

PRODUCT RANGE

LUBRICANTS & RELEASE AGENTS





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Thinners



ABOUT US

BCD Chemie

For decades, BCD Chemie has focussed on the Europe-wide marketing and distribution of industrial and specialty chemicals and is one of the leading suppliers in this segment. As a link between manufacturers of high-quality chemical raw materials and customers from many industries, we supply B2B sales solutions for a wide range of sectors and applications. Profound market knowledge, competent product and application advice as well as comprehensive expertise in chemical-technical and market-analytical contexts form the basis of our philosophy of modern chemical distribution.

We offer a diverse product portfolio for manufacturers of lubricant oils, lubricant greases, metal working fluids and release agents. With the help of our solutions, high-quality and innovative products can be developed that optimize the properties of your formulations.

Sustainability is at the centre of our efforts - which is why BCD Chemie plans to continuously expand its range of environmentally friendly products in the coming years. The sustainable products currently available, especially those that are 100 % or partially derived from non-fossil sources, are labelled with a green leaf.

More information on the products can be found in our sustainable range card. Our sustainable concept is available on our <u>sustainablity</u> website, from which you can conveniently download the range card as well.

BASE OILS

Bio-based Base Oils

Product	Description
Bio-based base oils, low viscosity	Base oils in four different viscosities made from processed and hydrogen-modified non-edible vegetable oils, bio-based and readily biodegradable. A sustainable alternative to fossil naphthenic base oils. PCF (Product Carbon Footprint) data available.
Bio-based base oils, medium to high viscosity	Base oils in six different viscosities, bio-based and readily biodegradable. Fatty acids derived from rapeseed oil as a replacement for unsaturated esters. PCF (Product Carbon Footprint) data available.
Bio-based solvents	Four different solvents made from biohydrocarbon esters and vegetable oils. Biobased and readily biodegradable as an alternative to petroleum-based solvents. PCF (Product Carbon Footprint) data available.
Regenerative base oil	Base oil made from a combination of bio-based and refined components, with comparable solvency to naphthenic base oils. Reduces the carbon footprint by 50% compared to native mineral oil.

Silicone Fluids

Product	Description
Silicone fluids, low viscosity	Polydimethylsiloxanes (PDMS) in various viscosities from 0.65cs – 20cs for use as a base oil.
Silicone fluids, medium viscosity	Polydimethylsiloxanes (PDMS) in various viscosities from 50cs – 1,000cs for use as a base oil.
Silicone fluids, high viscosity	Polydimethylsiloxanes (PDMS) in various viscosities from 2,000cs – 60,000cs for use as a base oil.
Silicone fluids, ultra-high viscosity	Polydimethylsiloxanes (PDMS) in various viscosities from 100,000cs – 1,000,000cs for use as a base oil.

Additives for Ester Oils

Product	Description
Adipic acid esters / Adipates	DOA (di-2-ethylhexyl adipate)
	DBA (dibutyl adipate)
	BOA (benzyloctyl adipate)
	DINA (diisononyl adipate)
	DIDA (diisodecyl adipate)
	DTDA (diisotridecyl adipate)
Methyl esters	C16-18 & C18, can reduce friction in lubricants especially in applications that require good lubrication performance and environmental compatibility.

ADDITIVES FOR LUBRICANT OILS

Rheology Additives / Thickeners

Product	Description
Modified polyurea	Liquid rheology additives for lubricant oils to create a highly thixotropic flow behavior and to prevent the settling of solids.
Phyllosilicates	Powdered rheology additives as thickeners for lubricant oils. The high viscosity also prevents solids from settling (anti-settling).
Polyurethane thickener	Thickener for newtonian to pseudoplastic flow behavior in lubricant oils.
Fumed silica	Hydrophilic and hydrophobic fumed silica with different surface areas as a thickener for lubricant oils. Pseudoplastic to thixotropic flow behavior can be achieved.
Polybutadiene	Thickener, particularly suitable for high-viscosity lubricant oils.

Wetting and Dispersing Additives

Product	Description
Polycarboxylic acid polymer	Low molecular weight, unsaturated polycarboxylic acid polymer as a wetting and dispersing additive for stabilising solids in lubricant oils.
Phosphoric acid esters	Solution of a polymeric phosphoric acid ester as a wetting and dispersing additive for stabilising solids in lubricant oils.
Polyalkyleneimine	Polyglycol and polyester modified polyalkyleneimines as wetting and dispersing additives for stabilising solids in lubricant oils.
Copolymers	Alkylammonium salt of a high molecular weight copolymer as a wetting and dispersing additive for stabilising solids in lubricant oils.
Polyamine amide / Polyesters	Salt of unsaturated polyamine amides and low molecular weight acidic polyesters as a wetting and dispersing additive for stabilising solids in lubricant oils.

Antifoams

Product	Description
Silicone antifoams	Silicone-based antifoams for lubricant oils. Versatile and efficient for API classes I–V.
Polymer antifoams	Organic polymer-based antifoams for lubricant oils. Particularly suitable and effective for API Classes IV & V.

