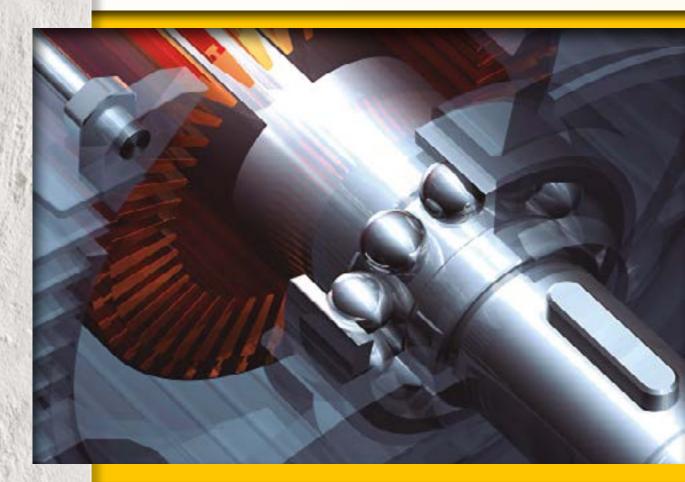
HI - TECH LUBRICANTS



OILS • GREASE • PASTA



OUR HISTORY

elesa® is the brand name of a great company called ELECTROFILM ESPAÑOLA, S.A. born in February 1965 thanks to its founding partner Mr. Teodoro Carvajal Gallego.

Electrofilm Española, S.A. began collaborating with the company **ELECTROFILM INC., USA,** located in West Lafayette (Indiana), importing its technology and lubricant products in all its formats.

Starting as an importing company and solely dedicated to the marketing of lubricants of well-known brands such as Lubri-Bond and Everlube, manufactured in accordance with the American **MIL** standards, it has reached such dimensions that motivate us to **GROW**.

In 1985, the management of **ELECTROFILM INC, USA** offered us the acquisition of their facilities in West Lafayette. In those years the Spanish government did not allow us to import their machinery from the USA. **ELECTROFILM INC., USA** begins negotiations with a large American chemical group, Great Lakes Chemical Corporation (GLCC). Nowadays we are independent.

Given our excellent relationship and professional cooperation, **ELECTROFILM INC., USA** decided to transfer all its technology, know-how and original formulations to ELECTROFILM ESPAÑOLA, S.A. before joining **GLCC** in 1988. and original formulations to **ELECTROFILM ESPAÑOLA**, **S.A.** This gave us the opportunity to grow as a company and to embark on the great adventure, after a long commercial career as importers, to become specialised manufacturers in the lubrication and industrial engineering sector.

This entailed a further change of facilities to the current management. The group of American technical specialists worked with us until the factory and its various production processes were up and running. To date, we manufacture more than 4000 product references.

Our company has specialised in industry since our beginnings, particularly in the maintenance and lubrication sector. Far from being a craft activity, production becomes an important technical process, inspected by measurement and evaluation systems.

The constant research, development and innovation of our technicians, their dedication and continuous work with small-scale pilot plant, has allowed a deep knowledge of the parameters that differentiate the reactions, mixtures, dispersions and emulsions, in order to offer homogeneity in the mixtures and give adequate performance to the manufactured lubricants.

At present, all our products are manufactured and supervised under our implemented quality system, complying with UNE EN-ISO-9001 and 14001 standards. **Elesa** designs and manufactures specific preparations for certain customers.

In parallel, our technical department provides added value in the form of immediate personal attention, either on site or via the customer service hotline. We carry out lubrication studies, advice on reducing unnecessary stocks, analysis of new and used lubricants, applied engineering, training courses, etc.

 $2 \star \star \star$

In parallel, our technical department provides added value in the form of immediate personal attention, either on site or via the customer service hotline. We carry out lubrication studies, advice on reducing unnecessary stocks, analysis of new and used lubricants, applied engineering, training courses, etc.

Our team is highly qualified in engineering, chemistry, mechanics, economics, quality and environment with the ultimate goal of increasing the life cycle of the products and the business relationship with our customers in their multiple sectors and to meet the demands of the very competitive and close global market.

We love a challenge and we provide enhanced performance to our products through close contact with our market-leading additives, which make the difference between market leaders. All of this is in line with safety, hygiene and environmental requirements.



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PRODUCT RANGE

We currently manufacture more than 4000 references of Speciality and Precision Lubricants, as well as Process Products and other Chemical Products.

Our wide range of products includes:

- Oils
- Greases
- Assembly pastes
- Cutting fluids
- Cleaners, release agents and protective agents
- Additives

The working sectors are so diverse that we wanted to categorise our catalogues and help our customers in their choice of products. In this catalogue, you will be able to view industrial products covering: cement, nuclear and power plants, chemicals, textiles, plastics, glass, etc.

We also have a multidisciplinary R&D&I Department, which allows us to study each particular situation of our clients, and provides tailor-made solutions to the various problems and challenges that may arise.

