIL - COST ANALYSIS | REPORT ETHYLENE E01A
Feasibility study of Ethylene production from vacuum gas oil (VGO) using a steam cracking process in the USA.
www.intratec.us/analysis/ethylene-e01a

ETHYLENE PRODUCTION VIA ETHANOL DEHYDRATION - COST ANALYSIS | REPORT ETHYLENE E83A
This study also presents the costs associated with Green Ethylene production from ethanol in the USA. Differently from the report “Ethylene E82A”, this study depicts a process similar to the processes developed by Braskem and Petrobras. In this process, the reaction system is composed of multiple reactors and multiple furnaces.
www.intratec.us/analysis/ethylene-e83a

ETHYLENE PRODUCTION VIA ETHANOL DEHYDRATION - COST ANALYSIS | REPORT ETHYLENE E84A
Differently from the other reports about Green Ethylene production via ethanol dehydration, the process analyzed in this study is similar to the process developed by Scientific Design. In this process, the reaction system is composed by only one reactor and one furnace. The study also assumes a plant constructed in the USA.
www.intratec.us/analysis/ethylene-e84a

ETHYLENE PRODUCTION VIA ETHANOL DEHYDRATION - COST ANALYSIS | REPORT ETHYLENE E85A
This study also concerns Green Ethylene production in the USA. Differently from the other reports, the technology examined in this report is similar to the one developed by Dow Chemical. In this process, a selective oxidation reactor is used in the purification step to remove CO and hydrogen from the process.
www.intratec.us/analysis/ethylene-e85a

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ETHYLENE PRICES
Online database presenting the following information:

* Ethylene Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at: www.intratec.us/chemical-markets/ethylene-prices
ETHYLENE DICHLORIDE

See below Intratec's reports related to EDC.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ETHYLENE DICHLORIDE FROM ETHYLENE AND CHLORINE - COST ANALYSIS | REPORT EDC E11A
Techno-economic analysis of Ethylene Dichloride (EDC) production from ethylene and chlorine in the USA using a direct chlorination process consisting in a liquid-phase high temperature chlorination (HTC).
www.intratec.us/analysis/edc-e11a

ETHYLENE DICHLORIDE PRODUCTION FROM ETHYLENE AND HCL - COST ANALYSIS | REPORT EDC E21A
Feasibility study of Ethylene Dichloride (EDC) production from ethylene and hydrogen chloride in the USA using an oxychlorination process carried out in fluidized-bed reactors.
www.intratec.us/analysis/edc-e21a

ETHYLENE DICHLORIDE PRODUCTION FROM ETHYLENE AND HCL - COST ANALYSIS | REPORT EDC E22A
This report presents the economics of Ethylene Dichloride production from ethylene and hydrogen chloride in the USA. Differently from the report "EDC E21A", the process examined in this report is conducted in fixed-bed reactors.
www.intratec.us/analysis/edc-e22a

ETHYLENE DICHLORIDE FROM ETHYLENE AND CHLORINE - COST ANALYSIS | REPORT EDC E12A
Economics of Ethylene Dichloride production from ethylene and chlorine in the USA. Differently from the process presented in the report "EDC E11A", the process examined in this report is based on a liquid-phase low temperature chlorination (LTC).
www.intratec.us/analysis/edc-e12a

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See below Intratec’s reports related to Ethylene Glycol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ETHYLENE GLYCOL PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT MEG E11A
Feasibility study of Monoethylene Glycol (MEG) production from ethylene in the USA using a typical process, in which diethylene glycol (DEG) and triethylene glycol (TEG) are generated as by-products.
www.intratec.us/analysis/meg-e11a

ETHYLENE GLYCOL PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT MEG E12A
Techno-economic analysis of Monoethylene Glycol production from ethylene in the USA using a process similar to Shell OMEGA, in which no by-products are generated.
www.intratec.us/analysis/meg-e12a

ETHYLENE GLYCOL PRODUCTION FROM CARBON DIOXIDE - COST ANALYSIS | REPORT MEG E21A
Economics of Monoethylene Glycol (MEG) production from carbon dioxide (CO2) in the USA using an electrochemical process similar to Liquid Light process.
www.intratec.us/analysis/meg-e21a

ETHYLENE GLYCOL PRODUCTION FROM SYNGAS - COST ANALYSIS | REPORT MEG E41A
This report presents the economics of Monoethylene Glycol (MEG) production from synthesis gas (syngas) via dimethyl oxalate intermediate in the USA.
www.intratec.us/analysis/meg-e41a

ETHYLENE GLYCOL PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT MEG E13A
This study also evaluates the production of Monoethylene Glycol from ethylene in the USA. The process analyzed is similar to Shell OMEGA. In this process, ethylene is first converted to ethylene oxide. Part of the ethylene oxide generated is sold as a by-product and the remaining part is converted to MEG as the final product.
www.intratec.us/analysis/meg-e13a

ETHYLENE GLYCOL PRODUCTION FROM ETHYLENE OXIDE - COST ANALYSIS | REPORT MEG E32A
This report presents a detailed cost analysis of Monoethylene Glycol production from ethylene oxide. The process examined similar to Shell OMEGA, in which no by-products are generated. The economic analysis assumes a plant located in the USA.
www.intratec.us/analysis/meg-e32a

ETHYLENE GLYCOL PRODUCTION FROM ETHYLENE OXIDE - COST ANALYSIS | REPORT MEG E31A
This assessment approaches the production of Monoethylene Glycol (MEG) from ethylene oxide in the USA. In the process under analysis, diethylene glycol (DEG) and triethylene glycol (TEG) are generated as by-products.
www.intratec.us/analysis/meg-e31a

See below data offered by Intratec related to Ethylene Glycol

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ETHYLENE GLYCOL PRICES
Online database presenting the following information:

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ETHYLENE OXIDE

See below Intratec’s reports related to Ethylene Oxide.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ETHYLENE OXIDE PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT EO E11A
Economics of Ethylene Oxide production from ethylene in the USA using a typical direct oxidation process. In the process examined, pure oxygen is used as the oxidizing agent.
www.intratec.us/analysis/EO-e11a

ETHYLENE OXIDE PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT EO E12A
This study also approaches ethylene oxide production in the USA. However, the process reviewed in this study is a direct oxidation technology using air instead of pure oxygen as the oxidizing agent.
www.intratec.us/analysis/EO-e12a

See below data offered by Intratec related to Ethylene Oxide

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ETHYLENE OXIDE PRICES
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*Ethylene Oxide Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
www.intratec.us/chemical-markets/ethylene-oxide-prices

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This report analyses the economics of Ethylene Propylene Diene Rubber (EPDM rubber) production from ethylene and propylene in the USA, via a suspension polymerization process.

www.intratec.us/analysis/epdm-e11a
ETHYLENE VINYL ACETATE

See below Intratec’s reports related to EVA.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ETHYLENE VINYL ACETATE PRODUCTION PROCESS - COST ANALYSIS | REPORT EVA E11A
Techno-economic study of a typical Ethylene Vinyl Acetate production process from ethylene and vinyl acetate using a high-pressure tubular polymerization process in the USA.
www.intratec.us/analysis/eva-e11a

ETHYLENE VINYL ACETATE PRODUCTION PROCESS - COST ANALYSIS | REPORT EVA E12A
Economics of a typical Ethylene Vinyl Acetate production process from ethylene and vinyl acetate in the USA. Different from the process presented in the report “EVA E11A”, the process examined in this report uses high-pressure autoclave polymerization.
www.intratec.us/analysis/eva-e12a
FDCA

See below Intratec’s reports related to FDCA.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

FDCA PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT FDCA E11A
This report presents the economics of 2,5-Furandicarboxylic Acid (FDCA) production from glucose syrup via a furan process similar to Avantium YXY technology. The process under analysis is comprised of the following steps: glucose isomerization; fructose conversion to methoxy methyl furan (MMF); MMF oxidation to FDCA. The economic analysis assumes a plant constructed in the USA.
www.intratec.us/analysis/fdca-e11a

FDCA PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT FDCA E21B
This report presents the costs associated with the construction of a plant producing FDCA production from raw sugar (sucrose) in Germany. In the process under analysis, sucrose is dehydrated to hydroxymethylfurfural (HMF) in ionic liquid medium, and the HMF is then oxidized to FDCA.
www.intratec.us/analysis/fdca-e21b

FDCA PRODUCTION FROM HMF - COST ANALYSIS | REPORT FDCA E31A
Economic analysis of Solid 2,5-Furandicarboxylic Acid (FDCA) production via hydroxymethylfurfural (HMF) oxidation in the USA.
www.intratec.us/analysis/fdca-e31a

FDCA PRODUCTION FROM HMF - COST ANALYSIS | REPORT FDCA E32A
Feasibility study of Liquid 2,5-Furandicarboxylic Acid (FDCA) production via hydroxymethylfurfural (HMF) oxidation. The plant considered in the analysis is also located in the United States.
www.intratec.us/analysis/fdca-e32a
Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

FORMALDEHYDE PRODUCTION FROM METHANOL - COST ANALYSIS | REPORT FORMALDEHYDE E11A
Techno-economic study of Formalin (37wt% aqueous solution of Formaldehyde) production from methanol in the USA using a silver-catalyzed reaction at conditions that prioritize selectivity over conversion. In this case, unconverted methanol is recycled.
www.intratec.us/analysis/formaldehyde-e11a

FORMALDEHYDE PRODUCTION FROM METHANOL - COST ANALYSIS | REPORT FORMALDEHYDE E12A
Feasibility study of Formalin production from methanol in the USA. Similarly to the process presented in the report “Formaldehyde E11A”, the process examined in this report also uses silver catalysts, but at reaction conditions that prioritize full methanol conversion. In this process, methanol recovery is unnecessary.
www.intratec.us/analysis/formaldehyde-e12a

FORMALDEHYDE PRODUCTION FROM METHANOL - COST ANALYSIS | REPORT FORMALDEHYDE E13A
Economic analysis of Formaldehyde production from methanol in the USA. In the process analyzed in this report, methanol is reacted in vapor phase over a metal oxide catalyst.
www.intratec.us/analysis/formaldehyde-e13a

FORMALDEHYDE PRODUCTION FROM METHANE - COST ANALYSIS | REPORT FORMALDEHYDE E21A
Economics of Formaldehyde production from methane in the USA. In this report, Formaldehyde is obtained via catalytic partial oxidation of methane in using a still non-commercial process based on patents issued to Snamprogetti.
www.intratec.us/analysis/formaldehyde-e21a
FURFURYL ALCOHOL

See below Intratec’s reports related to Furfuryl Alcohol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

FURFURYL ALCOHOL PRODUCTION FROM FURFURAL - COST ANALYSIS | REPORT FFA E11A
This report presents the economics of Furfuryl Alcohol from furfural via a hydrogenation process. The economic analysis presented assumes a plant constructed in the USA.

www.intratec.us/analysis/ffa-e11a
**GASOLINE**

See below Intratec’s reports related to Gasoline.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**GASOLINE PRODUCTION FROM WOOD CHIPS - COST ANALYSIS | REPORT GASOLINE E11A**
Techno-economic analysis of Gasoline production from wood chips in the United States using a fast pyrolysis process combined with a hydroprocessing step.
www.intratec.us/analysis/gasoline-e11a

**GASOLINE PRODUCTION FROM WOOD CHIPS - COST ANALYSIS | REPORT GASOLINE E12A**
Techno-economic analysis of Gasoline production from wood chips in the United States. In this process, biomass is gasified to syngas, which is converted to methanol. Methanol is converted to Gasoline.
www.intratec.us/analysis/gasoline-e12a
GLYCEROL

See below Intratec’s reports related to Glycerol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

TECHNICAL GRADE GLYCEROL PRODUCTION PROCESS - COST ANALYSIS | REPORT GLYCEROL E11A
This report presents the economics of a process for Technical Grade Glycerol production through treatment of fuel grade glycerol in the United States.
www.intratec.us/analysis/glycerol-e11a
HEXAMETHYLENE DIISOCYANATE

See below Intratec’s reports related to HDI.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

HEXAMETHYLENE DIISOCYANATE PRODUCTION - COST ANALYSIS | REPORT HDI E11A
Economics of a phosgenation process for Hexamethylene Diisocyanate (HDI) production from hexamethylene diamine (HMDA) in the United States.
www.intratec.us/analysis/hdi-e11a

HEXAMETHYLENE DIISOCYANATE PRODUCTION - COST ANALYSIS | REPORT HDI E12A
Techno-economic analysis of Hexamethylene Diisocyanate (HDI) production from hexamethylene diamine (HMDA) in the USA. Different from the process analyzed in the report "HDI E11A", the process presented in this report is a non-phosgene process similar to BASF process.
www.intratec.us/analysis/hdi-e12a
Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**HEXAMETHYLENEDIAMINE PRODUCTION FROM BUTADIENE - COST ANALYSIS | REPORT HMDA E11A**
This report presents the economics of Hexamethylenediamine (HMDA) production from butadiene. In the process examined, butadiene is reacted with hydrogen cyanide to generate adiponitrile intermediate, which is then hydrogenated to HMDA. The economic analysis performed assumes a plant located in the USA.
[www.intratec.us/analysis/hmda-e11a](http://www.intratec.us/analysis/hmda-e11a)

**HEXAMETHYLENEDIAMINE PRODUCTION FROM ADIPIC ACID - COST ANALYSIS | REPORT HMDA E21A**
This report presents the economics of Hexamethylenediamine (HMDA) production from adipic acid. In the process examined, adiponitrile is generated as intermediate from adipic acid, and then hydrogenated to HMDA. The economic analysis performed assumes a plant located in the USA.
[www.intratec.us/analysis/hmda-e21a](http://www.intratec.us/analysis/hmda-e21a)

**HEXAMETHYLENEDIAMINE PRODUCTION FROM ACRYLONITRILE - COST ANALYSIS | REPORT HMDA E31A**
This report presents the economics of Hexamethylenediamine (HMDA) production from acrylonitrile. In the process examined, adiponitrile is generated as intermediate from acrylonitrile, and then hydrogenated to HMDA. The economic analysis is based on a plant constructed in the USA.
[www.intratec.us/analysis/hmda-e31a](http://www.intratec.us/analysis/hmda-e31a)
See below Intratec’s reports related to Hexane.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

HEXANE PRODUCTION FROM GLYCEROL - COST ANALYSIS | REPORT HEXANE E11A
This report presents the economics of Hexane production from crude glycerol in the USA.
www.intratec.us/analysis/hexane-e11a
Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

1-HEXENE PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT HEXENE E11A
This report presents the economics of an industrial process for 1-Hexene production from ethylene, assuming a trimerization process similar to the one owned by Chevron Philips. The economic analysis is based on a plant operating in the United States.
www.intratec.us/analysis/hexene-e11a

1-HEXENE PRODUCTION FROM SYNFAULS - COST ANALYSIS | REPORT HEXENE E21A
In this report, it is approached the economics of 1-Hexene production via extraction from synfuels, using an industrial process similar to the technology owned by Sasol. The economic analysis assumes a plant located in the USA.
www.intratec.us/analysis/hexene-e21a

1-HEXENE PRODUCTION FROM RAFFINATE-2 - COST ANALYSIS | REPORT HEXENE E31A
This analysis approaches the economics of 1-Hexene production from raffinate-2, based on a process similar to the CPT Process licensed by CB&I Lummus. The analysis considers a facility erected in the United States.
www.intratec.us/analysis/hexene-e31a
See below Intratec’s reports related to HDPE.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**HDPE PRODUCTION VIA SLURRY PROCESS - COST ANALYSIS | REPORT HDPE E11A**
This report presents the economics of Bimodal High Density Polyethylene (HDPE) production from polymer grade (PG) ethylene and 1-butene in the USA, using a slurry process similar to LyondellBasell Hostalen and Mitsui CX.
www.intratec.us/analysis/hdpe-e11a

**HDPE PRODUCTION VIA GAS-PHASE PROCESS - COST ANALYSIS | REPORT HDPE E21A**
This report analyses the economics of Bimodal High Density Polyethylene (HDPE) production from polymer grade (PG) ethylene and 1-hexene in the USA, using a gas-phase process similar to LyondellBasell Spherilene.
www.intratec.us/analysis/hdpe-e21a

**HDPE PRODUCTION VIA GAS-PHASE PROCESS - COST ANALYSIS | REPORT HDPE E12A**
It presents the economics of Bimodal High Density Polyethylene (HDPE) production from polymer grade (PG) ethylene and 1-butene in the USA. Differently from the report "HDPE E11A", the process examined in this report uses a gas phase process similar to Univation UNIPOL.
www.intratec.us/analysis/hdpe-e12a

**HDPE PRODUCTION VIA SLURRY LOOP PROCESS - COST ANALYSIS | REPORT HDPE E13A**
This report presents the economics of Bimodal High Density Polyethylene (HDPE) production from polymer grade (PG) ethylene and 1-butene in the USA. Differently from the report "HDPE E11A", the process examined in this report uses a slurry loop process similar to Borealis BORSTAR.
www.intratec.us/analysis/hdpe-e13a

**HDPE PRODUCTION VIA SLURRY LOOP PROCESS - COST ANALYSIS | REPORT HDPE E22A**
This report analyses the economics of Bimodal High Density Polyethylene (HDPE) production from polymer grade (PG) ethylene and 1-hexene in the USA. Differently from the report "HDPE E21A", the process examined in this report uses a slurry loop process similar to Chevron Phillips CPChem and INEOS INNOVENE S.
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**HDPE PRODUCTION VIA SLURRY LOOP PROCESS - COST ANALYSIS | REPORT HDPE E31A**
This report presents the economics of High Density Polyethylene (HDPE) production from polymer grade (PG) ethylene in the USA, using a slurry loop process similar to Chevron Phillips CPChem and INEOS INNOVENE S.
www.intratec.us/analysis/hdpe-e31a

**HDPE PRODUCTION VIA GAS-PHASE PROCESS - COST ANALYSIS | REPORT HDPE E32A**
It presents the economics of High Density Polyethylene (HDPE) production from polymer grade (PG) ethylene in the USA. Differently from the report "HDPE E31A", the process examined in this report uses a gas phase process similar to LyondellBasell Spherilene.
www.intratec.us/analysis/hdpe-e32a

**HDPE PRODUCTION VIA GAS-PHASE PROCESS - COST ANALYSIS | REPORT HDPE E33A**

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This report analyses the economics of High Density Polyethylene (HDPE) production from polymer grade (PG) ethylene in the USA.
Differently from the report "HDPE E31A", the process examined in this report uses a gas phase process similar to Univation UNIPOL and INEOS INNOVENE G.

www.intratec.us/analysis/hdpe-e33a

**HDPE PRODUCTION VIA SOLUTION PROCESS - COST ANALYSIS | REPORT HDPE E34A**

This report examines the costs related to High Density Polyethylene (HDPE) production from polymer grade (PG) ethylene in the USA. Differently from the report "HDPE E31A", the process examined in this report uses a solution phase process similar to NOVA Chemicals Advanced SCLAIRTECH.

www.intratec.us/analysis/hdpe-e34a

**HDPE PRODUCTION VIA GAS-PHASE PROCESS - COST ANALYSIS | REPORT HDPE E14A**

This report analyses the economics of Bimodal High Density Polyethylene (HDPE) production from polymer grade (PG) ethylene and 1-butene in the USA. Differently from the report "HDPE E11A", the process examined in this report uses a gas-phase process similar to LyondellBasell Spherilene.

www.intratec.us/analysis/hdpe-e14a

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HYDROGEN

See below Intratec’s reports related to Hydrogen.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

HYDROGEN VIA NATURAL GAS STEAM REFORMING - COST ANALYSIS | REPORT HYDROGEN E11A
Economic analysis of Hydrogen production from natural gas in the USA using a steam reforming process.
www.intratec.us/analysis/hydrogen-e11a

HYDROGEN VIA LIGHT NAPHTHA REFORMING - COST ANALYSIS | REPORT HYDROGEN E21A
The process examined in this report is the same presented in the report “Hydrogen E11A”, with the exception that the raw material used is light naphtha.
www.intratec.us/analysis/hydrogen-e21a

HYDROGEN VIA NATURAL GAS PARTIAL OXIDATION - COST ANALYSIS | REPORT HYDROGEN E12A
Techno-economic study of Hydrogen production from natural gas in the USA. Differently from the process analyzed in the report “Hydrogen E11A”, in this analysis, Hydrogen is produced via a partial oxidation process.
www.intratec.us/analysis/hydrogen-e12a

