join resources, **build solutions**

connect CHEMICALS

PRODUCT CATALOGUE

Lubricant Base Oils and Additives

We Source, We Distribute, We Research & Develop, We Produce... *Globally*

Connect Chemicals is a global producer, custom manufacturer, and traditional distributor of a wide range of specialty chemicals. Established in 1998, with headquarters in Ratingen, Germany, offices on four continents and an international network of partners, Connect Chemicals offers global coverage, serving both local and multinational organizations.

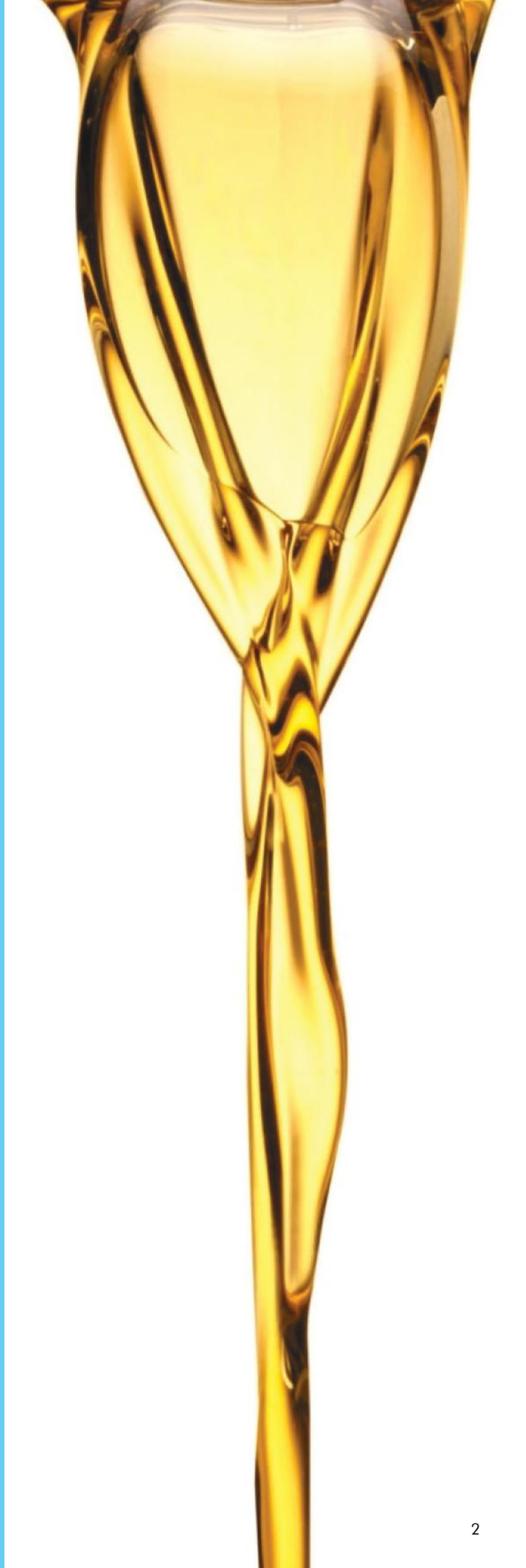
Our lubricant component portfolio has expanded with the addition of more product lines and we are ready to support you in taking your business to the next level for the development of industrial lubricants across a wide range of end-use applications. We do specialize in the distribution of high-quality and high-purity ingredients with a very effective supply chain.

Starting from metal working fluids to wind-mill gear boxes, no matter what your specific use or application may be, our product catalogue has something to meet your needs. Always at the forefront of the industry's and customer's requirements, we have evolved into a hybrid partner given our strengths in distribution, production and customs manufacturing. Supported by our own R&D laboratory, we will be able to support your future challenges by developing what you are looking for to serve your needs.

Explore a world of possibilities with our Chemistry for High Performance Lubricants.