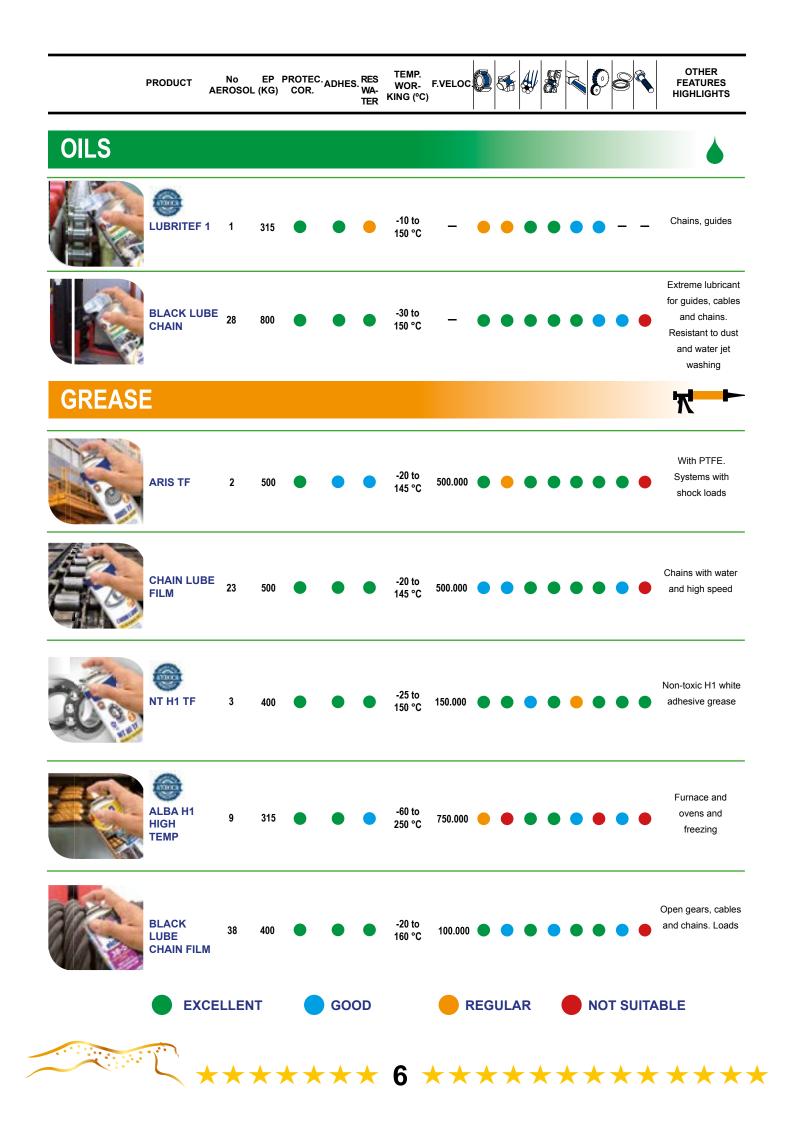
See also our other catalogues:



AEROSOLS

Elesa has a wide range of products in aerosol format. Cleaner work and easier application.

	PRODUCT	No AEROSOL	CLEANING CAPACITY	SPEED EVAPORATION	INFLAMMATION RESISTANCE (BULK)	OTHER FEATURES HIGHLIGHTS
	PRESTIGE K1	5	•	•	•	Contact cleaner, fast evaporating, cleans metal surfaces, does not attack rubber and plastics.
	PRESTIGE TECH K1	6	•	•	•	Cleaner for adhesives, most common glues, residues in moulds and extrusion nozzles
	CLEAN K1 K3 IPA	19	•	٠	•	Dielectric electronic circuit cleaner, alcoholic Isopropyl alcohol >70%
	FOAM CLEANER	11	N.A.	N.A.	N.A.	Foam cleaner for glass, plastics, enamelled surfaces, painted surfaces, stainless steel, chro- me, keyboards, plasma screens, computer equipment, fabrics, carpets and upholstery
MOULD R	ELEASE					31
	PRODUCT	No AEROSOL		TEMP. WORKING (°C)		OTHER FEATURES HIGHLIGHTS
	LUBE H1 SILICONA	5		-55 to 230 ℃	Resis	emoulding of plastics and elastomers. Dielectric. stant to oxidation and aggres- environments and to washing water and organic solvents. Rubber regeneration
	DESMOL FSA SIN SILICONA	17		-5 to -35 °C	agent. Injection Does Anti-spatter in Polishing a injection, comp no	or plastics and elastomers. Polishir , compression or vacuum processe not affect paints and inks. welding.agent for plastics and elas- tomers. agent. Injection, compression or ression or vacuum processes. Doe t affect paints and inks. Anti-spatter in welding
	EXCELLE	NT	GOOD			NOT SUITABLE



	PRODUCT	No AEROSOL		PROTEC COR.	ADHES	. RES WA- TER	TEMP. WOR- KING (°C)	FVELOC	. Ø	5		æ	8	96		OTHER FEATURES HIGHLIGHTS
PASTA	S															
	PASTA	o ¹⁴	800	٠	٠	•	-25 to 700 °C	_	•	•	•	•	•		•	Aluminium anti-scratch
	PASTA COBRE	66	800	•	•	•	-40 to 1100 °C	-	•	•	•	•	•		•	Anti-cracking and electroconductive copper
	PASTA H CERAMIO TF	- 67	400	•	•	•	-50 to 2000 °C	250.000	•	•	•	•	•		•	Ceramic paste
PROTE	ECT															**
	PROTEC H1 LUBE SE		А			re di	•	power.	Esp	ecia	lly fo	or cle	ean ir	dustr	ies. E	fluid. Wetting Eliminates
	NT H1 TF	² 12	f	ormula	ted to	form	a high p	erforma	ance	coa	ting,	des	igneo	to a	chiev	and additives, e a high rust glossy finish
	ALBA H1 HIGH TEI	MP ¹⁵		of me	etals, n	nachi	inery, ele eners. Di	ctrical	equij s wa	ome ter fr	nt, e om a	tc. S all e	tops lectri	sulph cal co	ation	the protection of battery s. Dielectric.
C UNE	BLACK LUBE CHAIN FI	10 ILM				nuts	sy looser , pins, bo rosive ar	olts, hin	ges.	Ex	celle	ent lo	oser	ning fl	uid,	
		EXC	ELL	.ENT		G	OOD			RE	GUI	LAR			IOT :	SUITABLE
							-									***

GENERAL LUBRICATING OIL

The aim is to reduce energy consumption, reduce vibrations and the coefficient of friction, extending the service life of the elements by working with less effort.

elesa AEG

High quality paraffinic mineral oil for general lubrication and greasing of all types of elements and machinery subjected to medium loads and moderate speeds.