HYDROGEN VIA WATER ELECTROLYSIS - COST ANALYSIS | REPORT HYDROGEN E31A
Economics of Hydrogen production using a water electrolysis process in the USA.
www.intratec.us/analysis/hydrogen-e31a

HYDROGEN PRODUCTION FROM COAL GASIFICATION - COST ANALYSIS | REPORT HYDROGEN E41A
This report presents the economics of Hydrogen production from coal gasification in the USA.
www.intratec.us/analysis/hydrogen-e41a

HYDROGEN PRODUCTION FROM WOOD CHIPS - COST ANALYSIS | REPORT HYDROGEN E51A
Similarly to the report “Hydrogen E41A”, this study also examines Hydrogen production via a gasification process. However, in this case, wood chips are used as feedstock.
www.intratec.us/analysis/hydrogen-e51a

HYDROGEN PRODUCTION FROM VACCUMM RESIDUE - COST ANALYSIS | REPORT HYDROGEN E61A
Feasibility study of Hydrogen production from vacuum residue in the USA using a non-catalytic partial oxidation process.
www.intratec.us/analysis/hydrogen-e61a
HYDROGEN CHLORIDE

See below Intratec’s reports related to Hydrogen Chloride.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

HYDROGEN CHLORIDE PRODUCTION - COST ANALYSIS | REPORT HCL E11A
Economics of Anhydrous Hydrogen Chloride (HCl) production from hydrogen and chlorine in the USA. In this process, the reaction occurs in gaseous phase in a plug flow reactor.
www.intratec.us/analysis/hcl-e11a

HYDROCHLORIC ACID PRODUCTION - COST ANALYSIS | REPORT HCL E21A
This report presents the economics of Hydrochloric Acid production from sodium chloride and sulfuric acid in the USA through a typical Mannheim process in which the reaction occurs in a reactor furnace.
www.intratec.us/analysis/hcl-e21a

HYDROCHLORIC ACID PRODUCTION - COST ANALYSIS | REPORT HCL E22A
The process examined in this report is based on the Mannheim process presented in the report "HCl E21A". In this case, the main reactor furnace from the Mannheim process is replaced by a fluidized bed reactor. The economic analysis also assumes a plant located in the USA.
www.intratec.us/analysis/hcl-e22a

HYDROCHLORIC ACID PRODUCTION - COST ANALYSIS | REPORT HCL E31A
Feasibility analysis of a typical Hargreaves process for Hydrochloric Acid production from sodium chloride and sulfur in the USA. This is a two-step reaction process, in which Hydrochloric Acid is produced via sulfur dioxide intermediate.
www.intratec.us/analysis/hcl-e31a

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HYDROGEN CYANIDE

See below Intratec’s reports related to Hydrogen Cyanide.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

HYDROGEN CYANIDE PRODUCTION - COST ANALYSIS | REPORT HCN E11A
Economics of Hydrogen Cyanide production from ammonia and natural gas in the United States using a combustion process similar to Andrussow process.

www.intratec.us/analysis/hcn-e11a
HYDROGEN PEROXIDE

See below Intratec’s reports related to Hydrogen Peroxide.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

HYDROGEN PEROXIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT H2O2 E11A
This report presents the economics of Hydrogen Peroxide production from hydrogen in the USA using an anthraquinone auto-oxidation process.
www.intratec.us/analysis/h2o2-e11a
HYDROXYMETHYLFURFURAL

See below Intratec’s reports related to HMF.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

HYDROXYMETHYLFURFURAL PRODUCTION PROCESS - COST ANALYSIS | REPORT HMF E11A
Feasibility analysis of Hydroxymethylfurfural (HMF) production from glucose syrup in the United States.
www.intratec.us/analysis/hmf-e11a
HYDROXYPROPYL METHYL CELLULOSE

See below Intratec’s reports related to HPMC.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

HYDROXYPROPYL METHYL CELLULOSE PRODUCTION - COST ANALYSIS | REPORT HPMC E11A
Feasibility analysis of Hydroxypropyl Methyl Cellulose (HPMC) production starting from cellulose, methyl chloride and propylene oxide. The plant is assumed to be located on the US Gulf Coast.

www.intratec.us/analysis/hpmc-e11a
INVERT SUGAR

See below Intratec’s reports related to Invert Sugar.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

INVERT SUGAR PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT INVERT SUGAR E11B

This report presents the economics of Invert Sugar Syrup production from raw sugar (sucrose) using a process similar to the European Sugar Holdings S.A.R.L. technology. In the process under analysis, raw sugar is diluted and sucrose is hydrolyzed into glucose and fructose (invert sugar). This inversion reaction occurs in an ion-exchange resin bed. The economic analysis presented is based on a plant constructed in Germany.

www.intratec.us/analysis/invert-sugar-e11b
See below Intratec’s reports related to Isobutanol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**BIO-ISOBUTANOL PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT ISOBUTANOL E21B**

The process examined in this report is the same examined in the report “Isobutanol E11A”, with some exceptions: (1) the plant is constructed in Germany, (2) the raw material used is raw sugar, and (3) DDGS is not generated as a by-product.

www.intratec.us/analysis/isobutanol-e21b

**BIO-ISOBUTANOL PRODUCTION FROM CORN - COST ANALYSIS | REPORT ISOBUTANOL E11A**

Economics of bio-based Isobutanol production from corn in the USA using a typical fermentation process. In this process, distiller’s dried grain with solubles (DDGS) and ethanol are generated as by-products.

www.intratec.us/analysis/isobutanol-e11a

**BIO-ISOBUTANOL PRODUCTION FROM CORN STOVER - COST ANALYSIS | REPORT ISOBUTANOL E31A**

Techno-economic analysis of cellulosic Isobutanol production from corn stover in the United States using a biochemical process.

www.intratec.us/analysis/isobutanol-e31a
See below Intratec’s reports related to Isobutylene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ISOBUTYLENE PRODUCTION FROM CRUDE C4S - COST ANALYSIS | REPORT ISOBUTYLENE E11A
This study presents the economics of Isobutylene production from a crude C4s stream in the USA, using an extraction process similar to Total Isobutylene Acid Extraction process.
www.intratec.us/analysis/isobutylene-e11a

ISOBUTYLENE PRODUCTION FROM ISOBUTANE - COST ANALYSIS | REPORT ISOBUTYLENE E12A
It presents the economics of Isobutylene production from isobutane in the USA, using a dehydrogenation process similar to UOP Oleflex.
www.intratec.us/analysis/isobutylene-e12a

ISOBUTYLENE PRODUCTION FROM ISOBUTANE - COST ANALYSIS | REPORT ISOBUTYLENE E13A
This report presents the economics of Isobutylene production from isobutane in the USA. Differently from the report "Isobutylene E12A", the process examined is a dehydrogenation process similar to CB&I Lummus CATOFIN.
www.intratec.us/analysis/isobutylene-e13a

ISOBUTYLENE PRODUCTION FROM ISOBUTANE - COST ANALYSIS | REPORT ISOBUTYLENE E14A
This report analyses the economics of Isobutylene production from isobutane in the USA. Differently from the report "Isobutylene E12A", the process examined is a dehydrogenation process similar to Uhde STAR.
www.intratec.us/analysis/isobutylene-e14a
ISODECANOL

See below Intratec’s reports related to Isodecanol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ISODECANOL PRODUCTION PROCESS - COST ANALYSIS | REPORT ISODECANOL E11A

This report presents the economics of Isodecanol production from nonenes in a typical industrial process based on cobalt catalyst. The industrial plant is located in the United States.

www.intratec.us/analysis/isodecanol-e11a
ISONONANOL

See below Intratec’s reports related to Isononanol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ISONONANOL PRODUCTION PROCESS - COST ANALYSIS | REPORT ISONONANOL E11A

This report presents an economic study of Isononanol production from octenes. It assumes a plant located in the United States using a process similar to Johnson Matthey OXO alcohols process.

www.intratec.us/analysis/isononanol-e11a

ISONONANOL PRODUCTION PROCESS - COST ANALYSIS | REPORT ISONONANOL E12A

In this report, the economics of Isononanol production from octenes is analyzed based on a typical cobalt catalyst process, also assuming a plant located in the USA.

www.intratec.us/analysis/isononanol-e12a
IPDI

See below Intratec’s reports related to IPDI.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

IPDI PRODUCTION FROM ISOPHORONE AND CHLORINE - COST ANALYSIS | REPORT IPDI E11A
Feasibility analysis of Isophorone Diisocyanate (IPDI) production from isophorone and chlorine via a phosgenation process in the USA.
www.intratec.us/analysis/ipdi-e11a

IPDI PRODUCTION FROM ISOPHORONE AND UREA - COST ANALYSIS | REPORT IPDI E12A
Economics of Isophorone Diisocyanate (IPDI) production from isophorone and urea in the United States. Different from the process examined in the report "IPDI E11A", this process is a non-phosgene process.
www.intratec.us/analysis/ipdi-e12a
ISOPHTHALIC ACID

See below Intratec’s reports related to Isophthalic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PURIFIED ISOPHTHALIC ACID PRODUCTION PROCESS - COST ANALYSIS | REPORT IPA E11A
This feasibility study provides the costs associated with the construction of a plant in the USA for the production of Isophthalic Acid (IPA) from m-xylene using a typical oxidation process. The process targeted in this report comprises p-xylene oxidation, crude Isophthalic Acid recovery and further purification via hydrogenation for obtaining Purified Isophthalic Acid.

www.intratec.us/analysis/ipa-e11a

CRUDE ISOPHTHALIC ACID PRODUCTION PROCESS - COST ANALYSIS | REPORT IPA E21A
This study also concerns Isophthalic Acid production. However, Differently from the report “IPA E11A”, this study does not include the section for Isophthalic Acid purification via hydrogenation. Crude Isophthalic Acid is the end-product of this process.

www.intratec.us/analysis/ipa-e21a
ISOPRENE

See below Intratec's reports related to Isoprene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

BIO-ISOPRENE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT ISOPRENE E11A
Feasibility analysis of Bio-Isoprene production from glucose syrup in the USA using an aerobic fermentation process.
www.intratec.us/analysis/isoprene-e11a

BIO-ISOPRENE PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT ISOPRENE E21B
The process presented in this report is the same examined in the report "Isoprene E11A", with two exceptions: (1) the plant is constructed in Germany, and (2) the feedstock used is raw sugar.
www.intratec.us/analysis/isoprene-e21b

ISOPRENE PRODUCTION FROM CRUDE C5S - COST ANALYSIS | REPORT ISOPRENE E31A
Economics of Isoprene production from a crude C5s stream in the USA using an extractive distillation process similar to BASF NMP process.
www.intratec.us/analysis/isoprene-e31a

ISOPRENE PRODUCTION FROM ISOBUTYLENE - COST ANALYSIS | REPORT ISOPRENE E41A
This report presents the economics of Isoprene production from isobutane and formaldehyde in the USA via a typical two-step carbonylation process.
www.intratec.us/analysis/isoprene-e41a

ISOPRENE PRODUCTION FROM ACETYLENE AND ACETONE - COST ANALYSIS | REPORT ISOPRENE E51A
Economic analysis of Isoprene production from acetylene and acetone in the USA using a process similar to a Snamprogetti Acetylene-based process.
www.intratec.us/analysis/isoprene-e51a

BIO-ISOPRENE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT ISOPRENE E12A
Techno-economic study of a fermentation process for Isoprene production from glucose in the USA. Different the process analyzed in the report "Isoprene E11A", the process examined in this report is based on an anaerobic fermentation.
www.intratec.us/analysis/isoprene-e12a

BIO-ISOPRENE PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT ISOPRENE E22B
This report examines the same process presented in the report "Isoprene E12A", with the exceptions that the plant is constructed in Germany and the raw material used is raw sugar.
www.intratec.us/analysis/isoprene-e22b

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See below Intratec’s reports related to Isopropanol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**ISOPROPYL ALCOHOL PRODUCTION FROM RG PROPYLENE - COST ANALYSIS | REPORT ISOPROPANOL E11A**
This report presents the economics of Isopropyl Alcohol production from refinery grade (RG) propylene, via a typical indirect propylene hydration process. The study assumes a plant located on the US Gulf Coast.
www.intratec.us/analysis/isopropanol-e11a

**ISOPROPYL ALCOHOL PRODUCTION FROM PG PROPYLENE - COST ANALYSIS | REPORT ISOPROPANOL E21A**
Economics of Isopropyl Alcohol production from Polymer Grade (PG) Propylene. This study is also based on a plant located on the US Gulf Coast. In this case, Isopropyl Alcohol is obtained via a typical direct propylene hydration process.
www.intratec.us/analysis/isopropanol-e21a

**ISOPROPYL ALCOHOL PRODUCTION FROM ACETONE - COST ANALYSIS | REPORT ISOPROPANOL E31A**
In this report, it is approached the economics of Isopropyl Alcohol production from acetone in a typical acetone hydrogenation process, also assuming an industrial plant located on the US Gulf Coast.
www.intratec.us/analysis/isopropanol-e31a

See below data offered by Intratec related to Isopropanol

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**ISOPROPNOL PRICES**
Online database presenting the following information:

* Isopropanol Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  www.intratec.us/chemical-markets/isopropanol-prices

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For further questions: sales@intratec.us
See below Intratec’s reports related to Isosorbide.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ISOSORBIDE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT ISOSORBIDE E11A
This report presents the economics of Isosorbide production from glucose syrup. The process examined is similar to Roquette Freres process. The economic analysis provided is based on a plant located in the USA.
www.intratec.us/analysis/isosorbide-e11a

ISOSORBIDE PRODUCTION FROM SORBITOL - COST ANALYSIS | REPORT ISOSORBIDE E21A
This study concerns Isosorbide production from sorbitol in the USA. The process reviewed in the analysis is a typical dehydration process.
www.intratec.us/analysis/isosorbide-e21a
ITACONIC ACID

See below Intratec’s reports related to Itaconic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ITACONIC ACID PRODUCTION PROCESS - COST ANALYSIS | REPORT IA E11A
Economic analysis of Itaconic Acid production from dimethyl succinate (DMS) and formaldehyde on the US Gulf Coast. In this process, Itaconic Acid is produced via a citraconate intermediate in a catalytic condensation reaction.

www.intratec.us/analysis/ia-e11a

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LACTIC ACID

See below Intratec’s reports related to Lactic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

LACTIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT LA E13A
Feasibility study of Lactic Acid production from glucose syrup in the USA using a fermentation process. This process is similar to Cargill process. In this case, Lactic Acid recovery is performed by trialkylamine solvent extraction in the presence of carbon dioxide.
www.intratec.us/analysis/la-e13a

LACTIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT LA E23B
The process analyzed in this report is the same presented in the report “LA E13A”, with the exceptions that the raw material used is raw sugar and the plant is erected in Germany.
www.intratec.us/analysis/la-e23b

LACTIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT LA E14A
Techno-economic analysis of Lactic Acid production from glucose syrup in the United States using a low pH fermentation process.
www.intratec.us/analysis/la-e14a

LACTIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT LA E24B
Feasibility analysis of Lactic Acid production from raw sugar in Germany. Similarly to the report “LA E14A”, the process analyzed in this report is a low pH fermentation process.
www.intratec.us/analysis/la-e24b

LACTIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT LA E12A
This report presents an economic analysis of Lactic Acid production from glucose syrup using a typical fermentation process in the USA.
www.intratec.us/analysis/la-e12a

LACTIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT LA E22B
This report presents the economics of Lactic Acid production using a typical fermentation process. The process examined in this report uses raw sugar as raw material for a plant located in Germany.
www.intratec.us/analysis/la-e22b

LACTIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT LA E11A
Economics of Lactic Acid production from glucose syrup using a fermentation process in the United States. This process is similar to Corbion process, in which Lactic Acid is recovered by acidification and purified by the use of a solvent.
www.intratec.us/analysis/la-e11a

LACTIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT LA E21B
The process presented in this report is the same examined in the report “LA E11A”, with two exceptions: (1) the plant is constructed in Germany, and (2) the feedstock used is raw sugar.
www.intratec.us/analysis/la-e21b

Purchase & pricing info: www.intratec.us
For further questions: sales@intratec.us
LACTIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT LA E15A
Economics of Lactic Acid production from glucose syrup using a speculative, continuous, low pH, fermentation process in the United States. In this process, Lactic Acid is recovered from the fermentation broth through microfiltration and nanofiltration steps. An 80 wt% Technical Grade Lactic Acid, with 95 wt% purity is generated as final product.
www.intratec.us/analysis/la-e15a

LACTIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT LA E25B
The process presented in this report is the same examined in the report "LA E15A", with two exceptions: (1) the plant is constructed in Germany, and (2) the feedstock used is raw sugar.
www.intratec.us/analysis/la-e25b

LACTIC ACID PRODUCTION FROM LACTOSE - COST ANALYSIS | REPORT LA E31A
Economic analysis of Lactic Acid production from lactose via a fermentation process in the USA. Lactic Acid purification is realized via ion exchange and product concentration is accomplished by reverse osmosis and evaporation.
www.intratec.us/analysis/la-e31a
LAUROLACTAM

See below Intratec’s reports related to Laurolactam.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

LAUROLACTAM PRODUCTION FROM CYCLODODECANE - COST ANALYSIS | REPORT LAUROLACTAM E11A
This report presents the economics of Laurolactam production from cyclododecane. The process examined is similar to the one owned by Evonik, which involves the generation of cyclododecanone intermediate. The economic analysis performed assumes a plant located in the USA.
www.intratec.us/analysis/laurolactam-e11a

LAUROLACTAM PRODUCTION FROM CYCLODODECANE - COST ANALYSIS | REPORT LAUROLACTAM E12A
This report also concerns the production of Laurolactam from cyclododecane in the USA. However, differently from the report “Laurolactam E11A”, this report reviews a photonitrozation process similar to the one owned by Arkema.
www.intratec.us/analysis/laurolactam-e12a

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LINEAR ALKYLBENZENE

See below Intratec's reports related to LAB.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

LINEAR ALKYLBENZENE PRODUCTION - COST ANALYSIS | REPORT LAB E11A
This report presents the economics of a Linear Alkylbenzene (LAB) production process from C10-C13 n-paraffins and benzene in the USA, via a typical hydrogenation/alkylation process.

www.intratec.us/analysis/lab-e11a
See below Intratec’s reports related to LAS.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

LINEAR ALKYLBENZENE SULFONATE PRODUCTION - COST ANALYSIS | REPORT LAS E11A
This report presents the economics of Linear Alkylbenzene Sulfonate (LAS) production from linear alkylbenzene (LAB) and oleum in the USA, via a conventional sulfonation process.
www.intratec.us/analysis/las-e11a

LINEAR ALKYLBENZENE SULFONATE PRODUCTION - COST ANALYSIS | REPORT LAS E21A
This report analyses the economics of Linear Alkylbenzene Sulfonate (LAS) production from linear alkylbenzene (LAB) and sulfur in the USA, via a conventional sulfonation process.
www.intratec.us/analysis/las-e21a
LINEAR ALPHA OLEFINS

See below Intratec’s reports related to LAO.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

LINEAR ALPHA OLEFINS FROM ETHYLENE - COST ANALYSIS | REPORT LAO E11A
Feasibility analysis of Linear Alpha Olefins (LAO) production from ethylene in the USA. The process presented is similar to Shell Higher Olefins Process (SHOP) in which LAOs ranging from C4 to C20 are obtained.
www.intratec.us/analysis/lao-e11a

LINEAR ALPHA OLEFINS FROM ETHYLENE - COST ANALYSIS | REPORT LAO E12A
Economics of Linear Alpha Olefins (LAO) production from ethylene in the United States. Differently from the report “LAO E11A”, the process examined in this report produces LAOs ranging from C4 to C30+ using a process similar to Chevron Phillips process.
www.intratec.us/analysis/lao-e12a

LINEAR ALPHA OLEFINS FROM ETHYLENE - COST ANALYSIS | REPORT LAO E13A
Techno-economic analysis of LAO production from ethylene in the USA. In this report, a process similar to INEOS process is analyzed, producing linear alpha-olefins ranging from C4 to C16+, mainly C6 to C10.
www.intratec.us/analysis/lao-e13a