*join resources, **build solutions***

Contents




Connect to high quality and robust supply chain

Polyalkylene Glycols - PAGs

P series - PO homo polymers; water insoluble

	Specifications & Properties							
Product name	**Molecular weight**	**Specific gravity (20/20 °C)**	**Water content**	**Viscosity index**	**Kinematic viscosity 40°C**	**Kinematic viscosity 100°C**	**Pour point**	**Flash point**
			%		cSt	cSt	°C	°C
Contex P35	790	0.98	0.25	169	33	6.7	-60	208
Contex P46	1100	0.99	0.25	175	46	8.5	-58	209
Contex P58	1300	0.99	0.25	184	55	11	-57	210
Contex P68		0.99	0.25	181	68	12	-50	211
Contex P75		0.99	0.25	190	76	14	-52	211
Contex P100	1600	0.99	0.25	195	100	17	-50	213
Contex P125		1	0.25	219	125	21	-32	225
Contex P150	2000	0.99	0.25	208	150	26	-46	217
Contex P225	2160	1	0.25	214	220'	37	-37	220
Contex P335	2370	1	0.25	219	330	52	-32	225
Contex P460			0.25		460			
Contex PT420	5000	1	0.25		420		-25	225
Contex PT680	7000	1	0.25		680		-32	230

Polyalkylene Glycols - PAGs

P series - PO homo polymers; water insoluble

	Applications							
Product name	**Compressor lubricant**	**Refrigeration & AC system lubricant**	**Textile lubricant**	**Industrial gear oil**	**Quenching**	**Hydroulic fluids**	**Metal working fluids**	**Features & benefits**
Contex P35	x	x				x		
Contex P46	x	x				x		
Contex P58	x	x		x		x		
Contex P68	x	x		x		x		
Contex P75	x	x		x		x		High performance water-insoluble base oils are suitable to formulate lubricants for several high-end applications. They represent the base of choice for industrial gear and bearing lubricants.
Contex P100	x	x		x		x	x	
Contex P125	x	x		x		x	x	
Contex P150	x	x		x		x	x	
Contex P225				x			x	
Contex P335				x			x	
Contex P460				x				
Contex PT420				x				High performance water-insoluble base oils are suitable for applications where enhanced thermal, oxidative, and shear stability are required.
Contex PT680				x				

Polyalkylene Glycols - PAGs

A series - 50% EO-PO random copolymers; water soluble

	Specifications & Properties							
Product name	**Molecular weight**	**Specific gravity (20/20 °C)**	**Water content**	**Viscosity index**	**Kinematic viscosity 40°C**	**Kinematic viscosity 100°C**	**Pour point**	**Flash point**
			%		cSt	cSt	°C	°C
Contex A10			0.25					
Contex A20	500	1.02	0.25	165	19	4.6	-58	185
Contex A30			0.25					
Contex A50	1100	1.03	0.25	212	52	11	-58	220
Contex A100	1400	1.05	0.25	217	100	19	-49	230
Contex A150	2000	1.05	0.25	225	145	28	-48	240
Contex A225	2600	1.06	0.25	239	217	41	-42	240
Contex A330			0.25					
Contex A330NW			0.25					
Contex A1000	3800	1.06	0.25	281	1000	163	-36	230
Context A1500	4500	1.08	0.25	307	1500	250		230

Polyalkylene Glycols - PAGs

A series - 50% EO-PO random copolymers; water soluble

	Applications							
Product name	**Compressor lubricant**	**Refrigeration & AC system lubricant**	**Textile lubricant**	**Industrial gear oil**	**Quenching**	**Hydroulic fluids**	**Metal working fluids**	**Features & benefits**
Contex A10			x			x		
Contex A20			x			x		
Contex A30			x			x		
Contex A50	x		x	x		x	x	
Contex A100			x	x		x	x	
Contex A150	x		x	x	x	x	x	
Contex A225	x		x	x	x		x	
Contex A330				x	x		x	
Contex A330NW				x	x		x	
Contex A1000				x	x		x	
Context A1500				x	x		x	

High performance water-soluble base oils are suitable for several types of applications. When formulated as a component of an aqueous solution, one does obtain an excellent lubricant and heat transfer agent for use in cutting fluids. They can be used alone or in combination with other water-soluble products such as amine soaps, amides, or phosphate esters.