GENERAL LUBRICATION LUBRICANTS

PRODUCT	EP. (Kg)	VISCOSITY INDEX ISO 2909	ISO VG 40°C, cSt ISO 3448	T. WORKING,°C	APPLICATIONS	PROPERTIES
	126	95	15, 22, 32	-8 / > 105	Hydraulic systems which do not	
AEG	126	95	46, 68, 100, 150	-8 / > 105	 special requirements Enclosed spur, helical, bevel and worm gears, helical, bevel and worm gears carrying light loads 	 Good anti-corrosion Oxidation stability
AEG	126	95	220, 320	-7 / > 110	 Guides and chains with inverted teeth and roller chains Plain and rolling bearings operating at speeds and operating at medium 	High demulsibility
	126	95	460, 680	-7 / > 110	speeds and loads	





HYDRAULIC OILS

The main purpose of any hydraulic fluid is to transmit mechanical energy through a hydraulic power system.



elesa BULL

Range formulated with our mineral, synthetic, vegetable, biodegradable synthetic and glycol bases depending on the type of machine or installation. Our hydraulic oils prevent wear on seals and sealing rings. The pressure transmitted to our oil is stable in its path and dissipates the temperature produced in its movements.

Our goal is to reduce friction, wear, corrosion and oxidation in different situations, which is why we have a wide range that allows you to choose the best product in each case. Our oils provide the necessary sealing in pressurised parts such as valves.

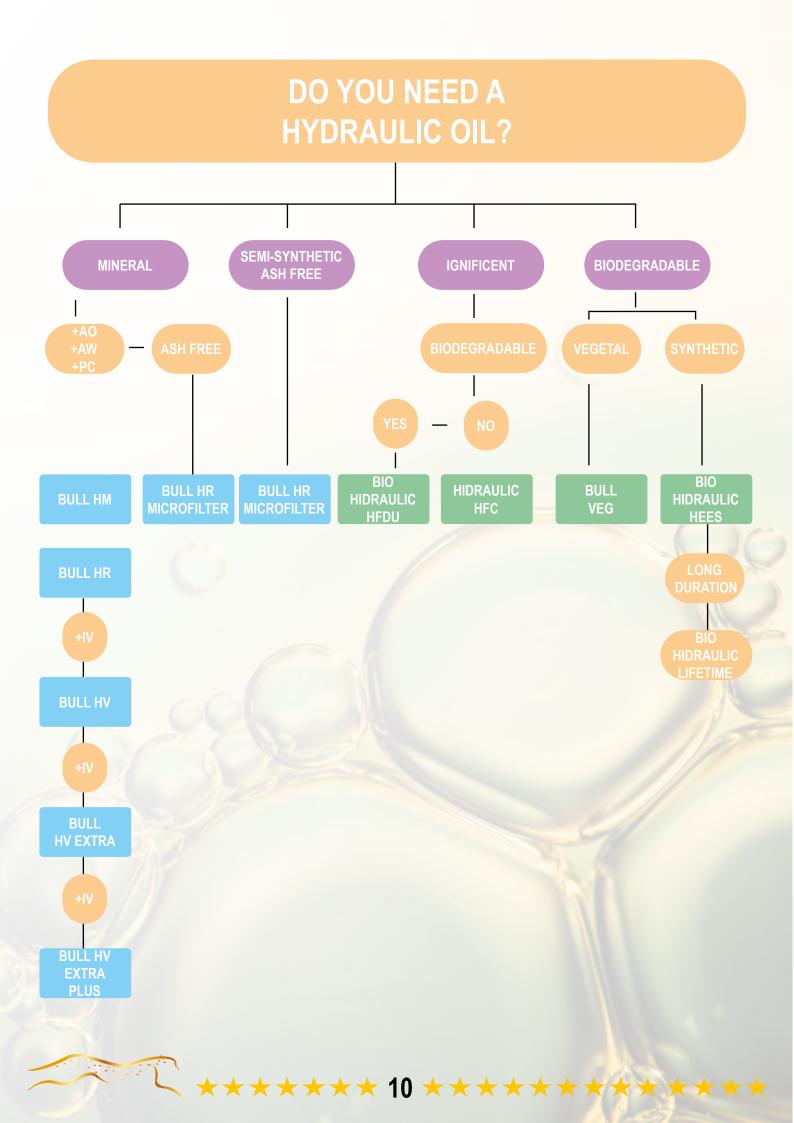


synthetic oil

9

mineral oil

biodegradable oil



HYDRAULIC SYSTEM OILS

	OECD-301-B						
HIDRAULIC HEES	ISO 15380 clase HEES ISO 6743/4 clase HEES DIN ISO 15380 HVLP DIN 51524/3 excepto TOST. VDMA 24568 clase HEES	180	15, 22, 32, 46, 68	 Hydraulic systems CNC, presses, shears Machinery where there is a risk of contamination 	 Very good EP characteristics Very high viscosity index and its viscosity will not be reduced by shear High chemical stability, with high resistance to ageing Very high flash and ignition point Miscible with mineral oils 		
BIO HIDRAULIC HEES LIFETIME	OECD-301-B ISO 15380 clase HEES ISO 6743/4 clase HEES DIN ISO 15380 HVLP DIN 51524/3 excepto TOST. VDMA 24568 clase HEES	143	46	 Loading bays Lifts Doors Gates Robots, etc. 	It includes the properties of BIO HIDRAULIC HEES and in addition: • Excellent behaviour at low temperatures • High hydrolytic stability • Wide range of use temperatures • Low viscosity variation with temperature		
BIO HIDRAULIC HFDU	OECD-301-B VDMA 24 317 HFD-U UNE EN ISO 12922:2013 ISO 6743-4 HFD-U DIN 51 502 HFD-U DIN 51524 parte 2(HLP) DIN 51524 parte 3(HVLP)	185	32, 46, 68	 Hydraulic systems systems with a fire risk 	 Anti-fire fluid that eliminates the risk of fire in installations working at high temperatures Very high viscosity index Compatible with most common elastomers, as well as with paints 		
BULL VEG	OECD-301-B VDMA 24568. ISO 6743-4 HM ISO 11158 HM ISO 6743 HETG	200	32, 46, 68	 Hydraulic systems Forestry, agricultural, quarrying quarries, marshes and marine 	 100% vegetable based, biodegradable. Environmentally friendly Contains no viscosity-increasing polymers Very high viscosity index Longer lasting and prevents the resin formation Corrosion protection of steel and copper Miscible with mineral oil 		
	ISO 6743-4 HM ISO 11158 HM DIN 51524 partes 2 (HLP)	110	32, 46, 68, 100, 150	 Hydraulic systems Loading docks Lifts Doors Gates Robots, etc. 	 Paraffinic based mineral lubricating oil designed for hydraulic systems hydraulic systems. Contains anti-rust, anti-wear and anti-foam additives Microfiltration with 20 micron filter and magnetic pre-filtration ensures the retention of smaller metallic particles 		
BULL HM SS	y DIN 51.517/2 CL AFNOR NFE 48603-HM CINCINNATY LAMB-MILACRON P-68, 69 , 70 VICKERS M-2952-S / M-2950-S /I-286-S3	AFNOR NFE 48603-HM CINCINNATY LAMB-MILACRON P-68, 69 , 70 VICKERS M-2952-S / M-2950-S /I-286-S3	AFNOR NFE 48603-HM CINCINNATY LAMB-MILACRON P-68, 69 , 70 VICKERS M-2952-S /	110	32, 46, 68, 100, 150	 Hydraulic systems where silicone-free oil is required 	 It includes the properties of BULL HM but completely free of silicones Recommended in hydraulic systems hydraulic systems of any industrial or public works
	KOMTASU HPV 35-35 Pump test	110	32, 46, 68, 100, 150	 Hydraulic systems Loading docks Lifts Doors Gates Robots, etc. 	 It includes the properties of BULL HM, but with a red dye that enhances improves product visualisation for easier leak detection 		