LINEAR ALPHA OLEFINS FROM ETHYLENE - COST ANALYSIS | REPORT LAO E14A
This report presents the economics of LAO production from ethylene in the USA. In this case, C4 to C12+ linear alpha-olefins are obtained via a process similar to Alpha-SABLIN process (jointly developed by SABIC and Linde).
www.intratec.us/analysis/lao-e14a

LINEAR ALPHA OLEFINS FROM ETHYLENE - COST ANALYSIS | REPORT LAO E15A
Economic analysis of LAO production from ethylene in the USA. Similarly to the process presented in the report “LAO E14A”, the process examined in this report also produces C4 to C12+ linear alpha-olefins, but a process similar to DuPont Versipol process is applied.
www.intratec.us/analysis/lao-e15a

LINEAR ALPHA OLEFINS FROM ETHYLENE - COST ANALYSIS | REPORT LAO E16A
Feasibility study of Linear Alpha Olefins (LAO) production from ethylene in the United States using a process similar to Sasol Technology to produce mainly C6 and C8 linear alpha-olefins.
www.intratec.us/analysis/lao-e16a
Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**LLDPE PRODUCTION VIA SOLUTION PROCESS - COST ANALYSIS | REPORT LLDPE E11A**
This report presents the economics of Linear Low Density Polyethylene (LLDPE) production from polymer grade (PG) ethylene and 1-octene in the USA, using a solution process similar to NOVA Chemicals SCLAIRTECH.
[www.intratec.us/analysis/lldpe-e11a](www.intratec.us/analysis/lldpe-e11a)

**LLDPE PRODUCTION VIA SOLUTION PROCESS - COST ANALYSIS | REPORT LLDPE E12A**
This study presents the economics of Linear Low Density Polyethylene (LLDPE) production from polymer grade (PG) ethylene and 1-octene in the USA. Differently from the report ”LLDPE E11A”, the process examined in this report is similar to NOVA Chemicals Advanced SCLAIRTECH.
[www.intratec.us/analysis/lldpe-e12a](www.intratec.us/analysis/lldpe-e12a)

**LLDPE PRODUCTION VIA SLURRY PROCESS - COST ANALYSIS | REPORT LLDPE E21A**
This report examines the costs related to Linear Low Density Polyethylene (LLDPE) production from polymer grade (PG) ethylene and 1-hexene in the USA, using a slurry process similar to Chevron Phillips CPChem.
[www.intratec.us/analysis/lldpe-e21a](www.intratec.us/analysis/lldpe-e21a)

**LLDPE PRODUCTION VIA SOLUTION PROCESS - COST ANALYSIS | REPORT LLDPE E13A**
This report presents the economics of Linear Low Density Polyethylene (LLDPE) production from polymer grade (PG) ethylene and 1-octene in the USA. Differently from the report ”LLDPE E11A”, the process examined in this report is similar to Dow DOWLEX.
[www.intratec.us/analysis/lldpe-e13a](www.intratec.us/analysis/lldpe-e13a)

**LLDPE PRODUCTION VIA GAS PHASE PROCESS - COST ANALYSIS | REPORT LLDPE E22A**
It presents the economics of Linear Low Density Polyethylene (LLDPE) production from polymer grade (PG) ethylene and 1-hexene in the USA. Differently from the report ”LLDPE E21A”, the process examined in this report uses a gas phase process similar to Univation UNIPOL and INEOS INNOVENE.
[www.intratec.us/analysis/lldpe-e22a](www.intratec.us/analysis/lldpe-e22a)

**LLDPE PRODUCTION VIA GAS PHASE PROCESS - COST ANALYSIS | REPORT LLDPE E31A**
This study presents the economics of Linear Low Density Polyethylene (LLDPE) production from polymer grade (PG) ethylene and 1-butene in the USA, using a gas phase process similar to Univation UNIPOL and INEOS INNOVENE.
[www.intratec.us/analysis/lldpe-e31a](www.intratec.us/analysis/lldpe-e31a)

**LLDPE PRODUCTION VIA GAS PHASE PROCESS - COST ANALYSIS | REPORT LLDPE E32A**
This report presents the economics of Linear Low Density Polyethylene (LLDPE) production from polymer grade (PG) ethylene and 1-butene in the USA. Differently from the report ”LLDPE E31A”, the process examined in this report is similar to LyondellBasell Spherilene.
[www.intratec.us/analysis/lldpe-e32a](www.intratec.us/analysis/lldpe-e32a)

**LLDPE PRODUCTION VIA SOLUTION PROCESS - COST ANALYSIS | REPORT LLDPE E33A**
This report examines the costs related to Linear Low Density Polyethylene (LLDPE) production from polymer grade (PG) ethylene and 1-
butene in the USA. Differently from the report "LLDPE E31A", the process examined in this report is a solution process similar to NOVA Chemicals SCLAIRTECH.

www.intratec.us/analysis/lldpe-e33a

See below data offered by Intratec related to LLDPE

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LLDPE PRICES
Online database presenting the following information:
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See below Intratec’s reports related to LDPE.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**LDPE VIA HIGH-PRESSURE TUBULAR PROCESS - COST ANALYSIS | REPORT LDPE E11A**
This report presents the economics of a typical Low Density Polyethylene (LDPE) production process from polymer grade (PG) ethylene in the USA, using a high-pressure tubular process.

[www.intratec.us/analysis/ldpe-e11a](http://www.intratec.us/analysis/ldpe-e11a)

**LDPE VIA HIGH-PRESSURE AUTOCLAVE PROCESS - COST ANALYSIS | REPORT LDPE E12A**
This report analyses the economics of a typical Low Density Polyethylene (LDPE) production process from polymer grade (PG) ethylene in the USA. Differently from the report “LDPE E11A”, the process examined in this report is a high-pressure autoclave process.

[www.intratec.us/analysis/ldpe-e12a](http://www.intratec.us/analysis/ldpe-e12a)

See below data offered by Intratec related to LDPE

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**LDPE PRICES**
Online database presenting the following information:

* LDPE Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  [www.intratec.us/chemical-markets/ldpe-prices](http://www.intratec.us/chemical-markets/ldpe-prices)
LYSINE

See below Intratec’s reports related to Lysine.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

L-LYSINE-HCL PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT LYSINE E12A
Feasibility analysis of L-Lysine Monohydrochloride (or L-Lysine-HCl) production from glucose syrup in the United States using a conventional fermentation process.
www.intratec.us/analysis/lysine-e12a

L-LYSINE-HCL PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT LYSINE E21B
The process presented in this report is the same examined in the report “Lysine E12A”, with two exceptions: (1) the plant is constructed in Germany, and (2) the feedstock used is raw sugar.
www.intratec.us/analysis/lysine-e21b

L-LYSINE SULFATE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT LYSINE E31A
This report approaches the economics of L-Lysine Sulfate production from glucose syrup. The economic analysis provided assumes a plant located in the USA.
www.intratec.us/analysis/lysine-e31a
See below Intratec’s reports related to m-Xylene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

M-XYLENE PRODUCTION FROM MIXED XYLENES - COST ANALYSIS | REPORT M-XYLENE E11A
This study presents an economic analysis for a process similar to UOP’s Sorbex technology for m-Xylene recovery from mixed xylenes considering a plant located in the United States.

www.intratec.us/analysis/m-xylene-e11a
MAGNESIUM SULFATE

See below Intratec’s reports related to Magnesium Sulfate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

MAGNESIUM SULFATE PRODUCTION PROCESS - COST ANALYSIS | REPORT MAGNESIUM SULFATE E11A
This report analyses the economics of a Magnesium Sulfate production process from magnesium carbonate and sulfuric acid in the USA.

www.intratec.us/analysis/magnesium-sulfate-e11a
MALEIC ANHYDRIDE

See below Intratec’s reports related to Maleic Anhydride.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

MALEIC ANHYDRIDE PRODUCTION FROM BUTANE - COST ANALYSIS | REPORT MAN E11A
Feasibility analysis of Maleic Anhydride production from n-butane in the USA using a process similar to the one developed by Huntsman. In this process, the reaction occurs in a fixed-bed reactor followed by a solvent-based recovery system.
www.intratec.us/analysis/man-e11a

MALEIC ANHYDRIDE PRODUCTION FROM BUTANE - COST ANALYSIS | REPORT MAN E12A
Economic analysis of Maleic Anhydride production from n-butane in the USA. Similarly to the process presented in the report "MAN E11A", the process examined in this report also uses a fixed-bed reactor, but, in this case, the recovery system is aqueous-based. This process is similar to Scientific Design process.
www.intratec.us/analysis/man-e12a

MALEIC ANHYDRIDE PRODUCTION FROM BUTANE - COST ANALYSIS | REPORT MAN E13A
Economics of a process similar to CB&I Lummus ALMA for Maleic Anhydride production from n-butane in the United States. Differently from the report "MAN E11A", the process examined in this report uses a fluid bed reactor.
www.intratec.us/analysis/man-e13a

MALEIC ANHYDRIDE PRODUCTION FROM BENZENE - COST ANALYSIS | REPORT MAN E21A
Techno-economic study of a process for Maleic Anhydride production from benzene in the USA. This process uses a fixed-bed reactor combined with an aqueous-based recovery system.
www.intratec.us/analysis/man-e21a

MALEIC ANHYDRIDE PRODUCTION FROM BUTENES - COST ANALYSIS | REPORT MAN E31A
This study reviews the economics of a process for Maleic Anhydride production from butenes. In the process examined, Maleic Anhydride is produced by the oxidation of n-butenes in a fluidized-bed reactor. The economic analysis performed is based on a plant constructed in the USA.
www.intratec.us/analysis/man-e31a
MELAMINE RESIN

See below Intratec’s reports related to MF Resins.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

MELAMINE FORMALDEHYDE RESINS PRODUCTION - COST ANALYSIS | REPORT MF E11A
This report assesses the economics of a batch polymerization process for Melamine Formaldehyde Resins production, assuming a plant located in the United States. The analysis considers a plant receiving melamine and formalin to start production.

www.intratec.us/analysis/mf-e11a
METHACRYLIC ACID

See below Intratec’s reports related to MAA.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

METHACRYLIC ACID PRODUCTION FROM ISOBUTYLENE - COST ANALYSIS | REPORT MAA E11A
This report presents the economics of Methacrylic Acid production from isobutylene via a typical oxidation process. The economic analysis is based on the construction of a plant in the USA.
www.intratec.us/analysis/maa-e11a

METHACRYLIC ACID PRODUCTION FROM ISOBUTANE - COST ANALYSIS | REPORT MAA E21A
This study provides the economics of Methacrylic Acid production starting from isobutane in the United States. Isobutane is first dehydrogenated to isobutylene, which is then converted to Methacrylic Acid via a typical oxidation process.
www.intratec.us/analysis/maa-e21a
METHANOL PRODUCTION FROM NATURAL GAS - COST ANALYSIS | REPORT METHANOL E11A
Economics of large-scale Methanol production from natural gas in the United States, based on a process in which natural gas is first converted into synthesis gas (syngas) by means of conventional steam reforming and then the syngas is converted into Methanol.
www.intratec.us/analysis/methanol-e11a

METHANOL PRODUCTION FROM NATURAL GAS - COST ANALYSIS | REPORT METHANOL E12A
In this report, as in the report "Methanol E11A", the economic analysis concerns a process in which Methanol is generated from natural gas. However, this study examines a combined reforming process similar the technologies developed by Lurgi, Toyo, KBR, Johnson Matthey/Davy and Haldor-Topsoe. The plant is also located in the United States.
www.intratec.us/analysis/methanol-e12a

METHANOL PRODUCTION FROM NATURAL GAS - COST ANALYSIS | REPORT METHANOL E13A
Feasibility study of large-scale Methanol production in the USA. In this process, natural gas passes through a gas heated reformer to be converted into syngas, which is then converted to Methanol following concepts similar to the ones adopted in Leading Concept Methanol Process owned by Johnson Matthey.
www.intratec.us/analysis/methanol-e13a

METHANOL PRODUCTION FROM NAPHTHA - COST ANALYSIS | REPORT METHANOL E31A
Economic analysis of Methanol production from naphtha in the USA. The process consists of a typical naphtha partial oxidation for synthesis gas production followed by its conversion into Methanol.
www.intratec.us/analysis/methanol-e31a

METHANOL PRODUCTION FROM SYNGAS - COST ANALYSIS | REPORT METHANOL E21A
This report presents a techno-economic study of Methanol production from synthesis gas (syngas) in the United States.
www.intratec.us/analysis/methanol-e21a

See below data offered by Intratec related to Methanol

Chemicals Pricing Data. Intratec offers online up-to-date and historical prices of chemical commodities and utilities, across several world regions. To know more about Intratec Chemicals Pricing Data, go to page 11

METHANOL PRICES
Online database presenting the following information:
* Methanol Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  www.intratec.us/chemical-markets/methanol-prices
METHIONINE

See below Intratec’s reports related to Methionine.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

DL-METHIONINE FROM METHIONAL AND HYDROGEN CYANIDE - COST ANALYSIS | REPORT METHIONINE E11A
Economics of DL-Methionine production from methional and hydrogen cyanide (HCN) in the USA via a typical carbonate process.
www.intratec.us/analysis/methionine-e11a

BIO-METHIONINE PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT METHIONINE E21B
This report presents the economics of L-Methionine production from raw sugar in Germany using a direct fermentation process similar to the technology developed by Metabolic Explorer (MetEx).
www.intratec.us/analysis/methionine-e21b

BIO-METHIONINE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT METHIONINE E31A
The process for L-Methionine production presented in this report is the same examined in the report “Methionine E21F”, with two exceptions: (1) the plant is constructed in the United States, and (2) the raw material used is glucose syrup.
www.intratec.us/analysis/methionine-e31a

DL-METHIONINE FROM ACROLEIN, METHYL MERCAPTAN AND HCN - COST ANALYSIS | REPORT METHIONINE E41A
Economics of DL-Methionine production from acrolein, methyl mercaptan, and hydrogen cyanide (HCN) in the USA via a typical carbonate process.
www.intratec.us/analysis/methionine-e41a

METHIONINE HYDROXY ANALOG PRODUCTION PROCESS - COST ANALYSIS | REPORT METHIONINE E51A
Economics of Methionine Hydroxy Analog production from methional and hydrogen cyanide (HCN) in the USA via a typical process.
www.intratec.us/analysis/methionine-e51a

METHIONINE HYDROXY ANALOG PRODUCTION PROCESS - COST ANALYSIS | REPORT METHIONINE E61A
Economics of Methionine Hydroxy Analog production from acrolein, methyl mercaptan, and hydrogen cyanide (HCN) in the USA via a typical process.
www.intratec.us/analysis/methionine-e61a

DL-METHIONINE FROM PROPYLENE, METHYL MERCAPTAN AND HCN - COST ANALYSIS | REPORT METHIONINE E71A
This study presents the economics of an integrated process for DL-Methionine production starting from propylene in the USA. It is based on a typical carbonate process, which also requires methyl mercaptan, and hydrogen cyanide (HCN).
www.intratec.us/analysis/methionine-e71a
METHYL ACRYLATE

See below Intratec’s reports related to Methyl Acrylate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

METHYL ACRYLATE FROM ACRYLIC ACID - COST ANALYSIS | REPORT METHYL ACRYLATE E11A
This report presents the economics of Methyl Acrylate production from acrylic acid and methanol in the USA, via a typical esterification process.

www.intratec.us/analysis/methyl-acrylate-e11a
METHYL CHLORIDE

See below Intratec’s reports related to Methyl Chloride.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

METHYL CHLORIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT METHYL CHLORIDE E11A
This report presents the economics of Methyl Chloride production from methanol and hydrogen chloride. The economic analysis encompasses a plant located in the United States using a conventional industrial process where chloridric acid is combined with methanol in a reaction occurring in vapor phase over a catalyst bed.

www.intratec.us/analysis/methyl-chloride-e11a
METHYL ESTER SULFONATE

See below Intratec's reports related to Methyl Ester Sulfonate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

METHYL ESTER SULFONATE PRODUCTION PROCESS - COST ANALYSIS | REPORT MES E11A

Feasibility analysis of Methyl Ester Sulfonate production from palm oil in the United States. This process is comprised of two steps: a transesterification step, in which methyl ester is formed; and a sulfonation step to final product generation.

www.intratec.us/analysis/mes-e11a
See below Intratec’s reports related to MMA.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

METHYL METHACRYLATE FROM ISOBUTYLENE - COST ANALYSIS | REPORT MMA E31A
This report presents the economics of Methyl Methacrylate production from isobutylene in the United States using an oxidation process similar to Sumitomo/Nippon Shokubai process.
www.intratec.us/analysis/mma-e31a

METHYL METHACRYLATE FROM ACETONE - COST ANALYSIS | REPORT MMA E62A
The process presented in this report is the same examined in the report “MMA E11A” with the exception that hydrogen cyanide is purchased from external suppliers. The economic analysis presented in this report also assumes a plant located in the USA.
www.intratec.us/analysis/mma-e62a

METHYL METHACRYLATE FROM ACETONE - COST ANALYSIS | REPORT MMA E11A
Economics of a process similar to Evonik Aveneer for Methyl Methacrylate (MMA) production from acetone and hydrogen cyanide (HCN) in the USA. This report considers that hydrogen cyanide is produced on-site from ammonia and natural gas.
www.intratec.us/analysis/mma-e11a

METHYL METHACRYLATE FROM T-BUTANOL - COST ANALYSIS | REPORT MMA E21A
This study reviews the economics of a process for Methyl Methacrylate production from t-Butanol. The economic analysis performed is based on a plant constructed in the USA.
www.intratec.us/analysis/mma-e21a
See below Intratec’s reports related to MTBE.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

MTBE PRODUCTION FROM CRUDE C4S - COST ANALYSIS | REPORT MTBE E11A
Feasibility analysis of Methyl tert-Butyl Ether (MTBE) production from a crude C4s stream and methanol via a typical isobutylene etherification process in the United States.

www.intratec.us/analysis/mtbe-e11a
MDI

See below Intratec’s reports related to MDI.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

MDI FROM ANILINE VIA PHOSGENATION PROCESS - COST ANALYSIS | REPORT MDI E12A
This study presents the costs associated with the construction of a plant producing MDI from aniline and formaldehyde in the USA. Differently from the report “MDI E11A”, this study reviews a phosgenation process. The phosgene used is generated from chlorine in an on-site unit.
www.intratec.us/analysis/mdi-e12a

MDI FROM ANILINE VIA CARBONYLATION PROCESS - COST ANALYSIS | REPORT MDI E11A
This report presents the economics of Methylene Diphenyl Diisocyanate (MDI) production from aniline and formaldehyde using a typical oxidative carbonylation process. In the process under analysis, Polymeric MDI (PMDI) is also generated as product. The economic analysis assumes a plant constructed in the USA.
www.intratec.us/analysis/mdi-e11a

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MONOETHANOLAMINE

See below Intratec’s reports related to MEA.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ETHANOLAMINES FROM ETHYLENE OXIDE AND AMMONIA - COST ANALYSIS | REPORT MEA E11A

This report approaches the Ethanolamines production from ethylene oxide and ammonia. The process examined is similar to the one owned by Johnson Matthey Davy Technologies. In this process, Monoethanolamine (MEA), Diethanolamine (DEA) and Triethanolamine (TEA) are co-produced. The economic analysis performed assumes a plant located in the USA.

www.intratec.us/analysis/mea-e11a
NEOPENTYL GLYCOL

See below Intratec's reports related to Neopentyl Glycol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

NEOPENTYL GLYCOL PRODUCTION PROCESS - COST ANALYSIS | REPORT NEOPENTYL GLYCOL E11A
This report presents the economics of Neopentyl Glycol production from isobutyraldehyde, formaldehyde and hydrogen, assuming a conventional industrial process. The economic analysis approaches a plant located on the US Gulf Coast.

www.intratec.us/analysis/neopentyl-glycol-e11a
See below Intratec’s reports related to Nicotinamide.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

NICOTINAMIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT NICOTINAMIDE E11A
This report presents the economics of Nicotinamide production from 2-methyl-1,5-pentanediamine (MPDA) in the USA.
www.intratec.us/analysis/nicotinamide-e11a
NITRIC ACID