Surface Additives

Product	Description
Silicone surfactant	Polyether and polyester modified polydimethylsiloxane / siloxane for strong reduction of the surface tension.
Alcohol alkoxylates	Silicone-free surface additive for water-based lubricants to reduce surface tension.
Succinic acid / ester	Silicone-free surface additive for water-based lubricants to reduce surface tension.

Anti-corrosion Additives

Product	Description
Copper deactivator	Triazole derivatives, solvent free and good solubility in oils. Triazole derivatives formulation or triazole free options for water-based applications.
Multi-metal corrosion inhibitors	Polymer inhibitors, for aluminum alloys, iron and steel, non-ferrous metals and zinc. Depending on the formulation, also acts as a wetting agent, EP/AW additive or coemulsifier.
Long-term corrosion protection	For water- and solvent-based coatings, as temporary corrosion protection for iron and steel, specially modified version for aluminum.
Flash rust inhibitors	For water-based applications, as temporary corrosion protection for iron and steel. A special modified version for aluminum.

Bonding Agents

Product	Description
Bio-based modified adhesive resin	Resin used as an additive to improve adhesion and cohesion and reduce friction and wear in lubricants.

ADDITIVES FOR METAL WORKING FLUIDS

Wetting and Dispersing Additives

Product	Description
Polycarboxylic acid polymer	Low molecular weight, unsaturated polycarboxylic acid polymer as a wetting and dispersing additive for stabilising solids in metal working fluids.
Phosphoric acid esters	Solution of a polymeric phosphoric acid ester as a wetting and dispersing additive for stabilising solids in metal working fluids.
Polyalkyleneimine	Polyglycol and polyester modified polyalkyleneimines as wetting and dispersing additives for stabilising solids in metal working fluids.
Copolymers	Alkylammonium salt of a high molecular weight copolymer as a wetting and dispersing additive for stabilising solids in metal working fluids.
Polyamine amide / Polyesters	Salt of unsaturated polyamine amides and low molecular weight acidic polyesters as a wetting and dispersing additive for stabilising solids in metal working fluids.

Polyurethane	Solution of a modified polyurethane as a wetting and dispersing additive for stabilising solids in water-based metal working fluids.
Polyether	Solution of a modified polyether as a VOC-free wetting and dispersing additive for stabilising solids in water-based metal working fluids.
Styrene-maleic anhydride / Copolymer	Aqueous solution of a polyether-modified styrene-maleic anhydride / copolymer as a wetting and dispersing additive for stabilising solids in water-based metal working fluids.

Antifoams

Product	Description
Silicone antifoams	Silicone-containing antifoams for metal working fluids.
Polymer antifoams	Organic antifoams based on polymers for metal working fluids.
Oligomeric amine	Difunctional primary amine that can be used as an antifoam in fully synthetic metal working fluids.

Surface Additive

Product	Description
Silicone antifoams	Polyether and polyester modified polydimethylsiloxane / siloxane for strong reduction of the surface tension.
Alcohol alkoxylates	Silicone-free surface additive for water-based lubricants to reduce surface tension.
Succinic acid / ester	Silicone-free surface additive for water-based lubricants to reduce surface tension.

Emulsifiers

Product	Description	
Phosphate esters	As an emulsifier for metal working fluids.	
Sulfonates	As an emulsifier for metal working fluids.	
Ethoxylates	As an emulsifier for metal working fluids.	
Alkoxylates	As an emulsifier for metal working fluids.	

Amides / Fatty acid amides	As an emulsifier for metal working fluids.
Diglycolamine (DGA)	As an emulsifier for metal working fluids.
Triethanolamine (TEA)	As an emulsifier for metal working fluids.

pH regulators

Product	Description
Special amines	Primary / Tertiary amines as pH regulators in (water-miscible) metal working fluids.
Diglycolamine (DGA)	As a pH regulator for water-miscible metal working fluids.
Triethanolamine (TEA)	As a pH regulator for water-miscible metal working fluids.

Anti-corrosion Additives

Product	Description
Copper deactivator	Triazole derivatives, solvent free and good solubility in oils. Triazole derivatives formulation or triazole free options for water-based applications.
Multi-metal corrosion inhibitors	Polymer inhibitors, for aluminum alloys, iron and steel, non-ferrous metals and zinc. Depending on the formulation, also acts as a wetting agent, EP/AW additive or coemulsifier.
Long-term corrosion protection	For water- and solvent-based coatings, as temporary corrosion protection for iron and steel, specially modified version for aluminum.
Flash rust inhibitors	For water-based applications, as temporary corrosion protection for iron and steel. A special modified version for aluminum.
Special amines	Primary / Tertiary amines as anti-corrosion additive in (water-miscible) metal working fluids.
Diglycolamine (DGA)	Diglycolamine as anti-corrosion additive in (water-miscible) metal working fluids.
Phosphate esters	Acts as anti-corrosion in metal working fluids.
Monoethanolamine (MEA)	Acts as anti-corrosion in metal working fluids.
Methyldiethanolamine (MDEA)	Acts as anti-corrosion in metal working fluids.