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HYDRAULIC SYSTEM OILS

PRODUCT	QUALITY V LEVEL	INDEX ISCOSITY IS 2909	ISO VG O 40°C, cSt ISO 3448	APPLICATIONS	PROPERTIES
BULL HR	ISO 11158 HM y HR AFNOR NFE 48603-HM y HR CINCINNATY LAMB-MILACRON P-68, 69, 70 DENISON HF-2, HF-1 y HF-0 VICKERS M-2952-S / M-2950-S/ I-286-S3 GRUPO DANOBAT para ISO 32 a 150	110	2, 5, 10, 15, 22, 32, 46, 68,100, 150	Hydraulic systems and mechanisms that need high precision	 Developed for use in hydraulic systems and circuits with hydrostatic systems requiring viscosity improver to withstand pressure at varying temperatures without changing the way they work High oxidation resistance, wear resistance and corrosion protection. High viscosity Low freezing point facilitates work in winter and low temperature systems Microfiltration to safety level, with filter fitted with a magnetic pre-filtration which ensures the retention of smaller of lower micron metallic particles
BULL HR MICROFILTER	ISO 11158 HM y HR AFNOR NFE 48603 (HM) AFNOR NFE 48603-HM y HR	110	32, 46, 68, 100, 150	 Hydraulic systems and mechanisms that need high precision 	 Same properties as BULL HR but zinc free (ash free) Excellent viscosity-temperature characteristics Good anti-wear protection. Important when systems working at high pressures High corrosion protection and good compatibility with seals and paints. Protects the system condition and prevents leaks
BULL HV		140	2, 46, 68, 100, 150		 Ultra-refined paraffinic based mineral oil with high viscosity index Additive for increased wear resistance Recommended for use in hydraulic systems in all industrial and public works applications Its viscosity will not decrease due to shear
BULL HV EXTRA	ISO 6743-4 HV ISO 11158 HV DIN 51524 Partes 3 (HVLP) AFNOR NFE 48603-HV CINCINNATI MILACRON P-68, 69, 70 DENISON HF-0, HF-1, HF-2 VICKERS M-2952-S	150	32, 46, 68, 150	• Hydraulic systems and mechanisms in severe working conditions such as pressure and continuous motion	 Same as BULL HV, but with higher viscosity Very good anti-wear characteristics and withstands the Extreme Pressure levels required in gears and bearings at low load Very low freezing point which, together with the low viscosity variation with temperature, allows working inside cold chambers and facilitates winter Applicable in light and medium load gear systems, lubricated by and medium-loaded gear systems, greased by circulation or splash lubrication. Can also be used for rolling bearings and bearings in industrial machines under light and medium load
BULL HV EXTRA PLUS	/M-2950-S / I-286-S	> 250	32, 46		 Includes the properties of BULL HV EXTRA with an even higher viscosity index Hydraulic systems of mobile machines that e periment temperature changes, such as machines that are used in refrigerated chambers or temperature-controlled locations Demulsibility and filterability Hydrolytic and thermal stability



synthetic oil

mineral oil

biodegradable oil

HYDRAULIC SYSTEM OILS

PRODUCT	QUALITY LEVEL	INDEX VISCOSITY ISO 2909	ISO VG 40⁰C, cSt ISO 3448	APPLICATIONS	PROPERTIES
BULL HV MICROFILTER LONG LIFE	ISO 6743-4 HV DIN 51524 partes 2 y 3 (HLP) y (HVLP) AFNOR NFE 48603- HV CINCINNATY LAMB-MILACRON P-68, 69, 70 DENISON HF-2, HF-1 y HF-0	> 164	46	• High pressure hydraulic systems operating over a wide range of operating temperatures	 Semi-synthetic hydraulic oil, formulated from selected base oils and selected base oils and antioxidant additives, anti-wear, and anti-foaming additives that give it an optimum performance in industrial and mobile hydraulic systems High viscosity index. Excellent shear stability Ash free. Zinc free Hydraulic systems of mobile machines that temperature changes, e.g. machines in refrigerated machines used in refrigerated chambers or temperature-controlled locations
HIDRAULIC HFC	ISO 6743-4 HFC UNE-EN ISO 12922:2020 AFNOR NF E 48.603 HFC		46	• Systems operating in fire or high temperature zones: Aluminium and plastic extrusion, foundrzmachinery, hydraulic hammers and presses for forging, hydraulic systems in mining	 Water-glycol based hydraulic oil specifically developed for industrial hydraulics with a specifically developed for industrial hydraulic systems with fire risk Compatibility with materials used in hydraulic systems Excellent filterability Not for use in systems with magnesium alloy mechanisms due to the violent reaction
BULL HV MICROFILTER LONG LIFE	ISO 6743/4 HV DIN 51524 Partes 2 y 3 (HLP y HVLP) AFNOR NFE 48603- HV CINCINNATI P68, P69, P70 DENISON HF-0, HF- 1, HF-2	<164	46	• Systems High pressure hydraulic systems operating in a wide range of working temperatures, such as machines in cold rooms or temperature- controlled rooms	 Semi-synthetic oil with high viscosity index, with antioxidant, anti-wear and anti-foaming additives Excellent shear stability. Zinc free Long-life properties. High service life due to its semi-synthetic character High chemical stability

ACCESSORIES





elesa GEAR IND

Formulated with mineral oils, synthetic and biodegradable bases depending on the application and needs, and premium additives that Premium additives that aim to reach the friction points in order to first lubricate and then protect.