See below Intratec’s reports related to Nitric Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

NITRIC ACID PRODUCTION FROM AMMONIA - COST ANALYSIS | REPORT NA E11A
Economics of Nitric Acid production from ammonia via the Ostwald process in the United States. In this process, 65 wt% Nitric Acid solution is obtained as the final product.
www.intratec.us/analysis/na-e11a

NITRIC ACID PRODUCTION FROM AMMONIA - COST ANALYSIS | REPORT NA E12A
In this report, the economic analysis concerns the same process studied in the report “NA E11A”, but in this case, the final product is a 99 wt% Nitric Acid solution. The economic analysis presented is also based on a plant constructed in the USA.
www.intratec.us/analysis/na-e12a
See below Intratec’s reports related to NBR.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**NITRILE RUBBER PRODUCTION - COST ANALYSIS | REPORT NBR E11A**
This report presents the economics of Nitrile Rubber (NBR) production from acrylonitrile and butadiene using a typical cold emulsion polymerization process. The economic analysis is based on a plant constructed in the USA.
[www.intratec.us/analysis/nbr-e11a](http://www.intratec.us/analysis/nbr-e11a)

**ACRYLONITRILE BUTADIENE LATEX PRODUCTION - COST ANALYSIS | REPORT NBR E21A**
This report presents the economics of Nitrile Latex (NBR latex) production from acrylonitrile and butadiene using a typical cold emulsion polymerization process, based on a plant constructed in the USA.
[www.intratec.us/analysis/nbr-e21a](http://www.intratec.us/analysis/nbr-e21a)

See below data offered by Intratec related to NBR

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Online database presenting the following information:

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NITROBENZENE

See below Intratec’s reports related to Nitrobenzene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

NITROBENZENE PRODUCTION FROM BENZENE - COST ANALYSIS | REPORT NB E11A
This report presents the economics of Nitrobenzene production from benzene and nitric acid in the USA. The process analyzed in this report is similar to NORAM’s adiabatic benzene nitration process, which uses a plug-flow nitrator containing jet-impingement elements.
www.intratec.us/analysis/nb-e11a

NITROBENZENE PRODUCTION FROM BENZENE - COST ANALYSIS | REPORT NB E12A
This report presents the economics of Nitrobenzene production from benzene and nitric acid in the United States. Different from the process presented in the report “NB E11A”, the process examined in this report is similar to Chematur’s process, in which a tubular reactor is used.
www.intratec.us/analysis/nb-e12a
NITROGEN

See below Intratec’s reports related to Nitrogen.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

NITROGEN PRODUCTION - COST ANALYSIS | REPORT NITROGEN E11A
Economic analysis of a typical cryogenic distillation process for Nitrogen production in the USA, using atmospheric air as the starting material. Nitrogen main product and oxygen byproduct are produced as high-pressure gases.

www.intratec.us/analysis/nitrogen-e11a
NP FERTILIZER

See below Intratec's reports related to NP.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

NP FERTILIZER PRODUCTION - COST ANALYSIS | REPORT NP E11A
This report presents the economics of a typical nitrofosfate process (Odda process) for NP Fertilizer production in the USA from rock phosphate, ammonia, carbon dioxide, and nitric acid. The product formulation is 22-22-0 (22% N, 22% P2O5, 0% K2O).

www.intratec.us/analysis/np-e11a
See below Intratec’s reports related to NPK.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

NPK FERTILIZER PRODUCTION - COST ANALYSIS | REPORT NPK E11A
This report presents the economics of a typical phosphonitric process for NPK Fertilizer production in the USA from rock phosphate, phosphoric acid, ammonia, and nitric acid. The product formulation is 15-15-15 (15% N, 15% P2O5, 15% K2O).
www.intratec.us/analysis/npk-e11a
NYLON 6

See below Intratec's reports related to Nylon 6.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

NYLON 6 PRODUCTION FROM CAPROLACTAM - COST ANALYSIS | REPORT NYLON 6 E11A
This report presents the economics of Nylon 6 production from caprolactam. The typical process analyzed consists of a batch ring-opening polymerization of caprolactam via the hydrolytic mechanism. The economic assessment assumes a plant located in the USA.

www.intratec.us/analysis/nylon-6-e11a

NYLON 6 PRODUCTION FROM CAPROLACTAM - COST ANALYSIS | REPORT NYLON 6 E12A
This report presents the economics of Nylon 6 production from caprolactam in the USA. The process analyzed consists of a continuous ring-opening polymerization of caprolactam via the hydrolytic mechanism.

www.intratec.us/analysis/nylon-6-e12a
NYLON 66

See below Intratec’s reports related to Nylon 6,6.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

NYLON 6, 6 PRODUCTION - COST ANALYSIS | REPORT NYLON 66 E11A
This report presents the economics of Nylon 6,6 production from adipic acid and hexamethylenediamine (HMDA) in the USA. The process analyzed consists of a typical batch polycondensation process.
www.intratec.us/analysis/nylon-66-e11a

NYLON 6, 6 PRODUCTION - COST ANALYSIS | REPORT NYLON 66 E12A
This report also presents the economics of Nylon 6,6 production from adipic acid and hexamethylenediamine (HMDA) in the USA. The process analyzed consists of a continuous polycondensation process.
www.intratec.us/analysis/nylon-66-e12a
Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**OCTENES PRODUCTION FROM BUTENES - COST ANALYSIS | REPORT OCTENE E11A**
This report presents an economic analysis for the production of Mixed Octenes starting from butenes. The study concerns a plant based on a process similar to Axens Dimersol-X and located on the US Gulf Coast.
www.intratec.us/analysis/octene-e11a

**1-OCTENE PRODUCTION FROM MIXED C4S - COST ANALYSIS | REPORT OCTENE E12A**
This report presents the economics of 1-Octene production from mixed C4 hydrocarbons in the United States. The analysis assumes a plant employing a process similar to the technology owned by Dow Chemicals.
www.intratec.us/analysis/octene-e12a

**1-OCTENE PRODUCTION FROM C7S - COST ANALYSIS | REPORT OCTENE E21A**
In this study, it is approached the economics of 1-Octene production starting from mixed C7 hydrocarbons. The analysis is based on a United States-based plant using a process similar to the technology owned by Sasol.
www.intratec.us/analysis/octene-e21a

**1-OCTENE PRODUCTION FROM SYNFUELS - COST ANALYSIS | REPORT OCTENE E31A**
This feasibility study concerns the production of 1-Octene starting from synthetic gasoline. It also assumes a plant located in the United States, employing a process also owned by Sasol that uses synthetic gasoline as the start material.
www.intratec.us/analysis/octene-e31a
This report presents the economics of Oxalic Acid production from sugar and nitric acid in the USA, via a typical oxidation process.

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See below Intratec’s reports related to Oxygen.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

OXYGEN PRODUCTION - COST ANALYSIS | REPORT OXYGEN E11A
Techno-economic study of a typical cryogenic distillation process for Oxygen production using atmospheric air as the starting material. Oxygen main product and nitrogen byproduct are produced as high pressurized gases. The economic analysis presented assumes a plant located in the USA.
www.intratec.us/analysis/oxygen-e11a

OXYGEN PRODUCTION - COST ANALYSIS | REPORT OXYGEN E12A
Economics of Oxygen production in a plant also located in the United States, using atmospheric air as the starting material. Different from the process examined in the report “Oxygen E11A”, the process presented in this report also produces argon as byproduct. Nitrogen and the majority of the Oxygen produced are supplied in gaseous phase. Oxygen is also supplied in liquid phase, as well as all argon produced.
www.intratec.us/analysis/oxygen-e12a

OXYGEN PRODUCTION - COST ANALYSIS | REPORT OXYGEN E13A
Feasibility analysis of Oxygen production in the USA, using atmospheric air as the starting material. In this case, a typical vacuum swing adsorption process is applied for the production of low purity Oxygen.
www.intratec.us/analysis/oxygen-e13a
Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**BIO-PARAXYLENE PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT PARAXYLENE E71B**
Economics of p-Xylene production from raw sugar considering a plant located in Germany.
[www.intratec.us/analysis/paraxylene-e71b](http://www.intratec.us/analysis/paraxylene-e71b)

**PARAXYLENE PRODUCTION FROM MIXED XYLENES - COST ANALYSIS | REPORT PARAXYLENE E11A**
This report examines the costs related to a typical process for p-Xylene production from mixed xylenes via isomerization in the USA.
[www.intratec.us/analysis/paraxylene-e11a](http://www.intratec.us/analysis/paraxylene-e11a)

**PARAXYLENE PRODUCTION FROM MIXED XYLENES - COST ANALYSIS | REPORT PARAXYLENE E13A**
It presents the economics of a process for p-Xylene production from mixed xylenes in the USA, via isomerization followed by ethylbenzene (EB) dealkylation.
[www.intratec.us/analysis/paraxylene-e13a](http://www.intratec.us/analysis/paraxylene-e13a)

**PARAXYLENE PRODUCTION FROM MIXED XYLENES - COST ANALYSIS | REPORT PARAXYLENE E14A**
This report analyses the economics of a process for p-Xylene production from mixed xylenes in the USA, via crystallization followed by isomerization and ethylbenzene (EB) dealkylation.
[www.intratec.us/analysis/paraxylene-e14a](http://www.intratec.us/analysis/paraxylene-e14a)

**PARAXYLENE PRODUCTION FROM MIXED XYLENES - COST ANALYSIS | REPORT PARAXYLENE E12A**
It presents the economics of a typical process for p-Xylene production from mixed xylenes in the USA. Differently from the report "Paraxylene E11A", o-xylene is also produced.
[www.intratec.us/analysis/paraxylene-e12a](http://www.intratec.us/analysis/paraxylene-e12a)

**PARAXYLENE PRODUCTION FROM TOLUENE - COST ANALYSIS | REPORT PARAXYLENE E22A**
This report examines the costs related to a process for p-Xylene production from toluene in the USA. Differently from the report "Paraxylene E21A", p-xylene is produced via a selective disproportionation process.
[www.intratec.us/analysis/paraxylene-e22a](http://www.intratec.us/analysis/paraxylene-e22a)

**PARAXYLENE PRODUCTION FROM TOLUENE - COST ANALYSIS | REPORT PARAXYLENE E21A**
This study presents the economics of a process similar to PxMax developed by ExxonMobil for p-Xylene production from toluene in the USA.
[www.intratec.us/analysis/paraxylene-e21a](http://www.intratec.us/analysis/paraxylene-e21a)

**PARAXYLENE PRODUCTION FROM TOLUENE - COST ANALYSIS | REPORT PARAXYLENE E23A**
This report presents the economics of p-Xylene production from toluene in the USA. Differently from the report "Paraxylene E21A", the process used is a typical toluene disproportionation process (TDP).
[www.intratec.us/analysis/paraxylene-e23a](http://www.intratec.us/analysis/paraxylene-e23a)

**PARAXYLENE FROM TOLUENE AND C9 AROMATICS - COST ANALYSIS | REPORT PARAXYLENE E31A**

**Purchase & pricing info:** [www.intratec.us](http://www.intratec.us)

**For further questions:** sales@intratec.us
This report examines the costs of a typical disproportionation and transalkylation process for p-Xylene production from toluene and C9 aromatics in the USA.

www.intratec.us/analysis/paraxylene-e31a

PARAXYLENE PRODUCTION FROM C9 AROMATICS - COST ANALYSIS | REPORT PARAXYLENE E41A
This report presents the economics of a typical transalkylation process for p-Xylene production from C9 aromatics in the USA.

www.intratec.us/analysis/paraxylene-e41a

BIO-PARAXYLENE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT PARAXYLENE E51A
This report examines the costs of p-Xylene production from glucose syrup in the USA.

www.intratec.us/analysis/paraxylene-e51a

BIO-PARAXYLENE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT PARAXYLENE E52A
Economic analysis of p-Xylene production from glucose syrup in the United States. Differently from the process presented in the report “Paraxylene E51A”, in this process, p-Xylene is produced via isobutanol intermediate.

www.intratec.us/analysis/paraxylene-e52a

See below data offered by Intratec related to p-Xylene

Chemicals Pricing Data. Intratec offers online up-to-date and historical prices of chemical commodities and utilities, across several world regions. To know more about Intratec Chemicals Pricing Data, go to page 11

P-XYLENE PRICES
Online database presenting the following information:

* p-Xylene Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  www.intratec.us/chemical-markets/p-xylene-prices
PARACETAMOL

See below Intratec’s reports related to Paracetamol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PARACETAMOL PRODUCTION PROCESS - COST ANALYSIS | REPORT PARACETAMOL E11A
This report analyses the economics of Paracetamol production from 4-nitrochlorobenzene, sodium hydroxide, and acetic anhydride in the USA.
www.intratec.us/analysis/paracetamol-e11a
PENTAERYTHRITOL

See below Intratec’s reports related to PER.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PENTAERYTHRITOL PRODUCTION PROCESS - COST ANALYSIS | REPORT PER E11A
This report presents the economics of industrial Pentaerythritol (PER) production from acetaldehyde and formaldehyde in the United States.
www.intratec.us/analysis/per-e11a

PENTAERYTHRITOL PRODUCTION PROCESS - COST ANALYSIS | REPORT PER E21A
This study provides the economics of Pentaerythritol production starting from acetaldehyde and methanol in the United States. In this process, methanol is first converted to formaldehyde, which is then combined with acetaldehyde to form Pentaerythritol.
www.intratec.us/analysis/per-e21a
PHENETHYL ALCOHOL

See below Intratec’s reports related to Phenethyl Alcohol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PHENETHYL ALCOHOL PRODUCTION PROCESS - COST ANALYSIS | REPORT PHENETHYL ALCOHOL E11A
This report presents the economics of a typical Phenethyl Alcohol production process from benzene, ethylene oxide, and aluminum chloride in the USA.

www.intratec.us/analysis/phenethyl-alcohol-e11a
See below Intratec’s reports related to Phenol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PHENOL PRODUCTION FROM BENZENE - COST ANALYSIS | REPORT PHENOL E31A
Techno-economic study of Phenol production from benzene and hydrogen peroxide in the United States using a process similar to the one proposed by the Council of Scientific and Industrial Research.
www.intratec.us/analysis/phenol-e31a

PHENOL PRODUCTION FROM CUMENE - COST ANALYSIS | REPORT PHENOL E11A
Feasibility analysis of Phenol production from cumene in the USA using a typical hydroperoxidation process.
www.intratec.us/analysis/phenol-e11a

PHENOL PRODUCTION FROM BENZENE AND PROPYLENE - COST ANALYSIS | REPORT PHENOL E41A
This report presents an economic analysis of Phenol production from benzene and propylene also in the USA. The process analyzed in this report is similar to the one presented in the report "Phenol E11A", but in this case, cumene used in the reaction is produced on-site from benzene and propylene.
www.intratec.us/analysis/phenol-e41a

PHENOL PRODUCTION FROM TOLUENE - COST ANALYSIS | REPORT PHENOL E21A
This study reviews the economics of a process producing Phenol from Toluene. The economic analysis presented assumes a plant constructed in the USA.
www.intratec.us/analysis/phenol-e21a
This report presents the economics of a conventional batch polymerization for Phenol-Formaldehyde Resins production, starting from phenol and formalin. The economic analysis approaches a plant located on the US Gulf Coast.

www.intratec.us/analysis/pf-e11a
PHENTHOATE

See below Intratec’s reports related to Phenthoate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PHENTHOATE PRODUCTION PROCESS - COST ANALYSIS | REPORT PHENTHOATE E11A
This study presents the economics of Phenthoate production from EBPA, phosphorus pentasulfide, toluene, and methanol in the USA.

www.intratec.us/analysis/phenthoate-e11a
See below Intratec’s reports related to Phosgene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PHOSGENE PRODUCTION FROM CHLORINE - COST ANALYSIS | REPORT PHOSGENE E11A
This report presents the costs associated with the construction of a plant producing Phosgene from chlorine and carbon monoxide in the USA.

www.intratec.us/analysis/phosgene-e11a
PHTHALIC ANHYDRIDE

See below Intratec’s reports related to Phthalic Anhydride.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PHTHALIC ANHYDRIDE PRODUCTION FROM O-XYLENE - COST ANALYSIS | REPORT PHTAN E11A
This report presents the economics of Phthalic Anhydride production from o-xylene based on a conventional vapor phase oxidation. The economic analysis presented assumes a plant located in the USA.
www.intratec.us/analysis/phtan-e11a

PHTHALIC ANHYDRIDE PRODUCTION FROM NAPHTHALENE - COST ANALYSIS | REPORT PHTAN E21A
This feasibility study examines the economics of a process producing Phthalic Anhydride from naphthalene. The economic analysis performed is based on a plant constructed in the USA.
www.intratec.us/analysis/phtan-e21a

PHTHALIC ANHYDRIDE PRODUCTION FROM O-XYLENE - COST ANALYSIS | REPORT PHTAN E12A
This report presents the economics of Phthalic Anhydride production from o-xylene based on a conventional vapor phase oxidation. Differently from the report E11A, this report is based on a Low Air Ratio (LAR) process, in which the amount of air supplied to oxidation reaction is reduced. The economic analysis presented assumes a plant located in the USA.
www.intratec.us/analysis/phtan-e12a
POLYACRYLONITRILE

See below Intratec’s reports related to PAN.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYACRYLONITRILE PRODUCTION - COST ANALYSIS | REPORT PAN E11A
Techno-economic analysis of Polyacrylonitrile (PAN) production in the USA via a suspension polymerization process.
www.intratec.us/analysis/pan-e11a
POLYALPHAOLEFIN

See below Intratec’s reports related to PAO.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

UHVI POLYALPHAOLEFIN PRODUCTION - COST ANALYSIS | REPORT PAO E11A
This report assesses the economics of industrial Ultra High Viscosity Index (UHVI) Polyalphaolefins (PAO) production, assuming a plant located in the United States.

www.intratec.us/analysis/pao-e11a
See below Intratec’s reports related to PAC.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYALUMINUM CHLORIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT PAC E11A
This report presents the economics of Polyaluminum Chloride production from aluminum hydroxide, sulfuric acid, hydrochloric acid, and calcium carbonate in the USA.
www.intratec.us/analysis/pac-e11a
See below Intratec’s reports related to Polybutadiene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYBUTADIENE PRODUCTION VIA SOLUTION PROCESS - COST ANALYSIS | REPORT BR E11A
This report presents the economics of Polybutadiene production from butadiene in the USA, via a typical solution process.
www.intratec.us/analysis/br-e11a

POLYBUTADIENE PRODUCTION VIA SOLUTION PROCESS - COST ANALYSIS | REPORT BR E21A
It presents an economic analysis of an integrated unit for producing Polybutadiene starting from n-butane in the United States. The process comprehends a dehydrogenation process similar to CB&I Lummus Catadiene and a typical solution polymerization process.
www.intratec.us/analysis/br-e21a

BIO-POLYBUTADIENE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT BR E31A
This report analyses the economics of an integrated plant producing Polybutadiene from glucose in the United States. The process examined is a direct aerobic fermentation process similar to the one proposed by Global Bioenergies combined with a typical solution polymerization process for Polybutadiene generation.
www.intratec.us/analysis/br-e31a

BIO-POLYBUTADIENE PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT BR E41B
As the report "Polybutadiene E31A", this report also considers the economics of Bio-Polybutadiene production, but based on a plant located in Germany, using raw sugar as raw material.
www.intratec.us/analysis/br-e41b

See below data offered by Intratec related to Polybutadiene

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POLYBUTADIENE PRICES
Online database presenting the following information:
* Polybutadiene Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
www.intratec.us/chemical-markets/polybutadiene-prices
POLYBUTYLENE SUCCINATE

See below Intratec’s reports related to PBS.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYBUTYLENE SUCCINATE PRODUCTION - COST ANALYSIS | REPORT PBS E11A
This report presents the economics of Polybutylene Succinate (PBS) production from succinic acid and butanediol using a process similar to Uhde Inventa-Fischer process. The economic assessment assumes a plant located in the USA.
www.intratec.us/analysis/pbs-e11a

POLYBUTYLENE SUCCINATE PRODUCTION - COST ANALYSIS | REPORT PBS E21A
This report presents the economics of Polybutylene Succinate (PBS) production from glucose and butanediol in the United States. The examined process combines a process for succinic acid generation from glucose syrup with a process similar to Uhde Inventa-Fischer for generating Polybutylene Succinate from succinic acid and butanediol.
www.intratec.us/analysis/pbs-e21a