Polyalkylene Glycols - PAGs

W series - 33-66% EO-PO random copolymers; water soluble

	Specifications & Properties							
Product name	**Molecular weight**	**Specific gravity (20/20 °C)**	**Water content**	**Viscosity index**	**Kinematic viscosity 40°C**	**Kinematic viscosity 100°C**	**Pour point**	**Flash point**
			%		cSt	cSt	°C	°C
Contex 33W460	4200	1.08	0.25	210	460		-30	245
Contex 60W220	2350	1.08	0.25	227	220	38	-38	245
Contex 60W320								
Contex 60W460	3800	1.09	0.25	251	460		-15	245
Contex 60W680	4800	1.09	0.25	266	630	107		240
Contex 60W1000			0.25		1000		-38	250
Contex 66W220	2700				220		-35	245
Contex 66W460	3800				460		-38	250
Contex 66W1100	5600				1100		-38	245

Polyalkylene Glycols - PAGs

W series - 33-66% EO-PO random copolymers; water soluble

	Applications							
Product name	**Compressor lubricant**	**Refrigeration & AC system lubricant**	**Textile lubricant**	**Industrial gear oil**	**Quenching**	**Hydroulic fluids**	**Metal working fluids**	**Features & benefits**
Contex 33W460			x	x				
Contex 60W220			x	x			x	
Contex 60W320			x	x			x	This product group provides the same characteristics as the A series, but with improved labelling and different values of pour and flash point to better fit with application requirements, especially for high-temperature and high-pressure ones. The high-viscosity grades have great application performance in aluminium processing.
Contex 60W460			x	x			x	
Contex 60W680			x	x			x	
Contex 60W1000			x	x			x	
Contex 66W220			x	x			x	
Contex 66W460			x	x			x	
Contex 66W1100			x	x			x	

Polyalkylene Glycols - PAGs

W series - 75% EO-PO random copolymers; water soluble

	Specifications & Properties							
Product name	**Molecular weight**	**Specific gravity (20/20 °C)**	**Water content**	**Viscosity index**	**Kinematic viscosity 40°C**	**Kinematic viscosity 100°C**	**Pour point**	**Flash point**
			%		cSt	cSt	°C	°C
Contex W130	1400	1.05	0.25	198	130	22	6	230
Contex W270	2500	1.09	0.25	207	270	41	-7	250
Contex W525	3400	1.09	0.25	227	460	76	-1	250
Contex W2000	7500	1.09	0.25	300	2000	312	-5	245
Contex W18000	15000	1.09	0.25	414	18000	2540	6	245
Contex W19000	15000	1.09	0.25	414	19000	2540	6	245
Contex W45000	27000	1.09	0.25	430	45000	7900	6	240
Contex W55000	30000	1.09	0.25	430	55000	7900	6	240
Contex W70000	39000	1.09	0.25	500	72000	10000	8	235
Contex W100K	52000	1.09	0.25	500	100000	14000	8	235

Polyalkylene Glycols - PAGs

W series - 75% EO-PO random copolymers; water soluble

	Applications							
Product name	**Compressor lubricant**	**Refrigeration & AC system lubricant**	**Textile lubricant**	**Industrial gear oil**	**Quenching**	**Hydroulic fluids**	**Metal working fluids**	**Features & benefits**
Contex W130	x							At ambient temperature, this group of polymers is fully soluble in water. At temperatures above 75°C the polymers become insoluble and separate from the solution. These characteristics makes them ideal raw materials to formulate quenchants for cast, dip-brazed and forged aluminum alloys. These properties can also be used to provide the most effective combined coolant and lubricant. When used for hydraulic fluid formulations, they are stable in use, and high rate of shear has no effect on the viscosity rating. The fluids are resistant to sludge and varnish formation as well as to viscosity increase caused by soluble oxidation products. Viscosity grades from 18000cSt and above find large use as thickeners.
Contex W270	x							
Contex W525			x					
Contex W2000			x					
Contex W18000					x	x	x	
Contex W19000					x	x	x	
Contex W45000					x	x		
Contex W55000					x	x		
Contex W70000					x	x		
Contex W100K					x	x		