When formulating our gear oils, we at elesa thoroughly study the important parameters such as:

- Speed
- Impact load
- Adhesion
- Operating Temperature
- Component Material
- Working Environment
- Solid Additives

All our oils are of high quality and protect against corrosion, reduce the acidity generated by the use of oils and prevent foaming on the surface.

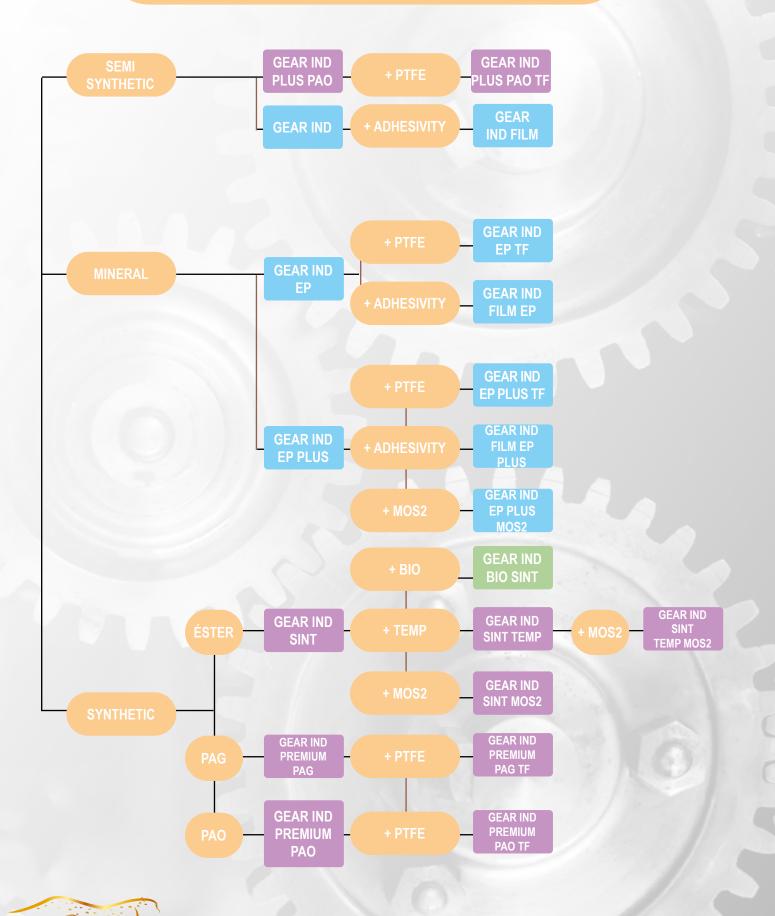
Our products meet quality standards:

- ISO 12925-1:2018
- DIN 51 517 Parte 3 CLP
- U.S. Steel 224
- AGMA 9005
- Cincinnati Milacron P-34/P-35/P-59/P-63/P-74/P-76/P-77/ P-78





DO YOU NEED A GEAR OIL?



PRODUCT	QUALITY LEVEL	ISO VG 40°C, cSt ISO 3448	APPLICATIONS	PROPERTIES					
		ISO/TR 3498 L-CKC	100	Gears: • Sprocket • Helical • Double helical • Hypoid • Helical bevel • Straight bevel	 Biodegradable >70% Stability to hydrolysis Durability up to 10 times longer than mineral oils Minimal evaporation which means minimal 				
GEAR IND BIO SINT		150	Gearboxes subjected to overloads where the tenacity of the lubricating film at high temperatures is vital. Bearings and Bearings	 consumption Optimum anti-wear protection Reduced maintenance costs and higher productivity Miscible with mineral oils High adhesion to metal surfaces and good EP properties Lubricant film resistance at high temperature 					
GEAR IND	SO-6743-6 e ISO 12925-1 CKB AGMA 9005/E02	46, 68, 100, 150		 With corrosion inhibitors, anti-wear, anti-rust and anti-foaming agents Thermal resistance Contains demulsibility properties, preventing 					
	DIN 51.517 part. 2 (CL-46 a 680)	220, 320, 460	Systems of Gear Systems without special	emulsion formation with water • Fatigue resistance					
					100 0740 0 100		460	 requirements Inverted tooth chains and roller chains Plain bearings and bearings operating at 	 Variant with the same properties as GEAR IND but with additional additives which give the oil to have high greasiness, adhesiveness and stringiness. No
GEAR IND FILM (CL-46 a 680)	12925-1 CKB DIN 51.517 part. 2 (CL-46 a 680)	900	working at medium speeds and loads	 sagging Especially for components where high adhesion is required and no high EP is required Ensures good surface lubrication at all times, even at the top of the gears and keeps them lubricated at all times before re-engagement Highly resistant to water washout, hot water, salt water, acids and alkalis 					
	AGMA 9005/E02	4000							
	ISO 6743-6 ISO 12925-1 CKC	46, 68, 100, 150		 Non-temperature high load gearbox Contains anti-wear and extreme pressure additives Meets DANOBAT GROUP quality levels Ensures good surface lubrication at all times, even 					
GEAR IND	· · ·	DANOBAT ISO 100-460 DIN 51517 part.3 (CLP 46-680)	DANOBAT ISO 100-460 DIN 51517 part.3 (CLP 46-680)	DANOBAT ISO 100-460 DIN 51517 part.3 (CLP 46-680)	220, 320, 460	Highly loaded gears	 Ensures good surface lubrication at all times, even in the high at all times, even in the high part of the gears, and keeps them gears, and keeps then lubricated 		
	AGMA 250.04 CINCINNATI MILACRON P47 y P50 US STELL 224	680, 1000	 gears: Toothed wheel Helical Double helical Hypoid 	 Good de-emulsion capacity, avoiding the formation of emulsions with water Excellent resistance to oxidation and corrosion Low foaming and fast deaeration High compatibility with seals and elastomers 					
	ISO/TR 3498 CKC	46, 68, 100, 150	 Helical bevel Straight bevel Planetary Worm wheel worm Bearings and 	 Variant with the same properties as GEAR IND EP and additional additives which provide high 					
GEAR IND FILM EP	DIN 51502 CGLP AGMA 250,04 US STEEL 224 CINCINNATI MILACRON	220, 320, 460	Bearings	adhesiveness and filamentability. No does not sag • Gearboxes where it is necessary that the oil does not leave the not to leave the tooth at any time • High shear strength					
	P-47 y P-50			 Highly resistant to water washout, hot water,salt water, acids and alkalis 					
	mineral oil		synthetic oil	biodegradable oil					