METHYL CHLORIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT PBS E31B
This report presents the economics of Polybutylene Succinate (PBS) production from raw sugar and butanediol in Germany. The examined process combines a process for succinic acid generation from raw sugar with a process similar to Uhde Inventa-Fischer for generating Polybutylene Succinate from succinic acid and butanediol.
www.intratec.us/analysis/pbs-e31b

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This report presents the economics of Polybutylene Terephthalate (PBT) production from dimethyl terephthalate (DMT) in the USA, via a typical transesterification/polycondensation process.

www.intratec.us/analysis/pbt-e11a
POLYCARBONATE

See below Intratec's reports related to Polycarbonate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYCARBONATE PRODUCTION FROM BPA - COST ANALYSIS | REPORT PC E11A
This report presents the economics of Polycarbonate (PC) production from bisphenol A (BPA) and phosgene in the USA, via a typical interfacial process.
www.intratec.us/analysis/pc-e11a

POLYCARBONATE PRODUCTION FROM BPA AND DPC - COST ANALYSIS | REPORT PC E21A
This study presents the economics of Polycarbonate (PC) production from bisphenol A (BPA) and diphenyl carbonate (DPC) in the USA, via a typical melt process.
www.intratec.us/analysis/pc-e21a

ISOSORBIDE POLYCARBONATE PRODUCTION - COST ANALYSIS | REPORT PC E91A
This report examines the costs related to Isosorbide Polycarbonate production from glucose and ethylene oxide in the USA, using a melt process similar to the one proposed by Mitsubishi Chemical. Ethylene glycol is generated as a by-product.
www.intratec.us/analysis/pc-e91a

POLYCARBONATE PRODUCTION FROM BPA AND ETHYLENE OXIDE - COST ANALYSIS | REPORT PC E31A
It presents the economics of Polycarbonate (PC) production from bisphenol A (BPA) and ethylene oxide in the USA, via a typical melt process. Ethylene glycol is generated as a by-product.
www.intratec.us/analysis/pc-e31a

POLYCARBONATE PRODUCTION FROM PHENOL - COST ANALYSIS | REPORT PC E41A
This report analyses the economics of Polycarbonate (PC) production from phenol, acetone and phosgene in the USA, using a typical interfacial process integrated with a BPA production unit.
www.intratec.us/analysis/pc-e41a

POLYCARBONATE PRODUCTION FROM PHENOL - COST ANALYSIS | REPORT PC E81A
This report presents the economics of Polycarbonate (PC) production from phenol, acetone, and methanol in the USA, via a typical melt process integrated with BPA and diphenyl carbonate (DPC) production units.
www.intratec.us/analysis/pc-e81a

POLYCARBONATE FROM BPA AND PHENOL - COST ANALYSIS | REPORT PC E71A
It presents the economics of Polycarbonate (PC) production from bisphenol A (BPA), phenol and methanol in the USA, using a typical melt process integrated with a diphenyl carbonate (DPC) production unit.
www.intratec.us/analysis/pc-e71a

POLYCARBONATE PRODUCTION FROM PHENOL - COST ANALYSIS | REPORT PC E61A
This report analyses the economics of Polycarbonate (PC) production from phenol, phosgene and acetone in the USA, using a typical melt process integrated with BPA and diphenyl carbonate (DPC) production units.
www.intratec.us/analysis/pc-e61a

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POLYCARBONATE FROM BPA AND PHENOL - COST ANALYSIS | REPORT PC E51A

It presents the economics of Polycarbonate (PC) production from bisphenol A (BPA), phenol and phosgene in the USA, via a typical melt process integrated with a diphenyl carbonate (DPC) production unit.

www.intratec.us/analysis/pc-e51a
See below Intratec’s reports related to Polychloroprene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYCHLOROPRENE PRODUCTION - COST ANALYSIS | REPORT CR E11A
This report presents the economics of Chloroprene Rubber (or Polychloroprene) production from chloroprene using a typical emulsion process. The economic analysis is based on a plant constructed in the USA.
[www.intratec.us/analysis/cr-e11a](www.intratec.us/analysis/cr-e11a)

POLYCHLOROPRENE PRODUCTION - COST ANALYSIS | REPORT CR E21A
This study provides an economic analysis of Polychloroprene production starting from butadiene and chlorine, based on a plant located in the United States.
[www.intratec.us/analysis/cr-e21a](www.intratec.us/analysis/cr-e21a)

See below data offered by Intratec related to Polychloroprene

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POLYCHLOROPRENE PRICES
Online database presenting the following information:

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[www.intratec.us/chemical-markets/polychloroprene-prices](www.intratec.us/chemical-markets/polychloroprene-prices)
POLYETHER

See below Intratec’s reports related to Polyether.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PTMEG PRODUCTION FROM THF - COST ANALYSIS | REPORT POLYETHER E11A
Techno-economic analysis of Polytetramethylene Ether Glycol (PTMEG) production from tetrahydrofuran (THF) polymerization in the United States.
www.intratec.us/analysis/polyether-e11a

GLYCEROL-PROPOXYLATED POLYETHER PRODUCTION - COST ANALYSIS | REPORT POLYETHER E24A
Techno-economic study of a process for Glycerol-Propoxylated Polyether production from propylene oxide and glycerol starter. The analysis considers a plant erected in the USA.
www.intratec.us/analysis/polyether-e24a

GLYCEROL-PROPOXYLATED POLYETHER PRODUCTION - COST ANALYSIS | REPORT POLYETHER E25A
This report presents the economics for the production of Glycerol-Propoxylated Polyether in the United States. Differently from what is presented in the report “Polyether E24A”, the polyether obtained presents an ethylene oxide end-cap (5 wt% of ethylene oxide content).
www.intratec.us/analysis/polyether-e25a

GLYCEROL-PROPOXYLATED POLYETHER PRODUCTION - COST ANALYSIS | REPORT POLYETHER E31A
Feasibility analysis of a process for Glycerol-Propoxylated Polyether production from propylene oxide, ethylene oxide and glycerol starter. The analysis considers a plant constructed in the United States and a final polyether product containing 20 wt% of ethylene oxide in its structure.
www.intratec.us/analysis/polyether-e31a

TMP-PROPYLENE OXIDE POLYETHER PRODUCTION - COST ANALYSIS | REPORT POLYETHER E21A
Economics of TMP-Propylene Oxide Polyether production in the USA. In this process, polyether is produced from propylene oxide using trimethylolpropane (TMP) as starter in the alkoxylation reaction.
www.intratec.us/analysis/polyether-e21a

PHOSPHORIC ACID POLYETHER PRODUCTION - COST ANALYSIS | REPORT POLYETHER E23A
Feasibility study of Phosphoric Acid Polyether production in a United States-based facility. In this case, phosphoric acid is the starter of the alkoxylation reaction with propylene oxide.
www.intratec.us/analysis/polyether-e23a

SORBITOL-BASED POLYETHER PRODUCTION - COST ANALYSIS | REPORT POLYETHER E27A
This report presents a techno-economic analysis of Sorbitol-Based Polyether production. Differently from the report “Polyether E26A”, the process examined in this report uses sorbitol as reaction starter. The economic analysis presented also assumes a plant located in the USA.
www.intratec.us/analysis/polyether-e27a

SUCROSE-BASED POLYETHER PRODUCTION - COST ANALYSIS | REPORT POLYETHER E22A
This report presents an economic analysis for Sucrose-Based Polyether production. Differently from the report "Polyether E21A", the
process examined in this report uses sucrose as reaction starter. The economic analysis presented is also based on a plant constructed in the USA.

TDA-BASED POLYETHER PRODUCTION - COST ANALYSIS | REPORT POLYETHER E26A
Economics of TDA-Based Polyether production in the USA. In this process, polyether is produced from propylene oxide using toluenediamine (TDA) as starter in the alkoxylation reaction.

ACRYLONITRILE GRAFT POLYETHER PRODUCTION - COST ANALYSIS | REPORT POLYETHER E41A
Economic analysis of Acrylonitrile Graft Polyether production from acrylonitrile and glycerol-propoxylated polyether in the USA. In this case, acrylonitrile is grafted into the polyether, forming a copolymer polyol.
POLYETHYLENE FURANOATE

See below Intratec’s reports related to PEF.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYETHYLENE FURANOATE PRODUCTION - COST ANALYSIS | REPORT PEF E11A
This report presents the economics of Polyethylene Furanoate (PEF) production from monoethylene glycol (MEG) and 2,5-furandicarboxylic acid (FDCA). In the process under analysis, FDCA and MEG are polymerized to PEF in two polymerization steps: melt-phase polymerization and solid-state polymerization. The economic analysis provided assumes a plant located in the USA.
www.intratec.us/analysis/pef-e11a

POLYETHYLENE FURANOATE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT PEF E21A
This report, in turn, presents the economics of Polyethylene Furanoate (PEF) production from monoethylene glycol (MEG) and glucose syrup. In the process under analysis, glucose is converted to FDCA in a process similar to AvantiumYXY. FDCA generated and MEG are then polymerized to PEF in two polymerization steps: melt-phase polymerization and solid-state polymerization. The economic analysis provided assumes a plant located in the USA.
www.intratec.us/analysis/pef-e21a

POLYETHYLENE FURANOATE PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT PEF E31B
This report presents the economics of Polyethylene Furanoate (PEF) production from raw sugar and monoethylene glycol (MEG) in Germany. In the process under analysis, raw sugar is converted to FDCA in a process similar to AvantiumYXY. FDCA generated and MEG are then polymerized to PEF in two polymerization steps: melt-phase polymerization and solid-state polymerization.
www.intratec.us/analysis/pef-e31b

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See below Intratec's reports related to PET.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**POLYETHYLENE TEREPHTHALATE PRODUCTION PROCESS - COST ANALYSIS | REPORT PET E11A**
This report presents the economics of Polyethylene Terephthalate (PET) production from ethylene glycol and purified terephthalic acid (PTA) in the USA, via a typical melt-phase process.

[www.intratec.us/analysis/pet-e11a](http://www.intratec.us/analysis/pet-e11a)

**POLYETHYLENE TEREPHTHALATE PRODUCTION PROCESS - COST ANALYSIS | REPORT PET E12A**
It presents the economics of Polyethylene Terephthalate (PET) production from ethylene glycol and purified terephthalic acid (PTA) in the USA. Differently from the report "PET E11A", the process examined in this report is a melt-phase process similar to Invista NG3.

[www.intratec.us/analysis/pet-e12a](http://www.intratec.us/analysis/pet-e12a)
POLYHYDROXYBUTYRATE

See below Intratec’s reports related to PHB.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYHYDROXYBUTYRATE PRODUCTION PROCESS - COST ANALYSIS | REPORT PHB E11A
Economic analysis of Polyhydroxybutyrate (PHB) production from switchgrass in the United States. This process encompasses a gasification step, in which switchgrass is converted to syngas, as well as a fermentation step for PHB production.
www.intratec.us/analysis/phb-e11a

POLYHYDROXYBUTYRATE PRODUCTION PROCESS - COST ANALYSIS | REPORT PHB E21F
The process presented in this report is the same examined in the report “PHB E11A”, with two exceptions: (1) the feedstock used is sugarcane bagasse, and (2) the plant is erected in Brazil.
www.intratec.us/analysis/phb-e21f
See below Intratec’s reports related to Polyisoprene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**POLYISOPRENE PRODUCTION - COST ANALYSIS | REPORT POLYISOPRENE E11A**
This report presents the economics of Polyisoprene production from isoprene in the USA, via a typical solution polymerization process.
www.intratec.us/analysis/polyisoprene-e11a

**POLYISOPRENE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT POLYISOPRENE E21A**
This report presents the economics of Polyisoprene production from starting from glucose, based on a plant located in the United States. The process comprehends the fermentation of 70 wt% glucose-water syrup into isoprene, followed by solution polymerization step for converting isoprene to Polyisoprene.
www.intratec.us/analysis/polyisoprene-e21a

**POLYISOPRENE PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT POLYISOPRENE E31B**
This report presents the economics of Polyisoprene production from starting from raw sugar, based on a plant located in Germany. The process comprehends the hydrolysis of sucrose, the fermentation of the obtained sugars into isoprene and a typical solution polymerization process for converting isoprene to Polyisoprene.
www.intratec.us/analysis/polyisoprene-e31b

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**POLYLACTIC ACID**

See below Intratec’s reports related to PLA.

Intratec **Production Cost Reports** describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**POLYLACTIC ACID PRODUCTION - COST ANALYSIS | REPORT PLA E11A**

This report presents the economics of Polylactic Acid (PLA) production from lactic acid using a melt process similar to the one proposed by NatureWorks. The economic analysis presented is based on a plant constructed in the USA.

[www.intratec.us/analysis/pla-e11a](http://www.intratec.us/analysis/pla-e11a)

**POLYLACTIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT PLA E31B**

This study also approaches the economics of Polylactic Acid production starting from raw sugar in Germany.

[www.intratec.us/analysis/pla-e31b](http://www.intratec.us/analysis/pla-e31b)

**POLYLACTIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT PLA E21A**

This study also approaches the economics of Polylactic Acid production starting from glucose syrup in the United States.

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See below Intratec’s reports related to POM.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYOXYMETHYLENE PRODUCTION PROCESS - COST ANALYSIS | REPORT POM E11A
In this report, it is assessed the production of Polyoxymethylene (POM), also called Polyacetal Resin. The economic analysis concerns Polyoxymethylene production from acetic anhydride and formaldehyde in the USA, assuming a process similar to the one owned by Dupont.
www.intratec.us/analysis/pom-e11a

POLYOXYMETHYLENE FROM METHANOL AND ACETIC ANHYDRIDE - COST ANALYSIS | REPORT POM E21A
This report approaches the production of Polyoxymethylene from methanol and acetic anhydride in the United States. The process portrayed in this report combines the generation of formaldehyde from methanol and the subsequent reaction of formaldehyde with acetic anhydride to form Polyoxymethylene.
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See below Intratec’s reports related to Polypropylene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYPROPYLENE HOMOPOLYMER VIA BULK PROCESS - COST ANALYSIS | REPORT PP E11A
This report presents the economics of Polypropylene (PP) Homopolymer production from polymer grade (PG) propylene in the USA, using a bulk phase polymerization process similar to LyondellBasell Spheripol and Mitsui Hypol II.
www.intratec.us/analysis/pp-e11a

POLYPROPYLENE HOMOPOLYMER VIA HYBRID PROCESS - COST ANALYSIS | REPORT PP E12A
This study presents the economics of Polypropylene (PP) Homopolymer production from PG propylene in the USA, using an hybrid (slurry/gas) polymerization process similar to Borealis BORSTAR.
www.intratec.us/analysis/pp-e12a

POLYPROPYLENE HOMOPOLYMER VIA GAS PROCESS - COST ANALYSIS | REPORT PP E13A
This report examines the costs related to Polypropylene (PP) Homopolymer production from polymer grade (PG) propylene in the USA, using a gas phase polymerization process similar to LyondellBasell Spherizone.
www.intratec.us/analysis/pp-e13a

POLYPROPYLENE HOMOPOLYMER VIA GAS PROCESS - COST ANALYSIS | REPORT PP E14A
It presents the economics of Polypropylene (PP) Homopolymer production from polymer grade (PG) propylene in the USA. Differently from the report "PP E13A", the process examined in this report is similar to Grace UNIPOL process.
www.intratec.us/analysis/pp-e14a

POLYPROPYLENE HOMOPOLYMER VIA GAS PROCESS - COST ANALYSIS | REPORT PP E15A
This report analyses the economics of Polypropylene (PP) Homopolymer production from polymer grade (PG) propylene in the USA. Differently from the report "PP E13A", the process examined in this report is similar to INEOS INNOVENE and JPP HORIZONE.
www.intratec.us/analysis/pp-e15a

POLYPROPYLENE HOMOPOLYMER VIA GAS PROCESS - COST ANALYSIS | REPORT PP E16A
This study presents the economics of Polypropylene (PP) Homopolymer production from polymer grade (PG) propylene in the USA. Differently from the report "PP E13A", the process examined in this report is similar to CB&I Lummus Novolen.
www.intratec.us/analysis/pp-e16a

IMPACT POLYPROPYLENE VIA GAS PROCESS - COST ANALYSIS | REPORT PP E21A
It presents the economics of Polypropylene (PP) Impact Copolymer production from polymer grade (PG) propylene and ethylene in the USA, using a gas phase polymerization process similar to LyondellBasell Spherizone process.
www.intratec.us/analysis/pp-e21a

IMPACT POLYPROPYLENE VIA GAS PROCESS - COST ANALYSIS | REPORT PP E22A
This report presents the economics of Polypropylene (PP) Impact Copolymer production from polymer grade (PG) propylene and ethylene in the USA. Differently from the report "PP E21A", the process examined in this report is similar to Grace UNIPOL process.
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IMPACT POLYPROPYLENE VIA GAS PROCESS - COST ANALYSIS | REPORT PP E23A
This study presents the economics of Polypropylene (PP) Impact Copolymer production from polymer grade (PG) propylene and ethylene in the USA. Differently from the report "PP E21A", the process examined in this report is similar to INEOS INNOVENE and JPP HORIZONE processes.
www.intratec.us/analysis/pp-e23a

IMPACT POLYPROPYLENE VIA GAS PROCESS - COST ANALYSIS | REPORT PP E24A
This report examines the costs related to Polypropylene (PP) Impact Copolymer production from polymer grade (PG) propylene and ethylene in the USA. Differently from the report "PP E21A", the process examined in this report is similar to CB&I Lummus Novolen process.
www.intratec.us/analysis/pp-e24a

IMPACT POLYPROPYLENE VIA BULK PROCESS - COST ANALYSIS | REPORT PP E25A
It presents the economics of Polypropylene (PP) Impact Copolymer production from polymer grade (PG) propylene and ethylene in the USA, using a bulk/gas phase polymerization process similar to LyondellBasell Spheripol and Mitsui Hypol II.
www.intratec.us/analysis/pp-e25a

IMPACT POLYPROPYLENE VIA HYBRID PROCESS - COST ANALYSIS | REPORT PP E26A
This study presents the economics of Polypropylene (PP) Impact Copolymer production from polymer grade (PG) propylene and ethylene in the USA, using a slurry/gas phase polymerization process similar to Borealis BORSTAR process.
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IMPACT POLYPROPYLENE VIA SLURRY PROCESS - COST ANALYSIS | REPORT PP E27A
This report examines the costs related to Polypropylene (PP) Impact Copolymer production from polymer grade (PG) propylene and ethylene in the USA, using a typical improved slurry phase polymerization process.
www.intratec.us/analysis/pp-e27a

POLYPROPYLENE RANDOM COPOLYMER PRODUCTION - COST ANALYSIS | REPORT PP E31A
This report presents the economics of Polypropylene (PP) Random Copolymer production from polymer grade (PG) propylene and ethylene. The economic analysis assumes a plant located in the USA, using a bulk phase polymerization process similar to LyondellBasell Spheripol and Mitsui Hypol II.
www.intratec.us/analysis/pp-e31a

POLYPROPYLENE RANDOM COPOLYMER PRODUCTION - COST ANALYSIS | REPORT PP E32A
This study presents the economics of Polypropylene (PP) Random Copolymer production from PG propylene and ethylene. The analysis concerns a plant constructed in the USA, using an hybrid (slurry/gas) polymerization process similar to Borealis BORSTAR.
www.intratec.us/analysis/pp-e32a

POLYPROPYLENE RANDOM COPOLYMER PRODUCTION - COST ANALYSIS | REPORT PP E33A
This report examines the costs related to Polypropylene (PP) Random Copolymer production from polymer grade (PG) propylene and ethylene. The cost analysis is based on a plant located in the USA, using a gas phase polymerization process similar to LyondellBasell Spherizone.
www.intratec.us/analysis/pp-e33a

POLYPROPYLENE RANDOM COPOLYMER PRODUCTION - COST ANALYSIS | REPORT PP E34A
It presents the economics of Polypropylene (PP) Random Copolymer production from polymer grade (PG) propylene and ethylene in the USA. Differently from the report "PP E33A", the process examined in this report is similar to Grace UNIPOL process.