Polyalkylene Glycols - PAGs

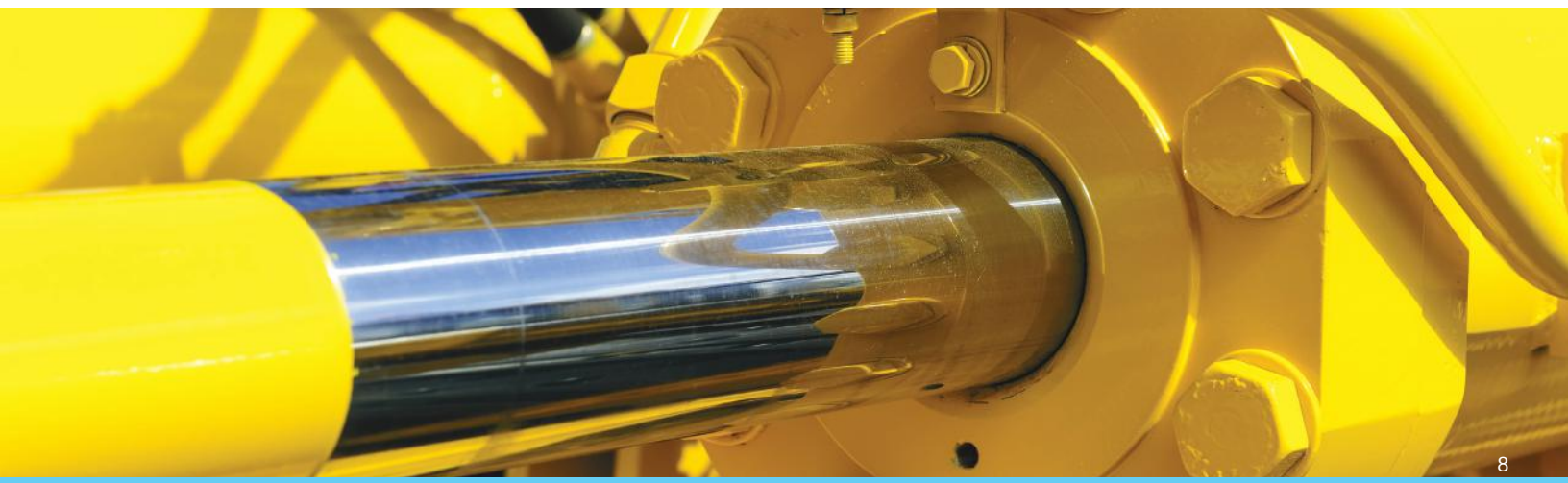
WB series - 75% EO-PO random copolymers; in water solution

	Specifications & Properties							
Product name	**Molecular weight**	**Specific gravity (20/20 °C)**	**Water content**	**Viscosity index**	**Kinematic viscosity 40°C**	**Kinematic viscosity 100°C**	**Pour point**	**Flash point**
			%		cSt	cSt	°C	°C
Contex WB1830		1.09	30		2700		6	
Contex WB5540		1.09	40		2700		6	
Contex WB5544		1.09	44		1800		6	
Contex WB7040		1.09	40		3750		6	
Contex WB165-50NW		1.09	50		2000			

Polyalkylene Glycols - PAGs

WB series - 75% EO-PO random copolymers; in water solution

	Applications							
Product name	**Compressor lubricant**	**Refrigeration & AC system lubricant**	**Textile lubricant**	**Industrial gear oil**	**Quenching**	**Hydroulic fluids**	**Metal working fluids**	**Features & benefits**
Contex WB1830					x	x		Commercially available water solution of the high-viscosity reverse polymers. These have been designed for easy handling and faster formulation of the very high viscosity grades from 18000 cSt and above.
Contex WB5540					x	x		
Contex WB5544					x	x		
Contex WB7040					x	x		
Contex WB165-50NW					x	x		