PRODUCT	QUALITY LEVEL	ISO VG 40°C, cSt ISO 3448	APPLICATIONS	PROPERTIES		
	ISO 6743-6 ISO 12925-1 CKC	46, 68, 100, 150	High load gears: • Toothed wheel • Helical	 Variant with the same properties as GEAR IND EP and additional addition of micronised PTFE, which acts as a solid additive and reduces the coefficient of friction compared to the previous ones (lower energy cost) 		
GEAR IND EP TF GEAR IND EP TF GEAR IND EP TF GEAR IND GEAR IND DIN 51517 part.3 (CLP 46-680) AGMA 250.04	DANOBAT ISO 100-460 DIN 51517 part.3 (CLP 46-680)	220, 320, 460	 Double helical Hypoid Helical bevel Straight bevel Planetary 	 Low friction coefficient Excellent resistance to oxidation and corrosion Formation of a thin adherent film that avoids the dreaded dry starts Reduces stick-slip problems Excellent dirt resistance. Water repellent 		
	MILACRON P47 y P50 US STELL 224	680	 Worm wheel worm Bearings and Bearings 	 Recommended for lubrication of highly loaded enclosed gear systems or very high power units in heavy duty industrial applications Gearboxes where there are many stops and starts 		
		46, 68, 100, 150	Loaded gears: -Sprocket -Helical	 Semi-synthetic lubricant with higher viscosity index and more resistant to high temperatures than mineral oils Minimal sludge and oxidation products Zinc free Minimal evaporation and therefore minimal consumption and replenishment 		
ISO 3448 y DIN 5151	ISO L-CKC (100-460) ISO 3448 y DIN 51519 AGMA 9005.E02	220, 320	 -Double helical -Hypoid -Helical bevel -Straight bevel -Planetary -Worm and wheel set Inverted tooth chains and roller chains Plain bearings and bearings operating at medium speeds and loads speeds and loads at higher temperature 	-Double helical • Optimum wear protection -Hypoid • Excellent compatibility with elastomers and seals -Helical bevel • Miscibility and compatibility with mineral oils make easy to change to semi-synthetic oil	 Excellent compatibility with elastomers and seals Miscibility and compatibility with mineral oils makes it easy to change to semi-synthetic oil 	
	US STEEL 224 DAVID BROWN S1.53.101 CINCINNATI	480		 Its low detergency avoids the problems of lifting old sludge that may have accumulated in machinery that has worked for a long time with mineral oil High temperature tips 		
	MILACRON P47 y P50 DIN 51517 part.3 (CLP 46-680)	46, 68, 100, 150		 Same properties as GEAR IND PLUS PAO and additional addition of micronised PTFE, which acts as a 		
GEAR IND PLUS PAO TF		220, 320, 460		solid additive and reduces the coefficient of friction compared to the previous ones (lower energy cost)Formation of a thin adherent film avoids the dreaded dry starts		
		480		 Reduces stick-slip problems Gearboxes and differentials where more temperature is generated and there are many starts and stops 		
GEAR IND SINT	DIN 51517 part,3 (CLP-E) AGMA 9005.E02(S) US STEEL 224 DAVID BROWN S1.53.101	220, 460	 Gearboxes industrial Hypoid gears Steel and cement plants 	 100% synthetic ester type oil with excellent E.P. characteristics High adhesion to metal surfaces Freezing point of -32°C Durability of the order of 10 times higher than mineral oils Stability to hydrolysis in very corrosive environments Toughness of the lubricant film at high temperatures Minimal evaporation. Optimum anti-wear protection Extraordinary chemical and thermal stability 		