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POLYPROPYLENE RANDOM COPOLYMER PRODUCTION - COST ANALYSIS | REPORT PP E35A
This report analyses the economics of Polypropylene (PP) Random Copolymer production from polymer grade (PG) propylene and ethylene in the USA. Differently from the report “PP E33A”, the process examined in this report is similar to INEOS INNOVENE and JPP HORIZONE.

POLYPROPYLENE RANDOM COPOLYMER PRODUCTION - COST ANALYSIS | REPORT PP E36A
This study presents the economics of Polypropylene (PP) Random Copolymer production from polymer grade (PG) propylene and ethylene in the USA. Differently from the report “PP E33A”, the process examined in this report is similar to CB&I Lummus Novolen.

See below data offered by Intratec related to Polypropylene

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POLYPROPYLENE PRICES
Online database presenting the following information:
* Polypropylene Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  www.intratec.us/chemical-markets/polypropylene-prices
Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**POLYPROPYLENE CARBONATE PRODUCTION - COST ANALYSIS | REPORT PPC E11A**
Economics of Polypropylene Carbonate (PPC) production from propylene oxide and carbon dioxide in the USA using a process based on patents issued to SK Energy. In this process, the polymerization occurs in full-liquid phase and under pressure.

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See below Intratec’s reports related to Polystyrene.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

GENERAL PURPOSE POLYSTYRENE PRODUCTION - COST ANALYSIS | REPORT PS E11A
This report presents the economics of General Purpose Polystyrene (GPPS) production from styrene in the USA, via a typical continuous bulk polymerization process.

www.intratec.us/analysis/ps-e11a

HIGH IMPACT POLYSTYRENE PRODUCTION - COST ANALYSIS | REPORT PS E12A
This study presents the economics of High Impact Polystyrene (HIPS) production from styrene in the USA, via a typical continuous bulk polymerization process with a horizontal reactor.

www.intratec.us/analysis/ps-e12a

HIGH IMPACT POLYSTYRENE PRODUCTION - COST ANALYSIS | REPORT PS E13A
This report analyses the economics of High Impact Polystyrene (HIPS) production from styrene in the USA. Differently from the report “Polystyrene E12A”, the process examined is a typical continuous bulk polymerization process with a vertical tower type reactor.

www.intratec.us/analysis/ps-e13a

HIGH IMPACT POLYSTYRENE PRODUCTION - COST ANALYSIS | REPORT PS E14A
This report presents the economics of High Impact Polystyrene (HIPS) production from styrene in the USA. Differently from the report “Polystyrene E12A”, the process is similar to Sulzer Canada SDS process.

www.intratec.us/analysis/ps-e14a

EXPANDABLE POLYSTYRENE PRODUCTION - COST ANALYSIS | REPORT PS E15A
This study presents the economics of Expandable Polystyrene (EPS) production from styrene in the USA, via a typical suspension polymerization process.

www.intratec.us/analysis/ps-e15a

SYNDIOTACTIC POLYSTYRENE PRODUCTION - COST ANALYSIS | REPORT PS E16A
This report analyses the economics of Syndiotactic Polystyrene (SPS) production from styrene in the USA, via a typical continuous bulk polymerization process.

www.intratec.us/analysis/ps-e16a

HIGH TEMPERATURE RESISTANT POLYSTYRENE PRODUCTION - COST ANALYSIS | REPORT PS E17A
This report presents the economics of High Temperature Resistant Polystyrene (HTPS) production from styrene in the USA, via a typical continuous bulk polymerization process.

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**POLYTRIMETHYLENE TEREPTHALATE PRODUCTION - COST ANALYSIS | REPORT PTT E11A**
This report presents the economics of Polytrimethylene Terephthalate (PTT) production from terephthalic acid and propanediol via a process similar to Degussa (now Evonik) technology. The economic assessment assumes a plant located in the USA.
www.intratec.us/analysis/ptt-e11a

**POLYTRIMETHYLENE TEREPTHALATE PRODUCTION - COST ANALYSIS | REPORT PTT E21A**
This report presents the economics of Polytrimethylene Terephthalate (PTT) production from terephthalic acid and glucose in the United States. The process portrayed in the report combines a process similar to DuPont process for generating propanediol from glucose and a process similar to Degussa (now Evonik) process for producing PTT from propanediol and terephthalic acid.
www.intratec.us/analysis/ptt-e21a

**POLYTRIMETHYLENE TEREPTHALATE PRODUCTION - COST ANALYSIS | REPORT PTT E31B**
This report presents the economics of Polytrimethylene Terephthalate (PTT) production from terephthalic acid and raw sugar in Germany. The process portrayed in the report is similar to the one described in the report "PTTE21A", but starting from a feed of raw sugar instead of glucose.
www.intratec.us/analysis/ptt-e31b
Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYESTER THERMOPLASTIC POLYURETHANE PRODUCTION - COST ANALYSIS | REPORT PU E11A
This report presents the economics of Polyester Thermoplastic Polyurethane (TPU) production from methylene diphenyl diisocyanate (MDI) and poly(1,4-butandiol adipate) in the USA, via a typical polymerization in a twin screw extruder.

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POLYESTER THERMOPLASTIC POLYURETHANE PRODUCTION - COST ANALYSIS | REPORT PU E21A
This study presents the economics of Polyether Thermoplastic Polyurethane (TPU) production from methylene diphenyl diisocyanate (MDI) and poly(tetramethylene ether glycol) (PTMEG) in the USA, via a typical polymerization in a twin screw extruder.

www.intratec.us/analysis/pu-e21

POLYETHER POLYURETHANE PRODUCTION - COST ANALYSIS | REPORT PU E31A
This report examines the costs related to Flexible Slabstock Polyether Polyurethane production from toluene diisocyanate (TDI) and a polyether triol in the USA, via a typical foaming process.

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POLYETHER POLYURETHANE PRODUCTION - COST ANALYSIS | REPORT PU E32A
It presents the economics of Flexible Slabstock Polyether Polyurethane production from toluene diisocyanate (TDI) and a polyether triol in the USA. Differently from the report "PU E32A", the process examined in this report is a typical variable pressure foaming process.

www.intratec.us/analysis/pu-e32a

POLYESTER POLYURETHANE PRODUCTION - COST ANALYSIS | REPORT PU E41A
This report analyses the economics of Rigid Boardstock Polyester Polyurethane production from polymeric isocyanate (PMPPI) and a polyester polyol in the USA.

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POLYVINYL CHLORIDE

See below Intratec’s reports related to PVC.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

POLYVINYL CHLORIDE VIA SUSPENSION POLYMERIZATION - COST ANALYSIS | REPORT PVC E11A
This report presents the economics of Polyvinyl Chloride (PVC) production from vinyl chloride monomer (VCM) in the USA, via a typical suspension polymerization process.
www.intratec.us/analysis/pvc-e11a

POLYVINYL CHLORIDE VIA BULK POLYMERIZATION PROCESS - COST ANALYSIS | REPORT PVC E12A
This study presents the economics of Polyvinyl Chloride (PVC) production from vinyl chloride monomer (VCM) in the USA. Differently from the report "PVC 11A", the process examined is a typical bulk polymerization process.
www.intratec.us/analysis/pvc-e12a

POLYVINYL CHLORIDE VIA EMULSION POLYMERIZATION PROCESS - COST ANALYSIS | REPORT PVC E13A
It presents the economics of Polyvinyl Chloride (PVC) production from vinyl chloride monomer (VCM) in the USA. Differently from the report "PVC 11A", the process examined is a typical emulsion polymerization process.
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See below Intratec’s reports related to Vinylidene Chloride Copolymer.

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VINYLIDENE CHLORIDE COPOLYMER PRODUCTION - COST ANALYSIS | REPORT PVDC E11A
This report presents the economics of Vinylidene Chloride Copolymer production from vinylidene chloride and vinyl chloride using a suspension polymerization process. The economic analysis approaches a plant located in the USA.
www.intratec.us/analysis/pvdc-e11a

VINYLIDENE CHLORIDE COPOLYMER PRODUCTION - COST ANALYSIS | REPORT PVDC E21A
This study presents the economics of Vinylidene Chloride Copolymer production from vinylidene chloride, ethyl acrylate, and methyl methacrylate using an emulsion polymerization process. The economic analysis also assumes a plant located in the USA.
www.intratec.us/analysis/pvdc-e21a
See below Intratec’s reports related to Potassium Chlorate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

This report presents the economics of Potassium Chlorate production from potassium chloride in the USA.

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POTASSIUM IODIDE

See below Intratec’s reports related to Potassium Iodide.

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POTASSIUM IODIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT POTASSIUM IODIDE E11A
This report presents the economics of Potassium Iodide production from potassium hydroxide, iodine, and coke in the USA.

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PROPANEDIOL

See below Intratec's reports related to PDO.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

BIO-PROPANEDIOL PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT PDO E11A
This report presents the economics of 1,3-Propanediol (PDO) production from glucose syrup using a fermentation process similar to the one developed by DuPont. The economic assessment assumes a plant located in the USA.
www.intratec.us/analysis/pdo-e11a

BIO-PROPANEDIOL PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT PDO E21B
This study also approaches the economics of 1,3-Propanediol (PDO) production. The process reviewed in this study is the same as the examined in the report "PDO E11A", except that it uses raw sugar as the feedstock for the fermentation step. The economic analysis provided is based on a plant constructed in Germany.
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BIO-PROPANEDIOL PRODUCTION FROM GLYCEROL - COST ANALYSIS | REPORT PDO E31A
This report presents the economics of the production of 1,3-Propanediol (PDO) production from crude glycerol using a fermentation process in the United States.
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PROANOL

See below Intratec's reports related to Proanol.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PROANOL PRODUCTION FROM GLYCEROL - COST ANALYSIS | REPORT PROANOL E11A
This report presents an economic analysis for Proanol production from glycerol in the United States.

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PROPIONIC ACID

See below Intratec's reports related to Propionic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PROPIONIC ACID PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT PA E11A
Economic analysis of Propionic Acid production from ethylene in the USA. In this process, ethylene undergoes a hydrocarboxylation reaction to produce propionaldehyde, which is oxidized to Propionic Acid product.

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PROPYLENE

See below Intratec's reports related to Propylene.

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PROPYLENE PRODUCTION VIA METATHESIS - COST ANALYSIS | REPORT PROPYLENE E11A
This report presents the economics of Polymer Grade (PG) Propylene production from ethylene and raffinate-2 in the USA, using a metathesis process similar to CB&I Lummus Technology's Olefins Conversion Technology (OCT).
www.intratec.us/analysis/propylene-e11a

PROPYLENE PRODUCTION FROM PROPANE - COST ANALYSIS | REPORT PROPYLENE E31A
This study presents the economics of Polymer Grade (PG) Propylene production from propane in the USA, using a dehydrogenation process carried out in a moving-bed reactor, similar to UOP Oleflex.
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PROPYLENE PRODUCTION FROM PROPANE - COST ANALYSIS | REPORT PROPYLENE E32A
This report examines the costs related to Polymer Grade (PG) Propylene production from propane in the USA. Differently from the report "Propylene E31A", the process examined in this report is carried out in a fixed-bed reactor, similar to CB&I Lummus CATOFIN.
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PROPYLENE PRODUCTION FROM PROPANE - COST ANALYSIS | REPORT PROPYLENE E33A
It presents the economics of Polymer Grade (PG) Propylene production from propane in the USA. Differently from the report "Propylene E31A", the process examined in this report uses a two-step dehydrogenation process (steam reforming/oxyreaction), similar to Uhde STAR.
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PROPYLENE PRODUCTION FROM METHANOL VIA MTP PROCESS - COST ANALYSIS | REPORT PROPYLENE E41A
This report presents the economics of Polymer Grade (PG) Propylene production from methanol in the USA, using a methanol-to-propylene (MTP) process similar to Lurgi MTP.
www.intratec.us/analysis/propylene-e41a

PROPYLENE FROM NAPHTHA VIA STEAM CRACKING - COST ANALYSIS | REPORT PROPYLENE E71A
This report analyses the economics of Polymer Grade (PG) Propylene production from light naphtha feedstock in the USA, using a typical low-severity steam cracking process, maximizing propylene to ethylene ratio.
www.intratec.us/analysis/propylene-e71a

PROPYLENE FROM NAPHTHA VIA STEAM CRACKING - COST ANALYSIS | REPORT PROPYLENE E72A
This report presents the economics of Polymer Grade (PG) Propylene production from light naphtha feedstock in the USA. Differently from the report "Propylene E71A", the process examined in this report is a typical high-severity steam cracking process, maximizing ethylene yield.
www.intratec.us/analysis/propylene-e72a

PROPYLENE PRODUCTION FROM ETHYLENE - COST ANALYSIS | REPORT PROPYLENE E21A
It presents the economics of Polymer Grade (PG) Propylene production from ethylene in the USA, using two integrated processes:

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dimerization and metathesis, using processes similar to CB&I Lummus Olefins Conversion Technology (OCT) and Ethylene Dimerization Technology.

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PROPYLENE PRODUCTION FROM METHANOL VIA MTO PROCESS - COST ANALYSIS | REPORT PROPYLENE E42A
This report analyses the economics of Polymer Grade (PG) Propylene production from methanol in the USA. Differently from the report "Propylene E41A", the process examined in this report is similar to UOP/Norsk Hydro (now Ineos) MTO (Methanol-to-Olefins) process. Polymer grade ethylene is also generated as co-product in the process.

www.intratec.us/analysis/propylene-e42a

PROPYLENE PRODUCTION FROM VGO - COST ANALYSIS | REPORT PROPYLENE E51A
This report presents the economics of Polymer Grade (PG) Propylene production from vacuum gas oil (VGO) in the USA, similar to Sinopec Deep Catalytic Cracking (DCC) technology.

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PG PROPYLENE PRODUCTION FROM RG PROPYLENE - COST ANALYSIS | REPORT PROPYLENE E61A
This report examines the costs related to Polymer Grade (PG) Propylene production from refinery grade (RG) propylene in the USA, via a typical purification process. Propane stream is generated as by-product.

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PROPYLENE PRODUCTION FROM BUTENES - COST ANALYSIS | REPORT PROPYLENE E81A
This report analyses the economics of Polymer Grade (PG) Propylene production from raffinate-1 in the USA, using two typical integrated processes: isomerization and metathesis.

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PROPYLENE PRODUCTION FROM VGO - COST ANALYSIS | REPORT PROPYLENE E52A
This report presents the economics of Polymer Grade (PG) Propylene production process from vacuum gas oil (VGO) in the USA. Differently from the report "Propylene E51A", the process examined in this report is similar to Sinopec Catalytic Pyrolysis Process (CPP) technology.

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PROPYLENE PRODUCTION FROM SOYBEAN OIL - COST ANALYSIS | REPORT PROPYLENE E91A
This report presents the economics of Polymer Grade (PG) Propylene production from soybean oil in the USA, via a typical fluid catalytic process (FCC).

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PROPYLENE PRODUCTION FROM LIGHT NAPHTHA - COST ANALYSIS | REPORT PROPYLENE E73A
This report presents the economics of Polymer Grade (PG) Propylene production from light naphtha feedstock in the USA. Differently from the report "Propylene E71A", the process examined in this report uses a catalytic cracking process similar to KBR SUPERFLEX. Polymer grade ethylene and gasoline are generated as by-products.

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PROPYLENE PRICES
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Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PROPYLENE GLYCOL PRODUCTION FROM GLYCEROL - COST ANALYSIS | REPORT PROPYLENE GLYCOL E12A
This report presents the economics of Propylene Glycol production from glycerol in the USA. Differently from the report “Propylene Glycol E11A”, the process presented occurs in vapor-phase, similarly to Davy Technologies process.

www.intratec.us/analysis/propylene-glycol-e12a

PROPYLENE GLYCOL PRODUCTION FROM GLYCEROL - COST ANALYSIS | REPORT PROPYLENE GLYCOL E11A
This study presents the economics of Propylene Glycol production from glycerol using a liquid-phase process similar to Suppes process in the USA.

www.intratec.us/analysis/propylene-glycol-e11a

PROPYLENE GLYCOL FROM CHLORINE AND PROPYLENE - COST ANALYSIS | REPORT PROPYLENE GLYCOL E21A
This report presents the economics of Propylene Glycol production from chlorine and chemical grade (CG) propylene in the USA, via a typical hydration process. Dichloropropane is generated as by-product.

www.intratec.us/analysis/propylene-glycol-e21a

PROPYLENE GLYCOL FROM PROPYLENE OXIDE - COST ANALYSIS | REPORT PROPYLENE GLYCOL E31A
This report analyses the economics of Propylene Glycol production from propylene oxide in the USA, via a typical oxide hydration process. Dipropylene glycol is produced as by-product.

www.intratec.us/analysis/propylene-glycol-e31a
PROPYLENE OXIDE

See below Intratec’s reports related to Propylene Oxide.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

PROPYLENE OXIDE FROM PROPYLENE AND CHLORINE - COST ANALYSIS | REPORT PROPYLENE OXIDE E11A
This report presents the economics of Propylene Oxide (PO) production from chemical grade (CG) propylene and chlorine in the USA, via a typical chlorohydrin process.
www.intratec.us/analysis/propylene-oxide-e11a

PROPYLENE OXIDE FROM PROPYLENE AND ETHYLBENZENE - COST ANALYSIS | REPORT PROPYLENE OXIDE E31A
This study presents the economics of Propylene Oxide (PO) production from chemical grade (CG) propylene and ethylbenzene in the USA, similar to LyondellBasell process. Styrene is generated as by-product in the process.
www.intratec.us/analysis/propylene-oxide-e31a

PROPYLENE OXIDE FROM PROPYLENE AND ISOBUTENE - COST ANALYSIS | REPORT PROPYLENE OXIDE E41A
This report examines the costs related to Propylene Oxide (PO) production from chemical grade (CG) propylene and isobutene in the USA, using a tert-butyl hydroperoxide process similar to Huntsman process. t-Butanol is generated as by-product in the process.
www.intratec.us/analysis/propylene-oxide-e41a

PROPYLENE OXIDE FROM PROPYLENE AND ISOBUTENE - COST ANALYSIS | REPORT PROPYLENE OXIDE E42A
It presents the economics of Propylene Oxide (PO) production from chemical grade (CG) propylene and isobutene in the USA. Differently from the report "PO E41A", the process is similar to LyondellBasell process.
www.intratec.us/analysis/propylene-oxide-e42a

PROPYLENE OXIDE FROM PROPYLENE AND CUMENE - COST ANALYSIS | REPORT PROPYLENE OXIDE E51A
This report analyses the economics of Propylene Oxide (PO) production from chemical grade (CG) propylene and cumene in the USA, similar to Sumitomo process.
www.intratec.us/analysis/propylene-oxide-e51a

PROPYLENE OXIDE FROM PROPYLENE & HYDROGEN PEROXIDE - COST ANALYSIS | REPORT PROPYLENE OXIDE E61A
This report presents the economics of Propylene Oxide (PO) production from polymer grade (PG) propylene and hydrogen peroxide in the USA, similar to the hydrogen peroxide to propylene oxide (HPPO) process jointly developed by Evonik and Uhde.
www.intratec.us/analysis/propylene-oxide-e61a

PROPYLENE OXIDE FROM PROPYLENE AND ISOBUTANE - COST ANALYSIS | REPORT PROPYLENE OXIDE E23A
This report examines the costs related to Propylene Oxide (PO) production from chemical grade (CG) propylene and isobutane in the USA. Differently from the report "PO E22A", the production is based on a typical direct oxidation process.
www.intratec.us/analysis/propylene-oxide-e23a

PROPYLENE OXIDE PRODUCTION FROM PROPYLENE - COST ANALYSIS | REPORT PROPYLENE OXIDE E22A
It presents the economics of Propylene Oxide (PO) production from chemical grade (CG) propylene in the USA, using a hydro-oxidation process.
www.intratec.us/analysis/propylene-oxide-e22a

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This report analyses the economics of Propylene Oxide (PO) production from polymer grade (PG) propylene and hydrogen in the USA. The process used is a direct epoxidation similar to AIST/Nippon Shokubai process.

www.intratec.us/analysis/propylene-oxide-e24a

*See below data offered by Intratec related to Propylene Oxide*

**Chemicals Pricing Data.** Intratec offers online up-to-date and historical prices of chemical commodities and utilities, across several world regions. To know more about Intratec Chemicals Pricing Data, go to page 11