ADDITIVES FOR LUBRICANT GREASES

Rheology Additives / Thickeners

Product	Description
Phyllosilicates	Powdered rheology additives as thickeners for low- to medium-polarity lubricant greases. The high viscosity also prevents solids from settling (anti-settling).
Fumed silica	Hydrophilic and hydrophobic fumed silica with different surface areas as a thickener for lubricant greases. Pseudoplastic to thixotropic flow behavior can be achieved.

Bonding Agents

Product	Description
Bio-based modified adhesive resin	Resin used as an additive to improve adhesion and cohesion and reduce friction and wear in lubricants.

ADDITIVES FOR DRY LUBRICANTS

Wetting Agents

Product	Description
Silicone surfactant	Polyether-modified siloxane for strong reduction of surface tension.

Additives for Sliding Properties

Product	Description
Carnauba wax emulsion	Non-ionic aqueous carnauba wax emulsion to improve slip properties.
Polypropylene wax emulsion	Wax emulsions for the formulation of dry lubricants to improve sliding properties.
Polyethylene wax emulsion	Wax emulsions for the formulation of dry lubricants to improve sliding properties.

ADDITIVES FOR RELEASE AGENTS

Silicone Additives

Product	Description
(Functional) silicone oils	Polydimethylsiloxane (PDMS), also available as functional types, for non-water-based release agent formulations. It ensures good wetting and remains resistant even at high temperatures.
Silicone emulsions	Silicone emulsions for water-based release agent formulations. Ensures good wetting and remains resistant even at high temperatures.
Silicone resins	Silicone resins for non-water-based release agent formulations. Ensures good wetting and remains resistant even at high temperatures.
Silicone polyether	Wetting agent for water-based release agents to reduce surface tension and improve wetting.
Trisiloxanes	Wetting agent for water based release agents to reduce surface tension and improve wetting.

Wax Additives

Product	Description
Polypropylene wax emulsion	Wax emulsions for the formulation of water-based mold release agents. Ensures good film formation and adhesion to the mold surface.
Polyethylene wax emulsion	Wax emulsion for the formulation of water-based mold release agents. Ensures good film formation and adhesion to the mold surface.

Antifoams

Product	Description
Silicone antifoams	Silicone-containing antifoams for release agent formulations.
Polymer antifoams	Organic antifoams based on polymers for release agent formulations.

READY-TO-USE PRODUCTS

Ready-to-use Lubricants

Product	Description
Bio-based non-stick lubricant	A lubricant that prevents moist materials from adhering to surfaces during storage and transport and allows for easy removal of deposits. Bio-based and biodegradable.
Bio-based lubricant spray	Bio-based, biodegradable and PTFE-free lubricant spray.
Bio-based chain saw oil	Bio-based and biodegradable chain saw oil with excellent lubricating and adhesion properties. $\ensuremath{ \frac{9}{2}}$

Ready-to-use Release Agents

Product	Description
Concrete release agent	Bio-based and biodegradable release agents for various shapes and surfaces (e.g. concrete, metal and wood) that prevent sticking. \P
Asphalt release agent	Bio-based and biodegradable asphalt release agents that prevents sticking. $^{ ext{$\psi$}}$



Ready-to-use Cleaners

Product	Description
Bio-based cleaning agent	Effective bio-based and biodegradable cleaning agent, especially for cleaning concrete residues and scaffolding. \P
Bio-based cold degreasing	Bio-based and biodegradable agent for the removal of oil-based dirt. $\stackrel{\Diamond}{\mathbb{Q}}$
Bio-based absorption and oil binding agent	Absorption and oil binding agent based on cellulose from sustainable sources. Absorbs 14 times its own weight. Bio-based and biodegradable.
Industrial cleaners	Aqueous and solvent-based cleaners for removing residues (e.g. oily) and soiling in workshops and production facilities.
Emulsion paint cleaners	Cleaning, disinfection and preservation of containers, paint and pigging lines as well as technical equipment.
Degreasers	Aqueous and solvent-based cleaners for degreasing components.
Paint strippers	Gentle paint stripper for various substrates, aqueous and solvent-based systems.
Aqueous system cleaners	Ready-to-use solutions and concentrates (also VOC-free) for fast and residue-free dissolving of water-based paints.
PU-Cleaners / Special solvents	Aqueous and solvent-based cleaner for removing PU residues, e.g. from moulds also dissolves hardened material.
Pre-treatment	Efficient and sustainable pre-treatment before painting / coating.

Thinners

Product	Description	
Nitro thinners		
Universal thinners		
Low-VOC thinners	Tailor-made thinners for diverse applications.	
VOC-free thinners		
Washing thinners		



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