mineral oil synthetic oil biodegradable oil



PRODUCT	QUALITY LEVEL	ISO VG 40°C, cSt ISO 3448	APPLICATIONS	PROPERTIES
DIN 51517 part,3		150	 Gears: Sprocket Helical Double helical Hypoid Helical bevel Straight bevel Planetary 	 Variant with the same properties as GEAR IND SINT but with plus additional additives for continuous temperature extremes
GEAR IND SINT TEMP	(CLP-E) AGMA 9005.E02(S) US STEEL 224 DAVID BROWN S1.53.101	220, 460	 Worm wheel and sprocket Inverted tooth chains and rollers Plain and rolling bearings operating at medium speeds and loads with higher and temperature Gears where film toughness is critical Equipment that is difficult to access 	 Very thermally stable No sludge and lacquer formation Outstanding chemical and thermal stability Corrosive environments High flash point and very low volatility Miscibility and compatibility with mineral oils
	ISO L-CKC (46-680) DIN 51517 part.3	32		 Specific additives to prevent "micropitting" in gearboxes and differential cases Formulated with a combination of additives that ensure
GEAR IND	CLP-HC 46-680) AGMA 9005.E02 US STEEL 224 DAVID BROWN	46, 68, 100, 150	• Gears: - Sprocket - Helical - Double helical	excellent lubrication in severe conditions of extreme temperatures, low speeds and high shock loadsDifficult to access equipment, where oil changes are labour intensive
PREMIUM PAO	S1.53.101 FLENDER BA-7300 CINCINNATI MILACRON	220, 320, 460		 Absence of sludge and oxidation products Minimal evaporation Good start-up at low temperatures Excellent demulsibility due to its non-polar character and
	P34 a P80	680, 1000	- Hypoid - Helical bevel - Straight bevel - Planetary	 very high corrosion protection Very good compatibility with elastomers and gaskets Miscible with mineral oils
	U.S. Steel 224 AGMA 9005.E02	32	Worm and wheel setGearboxes and	Variant with the same excellent properties as GEAR IND PREMIUM PAO plus additional micronised PTFE additive, which acts as a solid additive and lowers the
GEAR IND PREMIUM PAO	DIN 51.517part.3 (CLP-HC-46 a 680) David Brown S1.53.101	46, 68, 100, 150	Differentials where there are very high temperature and high load • Bearings	 coefficient of friction Excellent lubrication under severe conditions of extreme temperatures, low speeds and high loads Formation of a thin adherent film that prevents dreaded dry starts
TF	Clasificación ISO L-CKC (46 a 680) Cincinnati Milacron P34 a P80	220, 320, 460		Reduces stick-slip problems Lower energy costs Anti-friction characteristics necessary for long oil and gear life
	FLENDER BA-7300	680, 1000		 Highly loaded gearboxes and high vibration; reduces noise level, friction and wear



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PRODUCT	QUALITY LEVEL	ISO VG 40⁰C, cSt ISO 3448	APPLICATIONS	PROPERTIES	
	DIN 51517 part.3 CLP-PG AGMA 9005. E02(S) US STELL 224 32 11 11	32		 Synthetic polyglycol base, with incredible performance at high temperatures and extreme pressure 	
		68		 Reduces maintenance costs High temperature stability (high and low) Minimal volatility 	
GEAR IND PREMIUM PAG		100	• Gears: - Sprocket - Helical	 No sludge and protection against oxidation High Viscosity Index and low freezing point High lubricating power and load capacity Excellent corrosion and rust protection 	
			- Hypoid - Helical bevel	 Compatible with all types of seals and elastomer Nitrile rubber (NBR), Fluoro-Silicone, Vinyl-Meth Polysiloxane (Q) or PTFE are especially 	
				 recommended for high temperature Compatible with non-ferrous materials Exceeds 10,000 working hours at 100°C in enclosed gear units 	
		320		Variant with the same properties as GEAR IND PREMIM PAG and additional additivation of	
		-	100	 Of great interest in all difficult to access equipment accessibility, where oil changes 	micronised PTFE, which acts as a solid additive and decreases the coefficient of friction. • For highly loaded gearboxes and high vibrations,
GEAR IND PREMIUM PAG TF			150	involve a high abour costs Worm and worm gearboxes 	 reducing noise level and wear. Formation of a thin adhesive film prevents the dreaded dry starts.
		220		 Reduces the problems of stick-slip Lower energy costs. Anti-friction characteristics necessary for a long life 	
		320		of oil and mechanisms.	



GUIDE OILS, CABLES AND CHAINS

This product block covers a wide range of applications for guides, cables and chains. Formulated with mineral oils, synthetic and biodegradable bases depending on the application and needs, and premium additives that aim to reach the friction points in order to first lubricate and then protect.

When formulating our guide, cable and chain oils, we at elesa thoroughly study the important parameters such as:

- Adhesion.
- Drip resistance.
- Static and dynamic coefficient of friction with speed.
- Penetrability.
- Solid additives.

elesa GUÍAS

They provide linear movement, prevent the stick-slip effect, avoid jumps between the two sliding parts and make this sliding continuous.

See our Cutting Fluids catalogue for our range of MACHINING CTRO GUIDES.

See our catalogue of Non-toxic Products for our range of H1 GUIDES.



GUIDE LUBRICANTS

PRODUCT	EP. (Kg)	VISCOSITY 40°C, cSt	FREEZING POINT / FLASH POINT, °C	APPLICATIONS	PROPERTIES		
	250 68 -12 / 225						
	250	100	-12 / 225		Ultra-refined paraffinic mineral bases		
GUÍAS	250	150	-12 / 225	Lubrication of vertical,	 Excellent anti-wear, adhesion and lubricity characteristics. Avoid Stick-Slip effect in sliding movements 		
GUIAS	250	220	-9 / 235	oblique and horizontal guides	 Do not sag and extend the life of the mechanisms. Insulate against humidity and protect against corrosion 		
	250	320	-9 / 240		Good wetting capacity		
	250	460	-9 / 240				
	315	68	-12 / 225	Lubrication of vertical, oblique and horizontal guides With extra protection	 Ultra-refined paraffinic mineral bases With E.P. extreme pressure sulphur-phosphorus type additives, which gives them superior 		
	315	100	-12 / 225		 b) b dudition, which groes them experior performance and greater environmental protection than those based on lead additives Excellent anti-wear, adhesion and lubricity characteristics. Avoid Stick-Slip effect in sliding movements They do not sag and extend the life of the mechanisms Insulate against humidity and protect against corrosion Good wetting capacity Greater adhesiveness and filamentousness, so 		
GUÍAS EP	315	150	-12 / 225				
GUIAS EF	315	220	-9 / 235				
	315	460	-9 / 240				
	315	480	-9 / 240		 Greater adhesiveness and mamentousness, so it has less sagging and allows working on vertical guides due to its anti-drip behaviour 		
	315	68	-12 / 225		 Ultra-refined paraffinic mineral bases With E.P. extreme pressure sulphur-phosphorus type additives, which gives them superior 		
	315	100	-12 / 225		performance and greater environmental protection than those based on lead additives		
GUÍAS EP	315	150	-12 / 225	 Specific for lubrication of vertical, obligue and horizontal 	 Excellent anti-wear, adhesion and lubricity characteristics. They avoid Stick-Slip effect in sliding movements 		
FILM	315	220	-9 / 235	guides • Extra adhesiveness	 They do not sag and extend the life of the mechanisms Insulate against humidity and protect against 		
	315	460	-9 / 240		corrosion • Good wetting capacity		
_	315	480	-9 / 240		 Greater adhesiveness and filamentousness, so it has less sagging and allows working on vertical guides due to its anti-drip behaviour 		



synthetic oil

mineral oil

biodegradable oil

elesa CHAIN

Chain oils formulated to allow penetration in those points of reduced size, difficult access and subjected to high loads.