**PROPYLENE OXIDE PRICES**

Online database presenting the following information:

* Propylene Oxide Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  
  www.intratec.us/chemical-markets/propylene-oxide-prices
Pyrantel Pamoate

See below Intratec’s reports related to Pyrantel Pamoate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

Pyrantel Pamoate Production Process - Cost Analysis | Report Pyrantel Pamoate E11A

This report presents the economics of Pyrantel Pamoate production from 2-thiophene aldehyde in the USA.

www.intratec.us/analysis/pyrantel-pamoate-e11a
See below Intratec’s reports related to Reformate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

REFORMATE PRODUCTION FROM NAPHTHA - COST ANALYSIS | REPORT REFORMATE E23A
This feasibility study is about Reformate production from heavy naphtha. The process evaluated is a continuous catalyst regeneration (CCR) process similar to the UOP CCR Platforming technology. The economic analysis developed is based on a plant constructed in the USA.
www.intratec.us/analysis/reformate-e23a

REFORMATE PRODUCTION FROM NAPHTHA - COST ANALYSIS | REPORT REFORMATE E21A
This study reviews the costs associated with Reformate production from light naphtha in the USA. The process under analysis is a semi-regeneration process similar to UOP RZ Platorming technology.
www.intratec.us/analysis/reformate-e21a

REFORMATE PRODUCTION FROM LPG - COST ANALYSIS | REPORT REFORMATE E11A
This report presents the economics of Reformate production from liquefied petroleum gas (LPG) using a process similar to UOP Cyclar technology. The economic assessment assumes an industrial plant in the USA.
www.intratec.us/analysis/reformate-e11a

REFORMATE PRODUCTION FROM NAPHTHA - COST ANALYSIS | REPORT REFORMATE E22A
This feasibility study also presents the economics of Reformate production from light naphtha in the USA. Different from the report “Reformate E21A”, this report examines a catalytic reforming process similar to Chevron Phillips Aromax technology.
www.intratec.us/analysis/reformate-e22a
See below Intratec’s reports related to Riboflavin.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

RIBOFLAVIN PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT RIBOFLAVIN E11A
This report presents the economics of Riboflavin production from glucose in the USA, via a typical fermentation process.

www.intratec.us/analysis/riboflavin-e11a
RIFAMPICIN

See below Intratec’s reports related to Rifampicin.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

RIFAMPICIN PRODUCTION VIA FERMENTATION - COST ANALYSIS | REPORT RIFAMPICIN E11A

This report presents the economics of Rifampicin production from mixed carbon sources (peanut meal, soybean flour, glucose, and starch) in the USA, via a typical fermentation process.

www.intratec.us/analysis/rifampicin-e11a
See below Intratec’s reports related to Salicylic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SALICYLIC ACID PRODUCTION PROCESS - COST ANALYSIS | REPORT SALICYLIC ACID E11A
This report analyses the economics of a typical Salicylic Acid production process from phenol, sodium hydroxide, carbon dioxide, and sulfuric acid in the USA.
www.intratec.us/analysis/salicylic-acid-e11a
SEBACIC ACID

See below Intratec's reports related to Sebacic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SEBACIC ACID PRODUCTION PROCESS - COST ANALYSIS | REPORT SEBACIC ACID E11A
This report presents the economics of Sebacic Acid production from castor oil and sodium hydroxide in the USA.

www.intratec.us/analysis/sebacic-acid-e11a
SILICA GEL

See below Intratec's reports related to Silica Gel.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SILICA GEL PRODUCTION PROCESS - COST ANALYSIS | REPORT SILICA GEL E11A
This report presents the economics of Silica Gel production from sodium silicate and hydrochloric acid in the USA.

www.intratec.us/analysis/silica-gel-e11a
Silicone

See below Intratec’s reports related to Silicone.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

Silicone Surfactant Production - Cost Analysis | Report Silicone E11a
This report presents the economics of a process for Silicone-Polyethylene Glycol production in the USA. This silicone formulation - obtained from cyclic siloxanes (mainly octamethylcyclotetrasiloxanes), Si-H fluid (methyl hydrogen polysiloxane - MD12M), hexamethyldichlorosiloxanes (used as chain broker for molecular weight control) and allyl PEG - is commonly used as surfactant in polyurethane foam.

www.intratec.us/analysis/silicone-e11a

Silicone Fluids Production Process - Cost Analysis | Report Silicone E21a
This report presents the economics of Silicone Fluid production in the United States. The assessment concerns a plant producing Methyl Hydrogen Polysiloxane (MD12M) starting from cyclic siloxanes (octamethylcyclotetrasiloxanes), using hexamethyldichlorosiloxanes for molecular weight control.

www.intratec.us/analysis/silicone-e21a

Silicone Elastomers Production - Cost Analysis | Report Silicone E31a
This report presents the economics of a process for Silicone Elastomers production in the USA. This Silicone Elastomer formulation is based on copolymerization of cyclic siloxanes (mainly octamethylcyclotetrasiloxanes) with vinylmethylsiloxane and phenylmethylsiloxane, using hexamethyldichlorosiloxanes for molecular weight control.

www.intratec.us/analysis/silicone-e31a
See below Intratec’s reports related to Siloxanes.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SILOXANES PRODUCTION PROCESS - COST ANALYSIS | REPORT SILOXANES E11A
This report presents the economics of Octamethylcyclotetrasiloxane production via dimethyldichlorosilanes hydrolysis. The study assumes a conventional plant located on the US Gulf Coast receiving a feed of dimethyldichlorosilanes.

www.intratec.us/analysis/siloxanes-e11a

SILOXANES PRODUCTION PROCESS - COST ANALYSIS | REPORT SILOXANES E21A
In this study, the economics of Hexamethyldisiloxane production is analyzed. The analysis assumes a plant also located in the US Gulf Coast receiving trimethylchlorosilane and generating Hexamethyldisiloxane via hydrolysis of the starting material.

www.intratec.us/analysis/siloxanes-e21a
SODIUM CHLORATE

See below Intratec’s reports related to Sodium Chlorate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SODIUM CHLORATE PRODUCTION - COST ANALYSIS | REPORT SODIUM CHLORATE E11A

This report presents the economics of a typical Sodium Chlorate production process from sodium chloride via electrolysis. The economic analysis approaches a plant located in the USA.

www.intratec.us/analysis/sodium-chlorate-e11a
SODIUM CHLORITE

See below Intratec’s reports related to Sodium Chlorite.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SODIUM CHLORITE FROM SODIUM CHLORATE - COST ANALYSIS | REPORT SODIUM CHLORITE E11A
This report presents the economics of Sodium Chlorite production from sodium chlorate, sodium hydroxide, and hydrogen peroxide. The economic analysis is based on a plant located in the USA.
www.intratec.us/analysis/sodium-chlorite-e11a

SODIUM CHLORITE FROM CHLORINE - COST ANALYSIS | REPORT SODIUM CHLORITE E21A
This study presents the costs associated with the construction of a plant for Sodium Chlorite production from chlorine, sodium hydroxide, and hydrogen peroxide in the USA.
www.intratec.us/analysis/sodium-chlorite-e21a

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SODIUM HYDROXIDE

See below Intratec’s reports related to Sodium Hydroxide.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SODIUM HYDROXIDE VIA MEMBRANE PROCESS - COST ANALYSIS | REPORT SODIUM HYDROXIDE E11A
This report presents the economics of Sodium Hydroxide production from brine in the USA, via a typical membrane process. Chlorine and hydrogen are generated as by-products in the process.
www.intratec.us/analysis/sodium-hydroxide-e11a

SODIUM HYDROXIDE VIA DIAPHRAGM PROCESS - COST ANALYSIS | REPORT SODIUM HYDROXIDE E12A
It presents the economics of Sodium Hydroxide production from brine in the USA. Differently from the report "Sodium Hydroxide E11A", the process examined in this report is a typical diaphragm process. Chlorine and hydrogen are also generated as by-products in the process.
www.intratec.us/analysis/sodium-hydroxide-e12a

SODIUM HYDROXIDE VIA MERCURY PROCESS - COST ANALYSIS | REPORT SODIUM HYDROXIDE E13B
This report analyses the economics of Sodium Hydroxide production from brine in Germany, via a typical mercury cell process. Chlorine and hydrogen are generated as by-products in the process.
www.intratec.us/analysis/sodium-hydroxide-e13b

See below data offered by Intratec related to Sodium Hydroxide

Chemicals Pricing Data. Intratec offers online up-to-date and historical prices of chemical commodities and utilities, across several world regions. To know more about Intratec Chemicals Pricing Data, go to page 11

SODIUM HYDROXIDE PRICES
Online database presenting the following information:
* Sodium Hydroxide Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
www.intratec.us/chemical-markets/sodium-hydroxide-prices

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SODIUM HYPOCHLORITE

See below Intratec's reports related to Sodium Hypochlorite.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SODIUM HYPOCHLORITE VIA CHEMICAL PROCESS - COST ANALYSIS | REPORT SODIUM HYPOCHLORITE E11A
This report analyses the economics of a typical Sodium Hypochlorite production process from sodium hydroxide and chlorine in the USA.

www.intratec.us/analysis/sodium-hypochlorite-e11a
See below Intratec’s reports related to SLES.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SODIUM LAURYL ETHER SULFATE PRODUCTION - COST ANALYSIS | REPORT SLES E11A
This report presents the economics of Sodium Lauryl Ether Sulfate (SLES) production from chlorosulfonic acid, lauryl ethoxylate, and sodium hydroxide in the USA.

www.intratec.us/analysis/sles-e11a
SODIUM LAURYL SULFATE

See below Intratec’s reports related to SLS.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SODIUM LAURYL SULFATE PRODUCTION - COST ANALYSIS | REPORT SLS E11A
This report presents the economics of Sodium Lauryl Sulfate (SLS) production from chlorosulfonic acid, lauryl alcohol, and sodium hydroxide in the USA.

www.intratec.us/analysis/sls-e11a
See below Intratec’s reports related to Sodium Polyacrylate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**STARCH-GRAFT SODIUM POLYACRYLATE PRODUCTION - COST ANALYSIS | REPORT SODIUM POLYACRYLATE E11A**

This report analyses the economics of Starch-Graft Sodium Polyacrylate production from corn and glacial acrylic acid in the USA.

[www.intratec.us/analysis/sodium-polyacrylate-e11a](http://www.intratec.us/analysis/sodium-polyacrylate-e11a)

**SODIUM POLYACRYLATE PRODUCTION PROCESS - COST ANALYSIS | REPORT SODIUM POLYACRYLATE E21A**

It presents the economics of Sodium Polyacrylate production from glacial acrylic acid and sodium hydroxide in the USA.

[www.intratec.us/analysis/sodium-polyacrylate-e21a](http://www.intratec.us/analysis/sodium-polyacrylate-e21a)
SODIUM PYRUVATE

See below Intratec’s reports related to Sodium Pyruvate.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SODIUM PYRUVATE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT SODIUM PYRUVATE E11A
This report analyses the economics of Sodium Pyruvate production from glucose in the USA, using solvent extraction for pyruvic acid recovery from fermentation broth.
www.intratec.us/analysis/sodium-pyruvate-e11a

SODIUM PYRUVATE PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT SODIUM PYRUVATE E12A
This report examines the costs related to Sodium Pyruvate production from glucose in the USA. Differently from the report “Sodium Pyruvate E11A”, the process examined in this report uses electrodialysis for pyruvic acid recovery from fermentation broth.
www.intratec.us/analysis/sodium-pyruvate-e12a
STYRENE PRODUCTION FROM ETHYLBENZENE - COST ANALYSIS | REPORT STYRENE E11A
This report examines the costs related to Styrene production from ethylbenzene in the USA, via a typical catalytic dehydrogenation process.
www.intratec.us/analysis/styrene-e11a

STYRENE PRODUCTION FROM PROPYLENE & ETHYLBENZENE - COST ANALYSIS | REPORT STYRENE E21A
This study presents the economics of Styrene production from chemical grade (CG) propylene and ethylbenzene in the USA. The process examined is a Propylene Oxide/Styrene Monomer (POSM) technology similar to the one owned by LyondellBasell.
www.intratec.us/analysis/styrene-e21a

STYRENE PRODUCTION FROM ETHANE & BENZENE - COST ANALYSIS | REPORT STYRENE E31A
This report presents the economics of Styrene production from ethane and benzene in the USA, with pure hydrogen as by-product. The process analyzed is based on concepts proposed in patents issued to Dow and Snamprogetti.
www.intratec.us/analysis/styrene-e31a

STYRENE PRODUCTION FROM ETHANE & BENZENE - COST ANALYSIS | REPORT STYRENE E32A
This study also presents the costs associated with Styrene production in the USA. It presents the economics of the same process examined in the report "Styrene E31A", except that the hydrogen produced is valued as fuel.
www.intratec.us/analysis/styrene-e32a

STYRENE PRODUCTION FROM METHANOL & TOLUENE - COST ANALYSIS | REPORT STYRENE E41A
This report analyses the economics of Styrene production from methanol and toluene in the USA. The process evaluated is similar to Exelus Styrene Monomer Technology (ExSyM) technology.
www.intratec.us/analysis/styrene-e41a

See below data offered by Intratec related to Styrene

Chemicals Pricing Data. Intratec offers online up-to-date and historical prices of chemical commodities and utilities, across several world regions. To know more about Intratec Chemicals Pricing Data, go to page 11

STYRENE PRICES

Online database presenting the following information:

* Styrene Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  www.intratec.us/chemical-markets/styrene-prices
STYRENE BUTADIENE RUBBER

See below Intratec’s reports related to Styrene-Butadiene Rubber.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

STYRENE BUTADIENE RUBBER PRODUCTION - COST ANALYSIS | REPORT SBR E11A
This report presents the economics of SBR production starting from butadiene and styrene. The analysis encompasses a plant located in the USA, employing a typical cold emulsion process for generating a non-oil extended, non-staining grade of emulsion SBR (similar to 1502).
www.intratec.us/analysis/sbr-e11a

STYRENE BUTADIENE RUBBER PRODUCTION - COST ANALYSIS | REPORT SBR E12A
This report also presents the economics of SBR production starting from butadiene and styrene in the USA. However, differently from the report "SBR E11A", it approaches a continuous process for producing a solution SBR grade.
www.intratec.us/analysis/sbr-e12a

HIGH SOLIDS STYRENE BUTADIENE LATEX PRODUCTION - COST ANALYSIS | REPORT SBR E21A
This report presents the economics of high solids content SBR Latex production starting from butadiene and styrene. The analysis, based on a plant located in the USA, approaches a typical cold emulsion process for generating a high solids latex with high butadiene content.
www.intratec.us/analysis/sbr-e21a

LOW SOLIDS STYRENE BUTADIENE LATEX PRODUCTION - COST ANALYSIS | REPORT SBR E31A
This report also targets SBR Latex production in the United States via a typical colda emulsion polymerization process. However, differently from Report SBR E21A, the main product generated is a low solids content SBR Latex with high styrene content.
www.intratec.us/analysis/sbr-e31a

See below data offered by Intratec related to Styrene-Butadiene Rubber

Chemicals Pricing Data. Intratec offers online up-to-date and historical prices of chemical commodities and utilities, across several world regions. To know more about Intratec Chemicals Pricing Data, go to page 11

STYRENE-BUTADIENE RUBBER PRICES
Online database presenting the following information:
* Styrene-Butadiene Rubber Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
www.intratec.us/chemical-markets/styrene-butadiene-rubber-prices
STYRENE ACRYLONITRILE RESIN

See below Intratec’s reports related to SAN.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

STYRENE/ACRYLONITRILE RESIN PRODUCTION - COST ANALYSIS | REPORT SAN E11A

This report presents the economics of Styrene/Acrylonitrile (SAN) Resin production from styrene and acrylonitrile in the USA, via a typical bulk polymerization process.

www.intratec.us/analysis/san-e11a
SUCCINIC ACID

See below Intratec’s reports related to Succinic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

BIO-SUCCINIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT SUCCINIC ACID E11B
This report analyses the economics of bio-based Succinic Acid production from raw sugar in Germany, using a fermentation process similar to Korea Advanced Institute of Science & Technology (KAIST) process.
www.intratec.us/analysis/succinic-acid-e11b

BIO-SUCCINIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT SUCCINIC ACID E21A
This report examines the costs related to bio-based Succinic Acid production from glucose syrup in the USA, using a fermentation process similar to Korea Advanced Institute of Science & Technology (KAIST) process.
www.intratec.us/analysis/succinic-acid-e21a

BIO-SUCCINIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT SUCCINIC ACID E22A
This report examines the costs related to bio-based Succinic Acid production from glucose syrup in the USA, using a fermentation process similar to Michigan Biotechnology Institute (MBI) process.
www.intratec.us/analysis/succinic-acid-e22a

BIO-SUCCINIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT SUCCINIC ACID E12B
This study presents the economics of bio-based Succinic Acid production from raw sugar in Germany, using a fermentation process similar to Michigan Biotechnology Institute (MBI) process.
www.intratec.us/analysis/succinic-acid-e12b

BIO-SUCCINIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT SUCCINIC ACID E24A
This report analyses the economics of bio-based Succinic Acid production from glucose syrup in the USA, using a fermentation process similar to Myriant process.
www.intratec.us/analysis/succinic-acid-e24a

BIO-SUCCINIC ACID PRODUCTION FROM RAW SUGAR - COST ANALYSIS | REPORT SUCCINIC ACID E13B
This report presents the economics of bio-based Succinic Acid production from raw sugar in Germany, using a fermentation process similar to Myriant process.
www.intratec.us/analysis/succinic-acid-e13b

BIO-SUCCINIC ACID PRODUCTION FROM GLYCEROL - COST ANALYSIS | REPORT SUCCINIC ACID E31A
It presents the economics of bio-based Succinic Acid production from crude glycerol in the USA, using a fermentation process similar to Succinity process.
www.intratec.us/analysis/succinic-acid-e31a

BIO-SUCCINIC ACID PRODUCTION FROM GLUCOSE - COST ANALYSIS | REPORT SUCCINIC ACID E25A
It presents the economics of bio-based Succinic Acid production from glucose syrup in the USA. Differently from the report “SA E24A”, the process examined in this report is similar to BioAmber process.
www.intratec.us/analysis/succinic-acid-e25a

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This study presents the economics of bio-based Succinic Acid production from raw sugar in Germany. Differently from the report "SA E13F", the process examined in this report is similar to BioAmber process.

www.intratec.us/analysis/succinic-acid-e14b

This report examines the costs related to bio-based Succinic Acid production from glucose syrup in the USA. Differently from the report "SA E24A", the process examined in this report is similar to Reverdia process.

www.intratec.us/analysis/succinic-acid-e26a

This study presents the economics of bio-based Succinic Acid production from raw sugar in Germany. Differently from the report "SA E13F", the process examined in this report is similar to Reverdia process.

www.intratec.us/analysis/succinic-acid-e15b

This report analyses the economics of a Succinic Acid production from maleic anhydride in the USA, via a typical hydrogenation process.

www.intratec.us/analysis/succinic-acid-e41a

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SULFUR HEXAFLUORIDE

See below Intratec’s reports related to Sulfur Hexafluoride.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SULFUR HEXAFLUORIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT SULFUR HEXAFLUORIDE E11A
This report presents the economics of Sulfur Hexafluoride production from sulfur and fluorine in the USA.
www.intratec.us/analysis/sulfur-hexafluoride-e11a
SULFURIC ACID FROM SULFUR VIA DOUBLE-CONTACT PROCESS - COST ANALYSIS | REPORT SULFURIC ACID E11A
This report presents the economics of Sulfuric Acid production from sulfur in the United States. In this process, sulfur is burned to form sulfur dioxide, which is then converted to sulfur trioxide. Sulfur trioxide is converted to sulfuric acid by double-contact double absorption (DC/DA) with a high concentration sulfuric acid solution in water.
www.intratec.us/analysis/sulfuric-acid-e11a

