

# **PRODUCT CATALOGUE**

Base Oils and Additives for Lubricants

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



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



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#### **OUR GLOBAL PRESENCE**







#### Polyalkylene Glycols - PAGs

P series - PO homo polymers; water insoluble

			Sp	pecifications	& Properties	s		
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

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



industrial applications.

Connect Chemicals is presenting two new lines of Polyalkylene Glycols specifically designed to meet the most demanding requirements for lubricants in air conditioning and refrigeration compressor units. The industry is increasingly adopting eco-friendly refrigeration gases, which require special lubricants that guarantee high compatibility, excellent performance, and exceptional longevity before requiring changeover, in order to meet the demands of greener, environmentally friendly refrigeration and heat pump units.

# Polyalkylene Glycols - PAGs Special series developed for refrigeration and air conditioning system

P series - PO homo polymers; water insoluble

		Specifications & Properties											
Product name	Acid Value	Water content	Viscosity index	Kinematic Viscosity 40°C	Flash Point	Features and benefits							
	mgKOH/g max	max %		mm²/s	°C								
Contex P46L	0.06	0.05	175	40-51	200	A special line of colorless homopolymers							
Contex P68L	0.06	0.05	175	60-75	200	with a low friction coefficient and excellent elastomer compatibility. The very low water							
Contex P100L	0.06	0.05	200	90-110	210	specification makes them a preferred solution when formulating lubricants for vehicle air conditioning systems or refrigeration units for domestic and							

# Polyalkylene Glycols - PAGs Special series developed for refrigeration and air conditioning system

#### **DEC series - Double End Capped**

	Specifications & Properties										
Product name	Acid Value	Hydroxyl Value	Water content	Viscosity index	Kinematic Viscosity 40°C	Pour Point	Flash Point				
	mgKOH/g max	mgKOH/g max	max ppm		mm²/s	°C	°C				
Contex DEC46	0.05	9	300	190	43-50	-40	200				
Contex DEC68	0.05	9	300	190	62-72	-40	200				
Contex DEC100	0.05	9	300	190	90-106	-40	200				

#### Features and benefits

Our unique polyether-ending technology ensures stable chemical properties and exceptional intersolubility with environmentally friendly refrigeration gases, including R-134A, R1234YF, and CO2. This advanced series of polyether-based solutions possesses intrinsic water repellency, effectively mitigating the issue of capillary freezing in refrigeration systems. With an outstanding viscosity index, it guarantees the formation of stable lubrication films that provide superior lubricity across a wide temperature range—from high-temperature conditions to extreme cold.

These grades are designed to provide consistent, long-lasting performance, ensuring optimal efficiency and reliability in refrigeration systems, even in the most demanding environments. Additionally, the series has been developed with sustainability in mind, minimizing environmental impact while maximizing operational performance. Whether you're focused on reducing carbon footprints or improving energy efficiency, our polyether-ending technology delivers both stability and high performance, ensuring the perfect balance between eco-friendly functionality and technical excellence in demanding applications.





#### 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 Iubricant	Refrigeration & AC system lubricant	Textile lubricant	Industrial gear oil	Quenching	Hydroulic fluids	Metal working fluids					
Contex A10			x			×						
Contex A20			Х			Х						
Contex A30			Х			Х						
Contex A50	Х		Х	Х		Х	х	High pe				
Contex A100			X	Х		x	x	formulat				
Contex A150	Х		х	Х	Х	Х	x	solution, and hea				
Contex A225	х		x	х	Х		x	They car				
Contex A330				Х	х		х	other wo				
Contex A330NW				х	х		х	, ,				
Contex A1000				Х	х		х					
Context A1500				Х	Х		Х					

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.

Features & benefits



#### 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 - 33-6	6% EO-	PO rand	dom co	polyme	rs; wat	er solu	ble							
			Арр	olications										
Product name	Compressor Iubricant	Refrigeration & AC system lubricant	Textile lubricant	Industrial gear oil	Quenching	Hydroulic fluids	Metal working fluids	Features & benefits						
Contex 33W460			x	x										
Contex 60W220			Х	Х			Х							
Contex 60W320			X	X			X	This product group provides the same characteristics as the A series, but with improved labelling and						
Contex 60W460			х	х			X	different values of pour and flash point to better fit						
Contex 60W680			X	X			X	with application requirements, especially for high-temperature and high-pressure ones. The						
Contex 60W1000			X	х			X	high-viscosity grades have great application performance in aluminium processing.						
Contex 66W220			х	х			X							
Contex 66W460			X	X			x							
Contex 66W1100			Х	Х			Х							



### 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

Product name	Compressor Iubricant	Refrigeration & AC system lubricant	Textile lubricant	Industrial gear oil	Quenching	Hydroulic fluids	Metal working fluids	Features & benefits
Contex W130	х							At ambient temperature, this group o
Contex W270	Х							is fully soluble in water. At temperatu
Contex W525			Х					75°C the polymers become insol separate from the solution. These cha
Contex W2000			Х					makes them ideal raw materials to
Contex W18000					X	X	x	quenchants for cast, dip-brazed ar aluminum alloys. These properties co
Contex W19000					Х	X	Х	used to provide the most effective
Contex W45000					Х	X		coolant and lubricant. When used for fluid formulations, they are stable in
Contex W55000					Х	X		high rate of shear has no effect on th
Contex W70000					Х	X		rating. The fluids are resistant to sl varnish formation as well as to viscosit
Contex W100K					X	X		caused by soluble oxidation products grades from 18000 cSt and above find
								as thickeners.