Polyalphaolefines - PAO

	Specifications & Properties							
Product name	**Molecular weight**	**Specific gravity (20/20 °C)**	**Water content**	**Viscosity index**	**Kinematic viscosity 40°C**	**Kinematic viscosity 100°C**	**Pour point**	**Flash point**
			%		cSt	cSt	°C	°C
PAO10		0,835*		148	61	10	-52	260
PAO40				156	400	40	-35	270
PAO100				170	1258	108	-33	>300

Polyalphaolefines - PAO

	Applications							
Product name	**Compressor lubricant**	**Refrigeration & AC system lubricant**	**Textile lubricant**	**Industrial gear oil**	**Quenching**	**Hydroulic fluids**	**Metal working fluids**	**Features & benefits**
PAO10	x			x		x		Polyalphaolefins can be used as base stock for a wide range of engine oils and industrial lubricants, both mineral and fully synthetic formulations. They present a very high VI, a flash point, and very low volatility. Excellent oxidative and shear stability. They are fully compatible with mineral oils and esters for a broad spectrum of applications.
PAO40	x			x		x		
PAO100	x			x		x		

Polybutenes - PIB

	Specifications & Properties							
Product name	**Molecular weight**	**Specific gravity (20/20 °C)**	**Water content**	**Viscosity index**	**Kinematic viscosity 40°C**	**Kinematic viscosity 100°C**	**Pour point**	**Flash point**
			%		cSt	cSt	°C	°C
PB300	300	0.837	<40 ppm		28		-47	>130
PB450	450	0.85	<40 ppm		190	14	-34	>160
PB680	680	0.879	<40 ppm		1700	80	-16	>170
PB950	950	0.89	<40 ppm		8100	230	-10	>190
PB1300	1300	0.899	<40 ppm		22000	640	-2	>220
PB1400	1420	0.901	<40 ppm		27000	810	1	>230
PB2000	2000	0.906	<40 ppm		72000	2600	6	>230
PB2400	2400	0.912	<40 ppm		206000	4700	10	>240

Polybutenes - PIB

	Applications							
Product name	**Compressor lubricant**	**Refrigeration & AC system lubricant**	**Textile lubricant**	**Industrial gear oil**	**Quenching**	**Hydroulic fluids**	**Metal working fluids**	**Features & benefits**
PB300				x		x	x	
PB450	x			x		x	x	Broadly compatible with mineral oils, PAOs and Ester base stocks can be used as high-viscosity components for the thickening of lubricants. They are non-toxic, thermally stable, have great shear stability, and have a high VI; hence, they are used as performance additives and modifying agents in many high-performance applications.
PB680	x			x		x	x	
PB950	x			x		x	x	
PB1300	x			x		x	x	
PB1400				x		x	x	
PB2000				x		x	x	
PB2400				x		x	x	


Connect to right Chemistry

Antioxidants

Aminic

	Specifications & Properties						
Product name	**CAS number**	**EC. number**	**Molecular weight**	**Physical form**	**Density at 25°C**	**Kinematic viscosity 40°C**	**Flash point**
					g/cm³	cSt	°C
Connect AO5057	68411-46-1	270-128-1	281	liquid	0.98	280-400	>185
Connect AO50648	68411-46-1	270-128-1	281	liquid	0.99	280-400	>185
Connect AO506D9	36878-20-3	253-249-4	422	liquid	0.95	500-900	>100
Connect AO5078P	51772-35-1	257-406-8	332	solid			

Phenolic

Connect AO1035	125643-61-0	406-040-9	390	liquid	0.97	90-150	152
Connect AO1015	41484-35-9	255-392-8	643	solid			

Antioxidants

Aminic

	Applications						
Product name	**Compressor oil**	**Greases**	**Industrial gear oil**	**Quenching**	**Hydroulic fluids**	**Metalworking fluids**	**Features & benefits**
Connect AO5057	x	x	x	x	x	x	The product imparts good protection against degradation by heat and oxygen. It has excellent high-temperature anti-oxidant and deposit inhibiting performance. It has low volatility and is highly efficient at preventing the thermal degradation of polymers. It is used in base oil production and formulation processes.
Connect AO50648	x	x	x		x		General purpose antioxidants for lubricants and greases.
Connect AO506D9	x	x	x		x		General purpose antioxidants for mineral and synthetic oil formulations. Not suitable for water-based applications.
Connect AO5078P							With a melting point of >74 °C, this antioxidant does represent a valuable solution for high temperature applications. It is suitable to formulate esters and mineral oil base lubricants.

