



QUALITY ENERGIZED BY

LANXESS
Energizing Chemistry

Product Range

Advanced Industrial Intermediates

ADVANCED INDUSTRIAL INTERMEDIATES

Market Focus, Quality and high level of Expertise

The LANXESS Business Unit Advanced Industrial Intermediates is known for high quality industrial chemicals. A broad range of products is providing the prerequisite for our customers success.

In four business lines, "Benzyl Products and Inorganic Acids", "Polyols and Oxidation Products", "Antioxidants and Accelerators" and "Aromatic Network", we combine long standing production excellence with customer partnership. Strict market focus as well as market knowledge are laying out our road of success.



- We are committed to Product Stewardship and Responsible Care Initiatives, including the European REACH legislation

COMPETENCE LEADS TO SUSTAINABLE DEVELOPMENT.

We offer our products at most advanced levels:

Our products have been investigated applying the latest methods for risk assessment. Our material safety data sheets provide all the information needed to handle and apply our products safely.

Our processes are designed to minimize impacts on air, water and soil because of our up-to-date installations. Responsibility is part of our daily operation. Our neighbour is our partner.

Regular process safety studies, combined with continuous investments into safety installations are providing our backbone for plant and transportation safety. Regular inspections prove our concept.

Our products are of high quality. Our manufacturing processes yield products of consistent quality for our customers. We have the know how to transport hazardous goods globally, on time, in full.

If our products and services do not fulfil customers' expectations, we investigate and respond.

Our assets are maintained for long-term operation. Maintenance leads to high asset

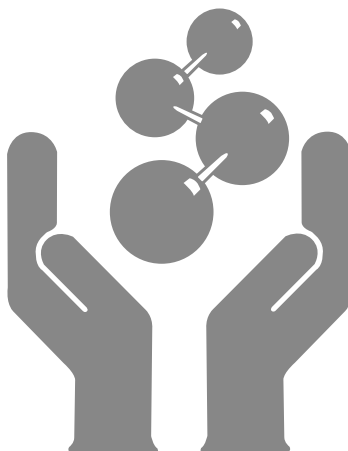
reliability with the most advanced technical standards.

Our personnel are well trained and their knowledge and skills contribute to our business. Our vendors and service providers must fulfil all our expectations.

REACH means responsible action: We strive to minimize the risks for a set of enumerated uses as set out in our material safety data sheets.

We are committed to Product Stewardship and Responsible Care Initiatives, including the European REACH legislation.

Sustainable Development – Compliance – Ethical Standards



BENZYL PRODUCTS AND INORGANIC ACIDS

Benzyl Products & Amines

- Benzyl chloride
- Benzyl alcohol
- Benzotrichloride
- Benzoyl chloride
- Benzaldehyde
- Dibenzylether
- Benzyl acetate
- Benzyl benzoate
- Cinnamic aldehyde
- Sodium benzoate
- Benzylamine
- Dibenzylamine
- Dimethylbenzylamine
- 1,2-Propylenediamine
- 3,5-Xylidine
- Methyldiisopropanolamine

Inorganic Acids

- Anhydrous hydrofluoric acid
- Hydrofluoric acid (various concentrations)
- Fluorosulphonic acid
- Anhydrite
- Fluorosilicic acid
- Hydrazine hydrate
- Levoxin® (activated hydrazine hydrate)
- Dihydrazine sulphate
- Oleum (various concentrations)
- Sodium bisulphite liquid
- Sulphuric acid (various concentrations)
- Sulphuric acid chemically pure
- Sulphuryl chloride
- Sulphur dichloride
- Sulphur monochloride
- Thionyl chloride

Bayowet®

- Bayowet® C4 – flame-retardant agent for polycarbonate
- Perfluorobutanesulfonyl fluoride – fluorinating agent

POLYOLS AND OXIDATION PRODUCTS

Polyols

- Trimethylolpropane (TMP)
- Di-Trimethylolpropane (Di-TMP)
- 1,6 - Hexanediol

Oxidation Products

- Phthalic anhydride
- Maleic anhydride
- Adipic acid
- Glutaric acid
- Phthalimide

Other Products

- Calcium formate (CaFo)
- Rovelan® (feed additive by LANXESS Distribution GmbH)
- Folanx® (specialty fertilizer by LANXESS Distribution GmbH)