SULFURIC ACID FROM SULFUR VIA SINGLE-CONTACT PROCESS - COST ANALYSIS | REPORT SULFURIC ACID E12A
This report presents the economics of Sulfuric Acid production from sulfur in the United States. In this process, sulfur is burned to form sulfur dioxide, which is then converted to sulfur trioxide. However, differently from report E11A, sulfur trioxide is converted to sulfuric acid by absorption with recirculating sulfuric acid solution in water in only one column. The absorption column offgas comprising sulfur dioxide is not recovered in this process.
www.intratec.us/analysis/sulfuric-acid-e12a

SULFURIC ACID PRODUCTION FROM IRON PYRITE GASES - COST ANALYSIS | REPORT SULFURIC ACID E21A
This report presents the economics of sulfuric acid production from iron pyrite gases in the United States. In this process, iron pyrite gas is treated for undesirable compounds removal and then, sulfur dioxide contained in the gas is converted to sulfur trioxide, which passes through double-contact double absorption to generate sulfuric acid.
www.intratec.us/analysis/sulfuric-acid-e21a

SULFURIC ACID FROM H2S GASES VIA WET SULFURIC ACID PROCESS - COST ANALYSIS | REPORT SULFURIC ACID E31A
This report presents the economics of recovering hydrogen sulfide gases to generate sulfuric acid in the United States.
www.intratec.us/analysis/sulfuric-acid-e31a

SULFURIC ACID FROM SPENT ACID VIA DOUBLE-CONTACT PROCESS - COST ANALYSIS | REPORT SULFURIC ACID E41A
This report presents the economics of spent sulfuric acid regeneration via double-contact double absorption process.
www.intratec.us/analysis/sulfuric-acid-e41a

SULFURIC ACID FROM SPENT ACID VIA WET SULFURIC ACID PROCESS - COST ANALYSIS | REPORT SULFURIC ACID E42A
This report presents the economics of spent sulfuric acid regeneration via wet sulfuric acid (WSA) process.
www.intratec.us/analysis/sulfuric-acid-e42a

SULFURIC ACID FROM TAIL GAS USING H2O2 ABATEMENT - COST ANALYSIS | REPORT SULFURIC ACID E51A
This report presents the economics of employing hydrogen peroxide abatement to generate Sulfuric Acid from tail gas in the United States.
www.intratec.us/analysis/sulfuric-acid-e51a
SYNGAS

See below Intratec’s reports related to Syngas.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

SYNGAS PRODUCTION FROM NATURAL GAS - COST ANALYSIS | REPORT SYNGAS E11A
This report presents the economics of Syngas (Synthesis Gas) production from natural gas using a typical autothermal reforming process. The economic analysis is based on the construction of a plant located in the USA.
www.intratec.us/analysis/syngas-e11a

SYNGAS PRODUCTION FROM FUEL OIL - COST ANALYSIS | REPORT SYNGAS E31A
It presents a techno-economic analysis of Syngas production from heavy fuel oil in the USA using a partial oxidation process.
www.intratec.us/analysis/syngas-e31a

SYNGAS PRODUCTION FROM WOOD - COST ANALYSIS | REPORT SYNGAS E21A
This study presents the costs associated with the construction of a plant for Syngas production from wood chips via a typical gasification process. The economic analysis provided assumes a plant constructed in the USA.
www.intratec.us/analysis/syngas-e21a

SYNGAS PRODUCTION FROM COAL - COST ANALYSIS | REPORT SYNGAS E51C
This feasibility study approaches the construction of a plant producing Syngas in China. The plant produces Syngas via a coal gasification process.
www.intratec.us/analysis/syngas-e51c

SYNGAS PRODUCTION FROM VACCUM RESIDUE - COST ANALYSIS | REPORT SYNGAS E41A
This report presents the economics of Syngas production in the USA via a typical non-catalytic partial oxidation process. In the process under analysis, the bottom product of a vacuum distillation unit, known as vacuums residue, is used as feedstock.
www.intratec.us/analysis/syngas-e41a
TANESPIMYCIN

See below Intratec’s reports related to Tanespimycin.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

TANESPIMYCIN PRODUCTION FROM CORN - COST ANALYSIS | REPORT TANESPIMYCIN E11A

This report presents the economics of the production of Tanespimycin production from corn in the USA, via a typical fermentation process.

www.intratec.us/analysis/tanespimycin-e11a
TEREPHTHALIC ACID

See below Intratec’s reports related to Terephthalic Acid.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

MEDIUM-PURITY TEREPTHALIC ACID PRODUCTION - COST ANALYSIS | REPORT TPA E11A
This report presents the economics of Medium-Purity Terephthalic Acid (MTA) production. The analysis is based on a plant located in the USA starting from p-xylene raw material. The process examined is a typical catalytic oxidation process.
www.intratec.us/analysis/tpa-e11a

TEREPHTHALIC ACID PRODUCTION FROM P-XYLENE - COST ANALYSIS | REPORT TPA E12A
This study presents the economics of Purified Terephthalic Acid (PTA) production using p-xylene as the process feedstock. The study approaches the construction of a plant in the USA employing a conventional catalytic oxidation process. In this process, Crude Terephthalic Acid (CTA) intermediate is dried and then sent to additional purification steps to obtain PTA as the final product.
www.intratec.us/analysis/tpa-e12a

TEREPHTHALIC ACID PRODUCTION FROM P-XYLENE - COST ANALYSIS | REPORT TPA E13A
This assessment also presents the economics of Purified Terephthalic Acid (PTA) production from p-xylene. The economic analysis is also based in a plant located in the USA. However, differently from the report “TPA E12A”, the process examined in this report is similar to BP X Technology. In this process, drying and storage of the CTA intermediate is not necessary. The CTA wet cake is directly subjected to a hydrogenation step and PTA is obtained as the final product.
www.intratec.us/analysis/tpa-e13a

TEREPHTHALIC ACID PRODUCTION FROM P-XYLENE - COST ANALYSIS | REPORT TPA E14A
This analysis also presents production cost of Purified Terephthalic Acid (PTA) production from p-xylene. The process examined in this report is similar to that one developed by GTC Technology. Differently from the conventional technology, this process does not involve a hydrogenation step for Terephthalic Acid purification. The economic analysis assumes a plant located in the USA.
www.intratec.us/analysis/tpa-e14a

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See below Intratec’s reports related to TBBPA.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

TETRABROMOBISPHENOL A PRODUCTION - COST ANALYSIS | REPORT TBBPA E11A
This report presents the economics of Tetrabromobisphenol A (TBBPA) production from bisphenol A (BPA) and bromine. The economic analysis approaches a plant located in the USA.

www.intratec.us/analysis/tbbpa-e11a

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See below Intratec’s reports related to THF.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

**TETRAHYDROFURAN FROM BUTANEDIOL - COST ANALYSIS | REPORT THF E11A**

It presents the economics of Tetrahydrofuran (THF) production from butanediol (BDO) in the USA, using a dehydration process similar to Davy Process Technology (DPT).

www.intratec.us/analysis/thf-e11a
See below Intratec’s reports related to Thiram.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

THIRAM PRODUCTION PROCESS - COST ANALYSIS | REPORT THIRAM E11A
This report presents the economics of Thiram production from dimethylamine, carbon disulfide, sodium hydroxide, hydrogen peroxide, and sulfuric acid in the USA.
www.intratec.us/analysis/thiram-e11a
TITANIUM BUTOXIDE

See below Intratec's reports related to Titanium Butoxide.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

TITANIUM BUTOXIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT TITANIUM BUTOXIDE E11A

This report presents the economics of a typical Titanium Butoxide production process from butyl alcohol, titanium tetrachloride, and ammonia in the United States.

www.intratec.us/analysis/titanium-butoxide-e11a
Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

TITANIUM DIOXIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT TITANIUM DIOXIDE E11A
Techno-economic analysis of an industrial process for Titanium Dioxide production from rutile in a United States-based facility.
www.intratec.us/analysis/titanium-dioxide-e11a

TITANIUM DIOXIDE PRODUCTION PROCESS - COST ANALYSIS | REPORT TITANIUM DIOXIDE E21A
Feasibility study of Titanium Dioxide production from ilmenite in USA.
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TOLUENE DIISOCYANATE

See below Intratec's reports related to TDI.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

TOLUENE DIISOCYANATE FROM DNT VIA PHOSGENATION - COST ANALYSIS | REPORT TDI E12A
This study reviews the costs associated with Toluene Diisocyanate (TDI) production from dinitrotoluene (DNT) and phosgene in the USA. The process examined is a typical liquid-phase phosgenation process.
www.intratec.us/analysis/tdi-e12a

TOLUENE DIISOCYANATE PRODUCTION FROM DNT - COST ANALYSIS | REPORT TDI E11A
This report presents the economics of Toluene Diisocyanate (TDI) production from dinitrotoluene (DNT). The process examined is a typical reductive carbonylation process comprised of two steps: reductive carbonylation of DNT to toluene dimethylcarbamate; thermal decomposition of carbamate to produce TDI. The economic assessment assumes an industrial plant in the USA.
www.intratec.us/analysis/tdi-e11a

TOLUENE DIISOCYANATE FROM DNT VIA PHOSGENATION - COST ANALYSIS | REPORT TDI E13A
This study also presents the costs associated with Toluene Diisocyanate (TDI) production. The process reviewed in this report is the same as the depicted in the report "TDI E12A". The difference is that in this report, the phosgene used is generated from chlorine and carbon monoxide in an on-site unit.
www.intratec.us/analysis/tdi-e13a

TOLUENE DIISOCYANATE FROM TOLUENE VIA PHOSGENATION - COST ANALYSIS | REPORT TDI E23A
As the reports "TDI E12A" and "TDI E13A", this report presents the economics of a typical liquid-phase phosgenation process for TDI production. However, in this report the TDI plant is integrated with DNT production from toluene and phosgene production from chlorine. The economic assessment assumes a plant located in the USA.
www.intratec.us/analysis/tdi-e23a

TOLUENE DIISOCYANATE FROM TOLUENE VIA PHOSGENATION - COST ANALYSIS | REPORT TDI E14A
As the report "TDI E13A", this report also shows a techno-economic analysis about TDI production from DNT and chlorine in the USA. However, the process examined in this report is similar to the Bayer gas-phase phosgenation (GPP) technology.
www.intratec.us/analysis/tdi-e14a

TOLUENE DIISOCYANATE FROM TOLUENE VIA PHOSGENATION - COST ANALYSIS | REPORT TDI E24A
This report presents the economics of TDI production from toluene and chlorine via a process similar to the Bayer Gas-Phase Phosgenation (GPP) technology. The process examined involves the following steps: toluene is dinitrated to DNT, DNT is hydrogenated to TDA, and TDA reacts with phosgene to produce TDI. The economic analysis performed is based on a plant located in the USA.
www.intratec.us/analysis/tdi-e24a

TOLUENE DIISOCYANATE FROM TOLUENE - COST ANALYSIS | REPORT TDI E21A
It presents the economics of TDI production from toluene in the USA using a typical reductive carbonylation process. Differently from the report "TDI E11A", the process examined in this report is integrated with dinitrotoluene (DNT) production via toluene dinitration.
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This feasibility study presents the costs associated with TDI production from toluene in the USA. Differently from the report "TDI E21A", the process examined is similar to Enichem's oxidative carbonylation process. In this process, DNT is hydrogenated to toluenediamine (TDA), which reacts with DMC to produce a urethane intermediate.

www.intratec.us/analysis/tdi-e22a
TOLUENEDIAMINE

See below Intratec's reports related to TDA.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

TOLUENEDIAMINE PRODUCTION FROM TOLUENE - COST ANALYSIS | REPORT TDA E11A
Techno-economic analysis of Toluenediamine (TDA) production from toluene via dinitrotoluene (DNT) considering a plant located in the United States.

www.intratec.us/analysis/tda-e11a
TRICALCIUM PHOSPHATE

See below Intratec’s reports related to TCP.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

TRICALCIUM PHOSPHATE PRODUCTION - COST ANALYSIS | REPORT TCP E11A
This report presents the economics of Tricalcium Phosphate from phosphate rock, phosphoric acid, and soda ash in the USA, via a typical calcination process.

www.intratec.us/analysis/tcp-e11a
TRICHLORFON

See below Intratec’s reports related to Trichlorfon.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

TRICHLORFON PRODUCTION - COST ANALYSIS | REPORT TRICHLORFON E11A
This report presents the economics of a typical Trichlorfon production from dimethyl hydrogen phosphite and chloral in the USA.
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TEA-LAURYL SULFATE

See below Intratec's reports related to TEA-Lauryl Sulfate.

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TRIETHANOLAMINE LAURYL SULFATE PRODUCTION - COST ANALYSIS | REPORT TEALS E11A
This report presents the economics of Triethanolamine Lauryl Sulfate (TEALS) production from chlorosulfonic acid, lauryl alcohol, and TEA in the USA.
www.intratec.us/analysis/teals-e11a
See below Intratec's reports related to TMP.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

TRIMETHYLOLPROPANE PRODUCTION PROCESS - COST ANALYSIS | REPORT TMP E11A
This report presents the economics of Trimethylolpropane (TMP) production from formaldehyde and isobutyraldehyde, assuming a plant located in the United States. In the process analyzed, formaldehyde and isobutyraldehyde go through a two-step reaction to form Trimethylolpropane and sodium formate.

www.intratec.us/analysis/tmp-e11a
UNSATURATED POLYESTER RESIN

See below Intratec’s reports related to UPR.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

ISOPHTHALIC UNSATURATED POLYESTER PRODUCTION PROCESS - COST ANALYSIS | REPORT UPR E11A
This report presents the economics of Terephthalic Unsaturated Polyester production from maleic anhydride, diethylene glycol, recycled polyethylene terephthalate (PET), propylene glycol and styrene using a typical batch process. The economic analysis is based on a plant located in the USA.
www.intratec.us/analysis/upr-e11a

TEREPHTHALIC UNSATURATED POLYESTER PRODUCTION PROCESS - COST ANALYSIS | REPORT UPR E21A
This study also approaches the production of Unsaturated Polyester Resin. The process reviewed is the same as the examined in the report “UPR E11A”. The difference is that the economic assessment assumes a plant located in China.
www.intratec.us/analysis/upr-e21a

ORTHOPHTHALIC UNSATURATED POLYESTER PRODUCTION PROCESS - COST ANALYSIS | REPORT UPR E31A
This report presents the economics of Orthophthalic Unsaturated Polyester production from phthalic and maleic anhydrides, monoethylene glycol, diethylene glycol, propylene glycol and styrene using a typical batch process. The economic analysis is based on a plant located in the USA.
www.intratec.us/analysis/upr-e31a

DCPD UNSATURATED POLYESTER PRODUCTION PROCESS - COST ANALYSIS | REPORT UPR E41A
This report presents the economics of DCPD Unsaturated Polyester production from maleic anhydride, dicyclopentadiene, monoethylene glycol, diethylene glycol and styrene using a typical batch process. The economic analysis is based on a plant located in the USA.
www.intratec.us/analysis/upr-e41a
UREA PRODUCTION FROM AMMONIA - COST ANALYSIS | REPORT UREA E11A
This report presents the economics of Urea production from ammonia and carbon dioxide in the USA, through a process similar to Snamprogetti's ammonia stripping process.
www.intratec.us/analysis/urea-e11a

UREA PRODUCTION FROM AMMONIA - COST ANALYSIS | REPORT UREA E12A
This report examines the costs related to Urea production from ammonia and carbon dioxide in the USA. Differently from the report "Urea E11A", the process examined in this report is similar to Stamicarbon's carbon dioxide stripping process.
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劣化熱塑性樹脂

这个报告介绍了尿素-甲醛树脂的生产经济学，从尿素和甲醛开始。研究考虑了一个位于美国墨西哥湾沿岸的工厂，采用传统的工艺流程，其中甲醛首先与尿素反应，然后反应产物聚合形成尿素-甲醛树脂。

www.intratec.us/analysis/uf-e11a

尿素-甲醛树脂从尿素和甲醇的生产经济学 | 报告UF E21A

这个报告介绍了尿素-甲醛树脂的生产经济学，从尿素和甲醇开始。研究考虑了一个位于美国墨西哥湾沿岸的工厂，采用传统的工艺流程，首先用甲醇生产甲醛，然后生成的甲醛与尿素反应，然后反应产物聚合形成尿素-甲醛树脂。

www.intratec.us/analysis/uf-e21a
VINYL ACETATE

See below Intratec’s reports related to VAM.

Intratec Production Cost Reports describe specific chemical production processes and present detailed and up-to-date analyses of their cost structure, encompassing capital investment and production cost figures.

VINYL ACETATE FROM ACETIC ACID AND ETHYLENE - COST ANALYSIS | REPORT VAM E11A
This study presents the economics of Vinyl Acetate production from acetic acid and ethylene in the USA, via a typical vapor-phase oxidation process.
www.intratec.us/analysis/vam-e11a

VINYL ACETATE FROM ACETIC ACID AND ACETYLENE - COST ANALYSIS | REPORT VAM E21A
This feasibility study examines the economics of a process producing Vinyl Acetate from acetic acid and acetylene. The economic analysis performed is based on a plant constructed in the USA.
www.intratec.us/analysis/vam-e21a

See below data offered by Intratec related to VAM

Chemicals Pricing Data. Intratec offers online up-to-date and historical prices of chemical commodities and utilities, across several world regions. To know more about Intratec Chemicals Pricing Data, go to page 11

VAM PRICES
Online database presenting the following information:
* VAM Price History. Know how prices practiced evolved since 2007, in several world regions. Check a free sample of this data at:
  www.intratec.us/chemical-markets/vam-prices

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VINYL CHLORIDE PRODUCTION FROM ETHYLENE DICHLORIDE - COST ANALYSIS | REPORT VCM E11A
This report presents the economics of Vinyl Chloride production from ethylene dichloride (EDC) in the USA using a typical thermal cracking process. In the process under analysis, EDC is thermally cracked to produce Vinyl Chloride, also generating hydrogen chloride as a by-product.
www.intratec.us/analysis/vcm-e11a

VINYL CHLORIDE PRODUCTION FROM ETHANE AND CHLORINE - COST ANALYSIS | REPORT VCM E21A
This study reviews the costs associated with Vinyl Chloride production directly from ethane and chlorine. The process examined is an early stage process similar to that developed by European Vinyls Corporation, now owned by INEOS. The economic assessment assumes an industrial plant in the USA.
www.intratec.us/analysis/vcm-e21a

VINYL CHLORIDE PRODUCTION FROM ACETYLENE - COST ANALYSIS | REPORT VCM E31A
This feasibility study reviews a typical hydrochlorination process for Vinyl Chloride production from acetylene. The economic analysis presented is based on the construction of an industrial plant in the USA.
www.intratec.us/analysis/vcm-e31a

VINYL CHLORIDE PRODUCTION FROM ETHYLENE AND CHLORINE - COST ANALYSIS | REPORT VCM E41A
It presents the economics of Vinyl Chloride production from ethylene in the USA. The process under analysis is a typical balanced process, which combines two ethylene dichloride (EDC) production routes (direct chlorination and oxychlorination) with the Vinyl Chloride production via EDC thermal cracking.
www.intratec.us/analysis/vcm-e41a

VINYL CHLORIDE PRODUCTION FROM ETHYLENE AND EDC - COST ANALYSIS | REPORT VCM E51A
This report also presents the production cost of Vinyl Chloride from ethylene and ethylene dichloride (EDC). The process examined combines: (1) EDC production from ethylene and chlorine via oxychlorination, and (2) Vinyl Chloride production via thermal cracking of EDC. The economic analysis presented is based on a plant located in the USA.
www.intratec.us/analysis/vcm-e51a

VINYL CHLORIDE PRODUCTION FROM ETHYLENE AND CHLORINE - COST ANALYSIS | REPORT VCM E42A
This study also approaches a detailed cost analysis of the Vinyl Chloride production from ethylene and chlorine as raw materials. The process under analysis combines: (1) EDC production from ethylene and chlorine via direct chlorination, and (2) Vinyl Chloride production via thermal cracking of EDC. Hydrogen chloride is generated as by-product. The economic analysis presented assumes a plant located in the USA.
www.intratec.us/analysis/vcm-e42a

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See below Intratec’s reports related to Ziram.

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ZIRAM PRODUCTION PROCESS - COST ANALYSIS | REPORT ZIRAM E11A
This report presents the economics of Ziram production from dimethylamine, carbon disulfide, sodium hydroxide, and zinc sulfate in the USA.
www.intratec.us/analysis/ziram-e11a