Phenolic

Connect AO1035			x			x	General purpose anti-oxidant, non-staining that provides excellent stability to a wide range of lubricants. It is easy to handle and dilute in mineral oil and major base stocks. Low volatility and no deposit formation.
Connect AO1015	x		x	x	x	x	With a melting point of >63°C, this antioxidant does represent a valuable solution for high temperature applications. It is suitable to formulate polyglycols and natural or synthetic esters.

EP modifiers

	Specifications & Properties						
Product name	**CAS number**	**EC. number**	**Molecular weight**	**Physical form**	**Density at 25°C**	**Kinematic viscosity 40°C**	**Flash point**
					g/cm³	cSt	°C
Connect EPDMTA	1072-71-5	214-014-1	150	powder	1.79		

EP modifiers

	Applications						
Product name	**Compressor oil**	**Greases**	**Industrial gear oil**	**Quenching**	**Hydroulic fluids**	**Metalworking fluids**	**Features & benefits**
Connect EPDMTA		x				x	It increases the EP-performance of water miscible metal working fluids, particularly fully synthetic ones used for several operations, at a typical level of 1–5% in the concentrate. It is easily soluble in water by neutralization with inorganic alkalizing agents or alkanolamines. It can be used as a solid additive, increasing the EP-performance of greases at a recommended concentration of 1–3% b.w.

Friction modifiers

Molybdenum Based

	Specifications & Properties							
Product name	**CAS number**	**EC. number**	**Physical form**	**Molybdenum content**	**Sulfur content**	**Phosphorous content**	**Density at 15 °C**	**Kinematic viscosity 100°C**
				%	%		g/ml	cSt
Connect FM85EA			liquid 90% in oil	7,3-8,5			1.08	65
Connect FM88DTP			liquid 80% in oil	7,5-8,8	11,0-14,0	5,5-7,5	1.08	6-10
Connect FM28DTC	68412-26-0	270-180-5	powder	27-29	23-26		1.56	

Friction modifiers

Molybdenum Based

	Applications					
Product name	**Greases**	**Industrial gear oil**	**Quenching**	**Hydroulic fluids**	**Metalworking fluids**	**Features & benefits**
Connect FM85EA						Friction modifier and antioxidant for engine oils, specifically designed for crankcase lubrification. Not suggested for diesel oil.
Connect FM88DTP	x	x		x		Soluble in petroleum oils and greases, aliphatic and aromatic solvents, and in various synthetic lubricant bases. Insoluble in water.
Connect FM28DTC	x					Insoluble in water and petroleum oils. Very slightly soluble in diesters and phosphate esters. A multipurpose additive is used as an antioxidant, friction modifier, and extreme pressure additive in grease formulations for high temperature applications due to its melting point of 258 °C.