ANTIOXIDANTS AND ACCELERATORS

Antioxidants and Antiozonants

- Vulkanox® 4020 (6PPD)
- Vulkanox® HS (TMQ)
- Vulkanox® 4005 (44PD)
- Vulkanox® 4010 (IPPD)
- Vulkanox® 4030 (77PD)
- Vulkanox® MB2 (MMBI)
- Vulkanox® ZMB2 (ZMMBI)
- Vulkazon® AFS

Accelerators

- Vulkacit® Mercapto (MBT)
- Vulkacit® DM (MBTS)
- Vulkacit® ZM (ZMBT)
- Vulkacit® CZ (CBS)
- Vulkacit® NZ (TBBS)
- Vulkacit® DZ (DCBS)

Specialties

- NaMBT 50%
- Benzothiazol (BT)
- Renacit® 10 (DBD)
- Renacit® 11
- Renacit® 11/WG
- Renacit® 9203



AROMATIC NETWORK

Chlorobenzenes & Derivatives

- Monochlorobenzene
- o-Dichlorobenzene
- m-Dichlorobenzene
- p-Dichlorobenzene
- 1,2,3-Trichlorobenzene
- 1,2,4-Trichlorobenzene
- 2,3-Dichloronitrobenzene
- 2,4-Dichloronitrobenzene
- 3,4-Dichloronitrobenzene
- 2,3-Dichloroaniline
- 2,4-Dichloroaniline
- 3,4-Dichloroaniline

Isocyanates

- 3,4-Dichlorophenyl isocyanate
- 2,4-Dichlorophenyl isocyanate
- 3,5-Dichlorophenyl isocyanate
- m-Chlorophenyl isocyanate
- p-Chlorophenyl isocyanate
- o-Chlorophenyl isocyanate
- 3-Chloro-4-methylphenyl isocyanate
- Phenyl isocyanate
- p-Isopropylphenyl isocyanate
- m-Tolyl isocyanate
- p-Tolyl isocyanate
- m-(Trifluormethyl)phenyl isocyanate
- p-(Trifluormethoxy)phenyl isocyanate

AROMATIC NETWORK

Chlorotoluenes & Derivatives

- o-Chlorotoluene
- p-Chlorotoluene
- Dichlorotoluene mixture
- o-Cresol
- m-Cresol
- m/p-Cresol
- m-Cresol GMP Grade*

*distributed via Hedinger GmbH & Co.KG,
Stuttgart, Germany

- 2-tert-Butyl-m-cresol (MBMC)
- 2-tert-Butyl-p-cresol (MBPC)
- Vulkanox® BHT KRIST
- Vulkanox® BHT Molten
- ROVELOX®
- PUROLAN® BHT
- Vulkanox® BHT GMP Grade*
- Vulkanox® BKF – Antioxidant
- Baynox® Biodiesel stabilizer
- Baynox® Molten
- Baynox® Plus
- Baynox® Solution
- Baynox® Cargo
- Baynox® Ultra
- Thymol

Heat Transfer Fluids

- Diphyl® DT

Nitrotoluenes & Derivates

- o-Nitrotoluene
- m-Nitrotoluene
- p-Nitrotoluene
- o-Toluidine
- m-Toluidine
- p-Toluidine
- o-/p-Toluidine mixture
- 2-Chlor-4-aminotoluene (2-CAT)
- 2-Methyl-6-ethylaniline (MEA)

- 1,5-Dihydroxynaphthalene



LANXESS **PORTFOLIO**

With its extensive portfolio, LANXESS focuses on premium products. Its core business comprises the development, manufacture and sale of high-tech plastics, high-performance rubber, specialty chemicals and intermediates. In addition, it helps its customers in the development and implementation of individual system solutions. In these areas, which are at the very

core of the chemical industry, the Group has specific expertise in the form of chemical and application-related know-how and flexible asset management. The Group's aim is, through innovative products, optimized processes and new ideas, to generate added value for customers and the company.

For further information, visit www.lanxess.com.



LANXESS DEUTSCHLAND GMBH
ADVANCED INDUSTRIAL INTERMEDIATES
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Customers in the USA are kindly
requested to refer to:
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