is group of polymers temperatures above ome insoluble and These characteristics aterials to formulate brazed and forged operties can also be effective combined en used for hydraulic e stable in use, and effect on the viscosity stant to sludge and s to viscosity increase n products. Viscosity above find large use



#### 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°	WB series - 75% EO-PO random copolymers; in water solution										
			Ap								
Product name	Compressor Iubricant	Refrigeration & AC system lubricant	Textile lubricant	Industrial gear oil	Quenching	Hydroulic fluids	Metal working fluids	Features & benefits			
Contex WB1830					х	Х					
Contex WB5540					Х	х		Commercially available water solution of the high-viscosity reverse polymers. These have			
Contex WB5544					Х	х		been designed for easy handling and faster			
Contex WB7040					Х	х		formulation of the very high viscosity grades from 18000 cSt and above.			
Contex WB165-50NW					Х	Χ					





# 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

			Арј	plications	3			
Product name	Compressor Iubricant	Refrigeration & AC system lubricant	Textile lubricant	Industrial gear oil	Quenching	Hydroulic fluids	Metal working fluids	Features & benefits
PAO10	х			х		х		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
PAO40	х			Х		х		compatible with mineral oils and esters for a
PAO100	X			Х		x		broad spectrum of applications.





# 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

. 01/100101101												
			Арр	olications	;							
Product name	Compressor Iubricant	Refrigeration & AC system lubricant	Textile lubricant	Industrial gear oil	Quenching	Hydroulic fluids	Metal working fluids	Features & benefits				
PB300				Х		Х	х					
PB450	Х			Х		x	x	Broadly compatible with mineral oils, PAOs and				
PB680	X			X		x	x	Ester base stocks can be used as high-viscosity components for the thickening of lubricants. They				
PB950	Х			Х		x	x	are non-toxic, thermally stable, have great shear				
PB1300	X			X		x	x	stability, and have a high VI; hence, they are use as performance additives and modifying agents many high-performance applications.				
PB1400				X		x	x					
PB2000				x		x	x					
PB2400				X		Х	Х					



#### **LUBRICANT ADDITIVES**



#### 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**

Antioxidants										
Aminic										
			Applic	ations						
Product name	Compressor oil	Greases	Industrial gear oil	Quenching	Hydroulic fluids	Metalworking fluids	Features & benefits			
Connect AO5057	х	x	х	х	х	х	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	Х	Х	Х		Х		General purpose antioxidants for lubricants and greases.			
Connect AO506D9	х	X	х		х		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			х			х	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	х		х	х	х	х	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.			

#### **LUBRICANT ADDITIVES**



EP modifiers							
			Specificati	ons & Proper	ties		
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							
			Applic	ations			
Product name	Compressor oil	Greases	Industrial gear oil	Quenching	Hydroulic fluids	Metalworking fluids	Features & benefits
							It increases the EP-performance of water miscible metal working fluids, particularly fully synthetic ones used for

Connect EPDMTA 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.



#### **LUBRICANT ADDITIVES**



#### Friction modifiers Molybdenum Based **Specifications & Properties Product name** CAS EC. Physical form Molybdenum Sulfur **Phosphorous Density** Kinematic number number content content content viscosity at 100°C 15°C % % g/ml cSt liquid 90% in oil Connect FM85EA 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 27-29 1.56 powder 23-26

Friction mod	Friction modifiers										
Molybdenum Based											
		Α	pplicatio	ns							
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	х	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.					





#### **METAL DEACTIVATORS - AZOLES**



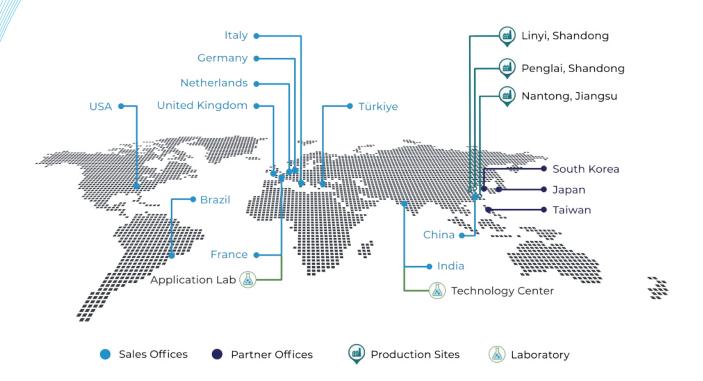
Connect Chemicals is one of the global market leaders for these chemicals. Azoles and their Na salts are among the most effective corrosion inhibitors for copper and copper alloys. They also show further positive effects in protection of steel, gray iron, cadmium, and nickel. Azoles find broad industrial 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	239-269-6	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





#### **Our Global Presence**



#### **CONTACT US**

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