Connect to High Performance Lubricants

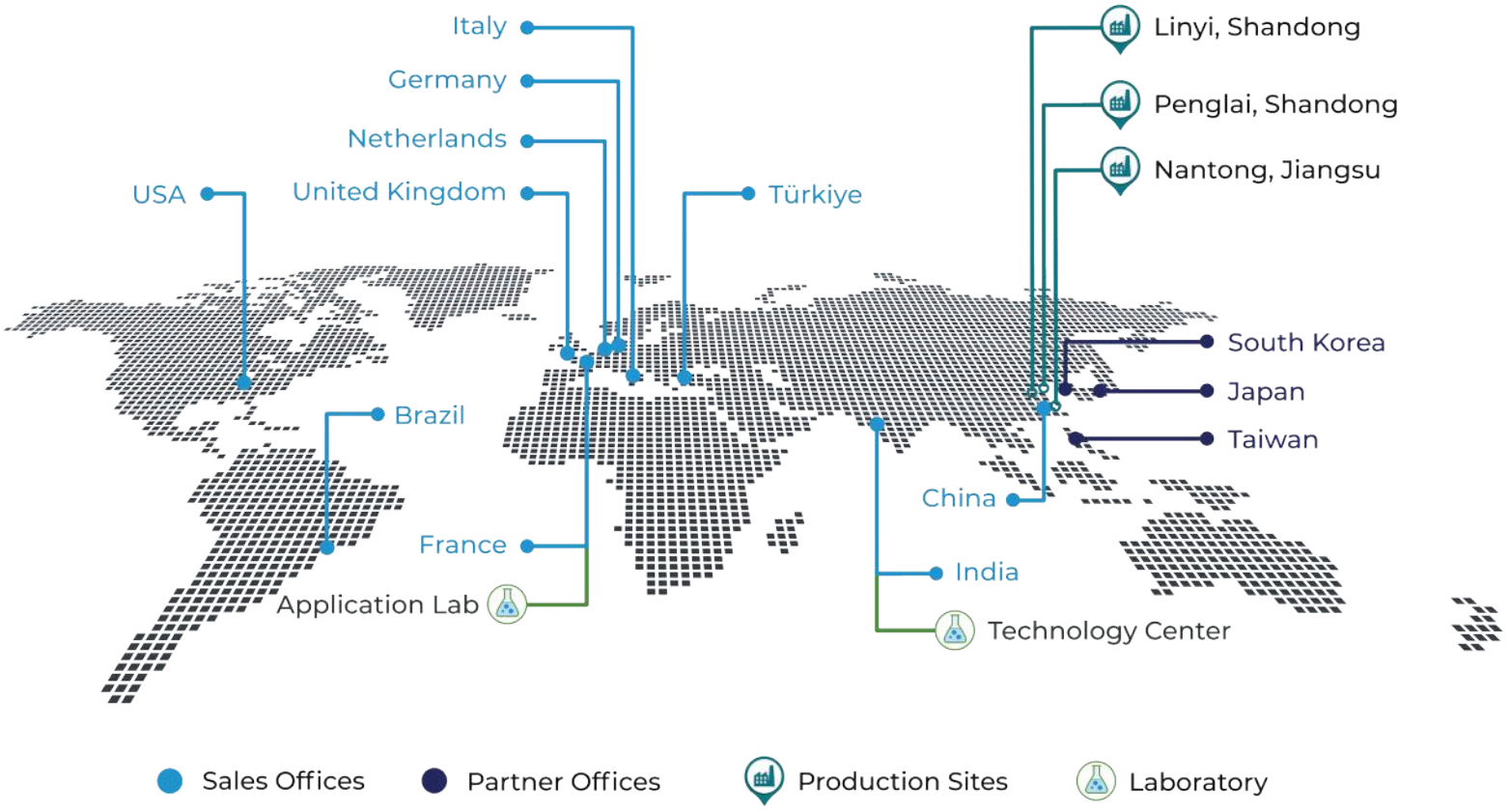
METAL DEACTIVATORS - AZOLES

Connect Chemicals is one of the global market leaders for these chemicals. Azoles and their Na salts are among the most effective corrosion inhibitors for copper and copper alloys. They also show further positive effects in protection of steel, gray iron, cadmium, and nickel. Azoles find broad industrial applications as industrial lubricant additives for drilling and cutting fluids or metal detergent formulations. We can provide you with an effective selection of products in different forms and concentrations. Here below, you can find references to our main products.

Product name	CAS Number	EC. Number	Physical form
1,2,3 Benzotriazole	95-14-7	202-394-1	Granular Fine Granular Flakes & Crystal
1,2,3 Benzotriazole 40% Na salt solution	15217-42-2		Liquid
5-Methylbenzotriazole	136-85-6	205-265-8	Granular
Tolytriazole - TTA	29385-43-1	249-596-6	Granular
Tolytriazole 50% Na salt solution	64665-57-2	265-004-9	Liquid

Since 25 years,
Always at your side.

nnect
to High Performance Lubricants



Our Global Presence

SCAN TO EXPLORE OUR PRODUCTS

connect
CHEMICALS

CONTACT US

lubricants@connectchemicals.com
www.connectchemicals.com