This range of products has been developed taking into account the following differentiating elements: time of exposure to high temperature, extreme pressure required, adhesion of the part in the presence in the working environment, chain speed. If no temperature is required, the elesa GUÍAS range of products could be used.

Other options:

For non-temperature chains with anti-drip action, the WIRE cable range can be recommended. For chains without temperatures, drip-free action and extreme high pressure, the most recommended product is elesa GEAR IND 460 FILM.

For NSF-H1 compliant alternatives, please see our non-toxic industry catalogue. For alternatives in the agricultural sector, such as chainsaw oil, see our agricultural catalogue. agricultural.



EXCELLENT

GOOD

REGULAR

NOT SUITABLE

CHAIN LUBRICANTS

PRODUCT	VISCOSITY INDEX	VISCOSITY INDEX 40°C, cSt	WORKING TEM- PERATURE °C	APPLICATIONS	PROPERTIES	
CHAIN BIO 140 SINT	140	140	-25 / 260	 Rames chains Rails and guides Compatible with nitrile, fluoro-carbon, silicone and sodium polyacrylate elastomers Oven chains 	 Synthetic base type 100% ester More than 70% biodegradable in 28 days according to the Sealed Vessel Test High adhesion. No dripping or splashing Excellent oxidation resistance and very high hydrolytic stability Very low consumption and no formation of fumes and odours Regeneration capacity of new oil over old oil. Reduces the formation of lacquers on the chain High detergent effect Better cold start of the machine Protects the mechanisms against wear and tear and extends their useful life 	
CHAIN 22 SINT	110	22	-18 / 180			
CHAIN 46 SINT	110	46	-35 / > 180 (open) -35 / 300 (closed)		 Contains synthetic ester type bases High adhesion. No dripping or splashing Excellent oxidation and evaporation stability 	
CHAIN 100 SINT	110	104	-20 / 225		 Good penetrability and wetting power to access difficult to reach points, especially in chains Protects against corrosion. Very important in ovens where products with high water content 	
CHAIN 150 SINT	114	150	-20 / 225	 Furnace chains and mechanisms subjected to high temperature 	evaporate	
CHAIN 250 SINT	120	270	-20 / 225	-		
CHAIN 250 SINT SS	120	240	-20 / 225	-	Silicone-free variant of CHAIN 250 SINT	
CHAIN 250 SINT TEMP	120	220	-20 / 225	-	CHAIN 250 SINT variant for high temperatures	
BLACK LUBE CHAIN			-30 / 150	 Cables Chains Pins, hinges and bearings of small dimensions as well as precision mechanisms Forklift truck chain EP loads Plastics industry Foundry 	 Provided with anti-rust, anti-wear, extreme pressure (E.P.) and freezing point depressant additives that offer excellent results in the life of the chains in service Its studied formulation allows penetration in those points of reduced size, difficult access and subjected to high loads High resistance to dust and water jet washing Low freezing point 	

synthetic oil **biodegradable oil**



mineral oil

CHAIN LUBRICANTS

PRODUCT	VISCOSITY INDEX	VISCOSITY INDEX 40°C, cSt	WORKING TEMPE- RATURE °C	APPLICATIONS	PROPERTIES
CHAIN 120 SINT PLUS	111	120	-35 / 240		 100% ester base oil Excellent high and low temperature properties Very stable to decomposition and oxidation at high temperature
CHAIN 320 SINT PLUS	100	320	-10 / 240	 Lubricant for oven chain wheels, paint drying and others 	 High lubricating power; no lacquer formation Excellent regeneration capacity of new oil over old oil
CHAIN 120 SINT PLUS TF	111	120	-10 / 240	Lubrication systems automatic and spray lubrication systems	CHAIN 120 SINT variant with extra PTFE content
CHAIN 120 SINT PLUS MOS2	111	120	-35 / 240		Contains Molybdenum Disulphide which acts as a safety lubricant
CHAIN 254 SINT PLUS	140	254	-30 / 260	• Rames, rails and guide	 100% ester type synthetic bases Longer working time at high temperature; 0 residues
CHAIN 400 SINT PLUS	145	400	-30 / 260	 Rames, rais and guide chains Compatible with elastomers such as nitrile, fluorocarbon, silicone and sodium polyacrylate Oven chains 	 Excellent oxidation resistance High detergent effect. Cleans old oils and reduces residues Protects mechanisms from wear and tear and extends their life Anti-drip effect Excellent behaviour with elastomers such as nitrile, fluorocarbon, silicone and polyacrylate, in decreasing order of preference
CHAIN 140 SINT PLUS MOS2	140	140 (base oil)	-30 / 260		 100% ester type synthetic bases Contains Molybdenum disulphide which acts as a safety lubricant Longer working time at high temperature
CHAIN 254 SINT PLUS MOS2	140	254 (base oil)	-30 / 260		 Excellent oxidation resistance Detergent power. Cleans old oils and reduces the generation of residues Protects mechanisms from wear and tear and
CHAIN 400 SINT PLUS MOS2	145	400 (base oil)	-30 / 260	 Oven chains, bearings, rollers, rails and gears Rames in the textile industry 	extends their life • Anti-drip effect • Excellent performance with elastomers nitrile, fluoro-carbon, silicone and polyacrylate, in decreasing order of preference • Excellent oxidation resistance and very high hydrolytic stability
CHAIN 140 SINT PLUS MOS2 TEMP	140	140 (base oil)	-30 / 260		 Variant of elesa® CHAIN 140 SINT PLUS MOS2 with a higher content of Molybdenum Disulphide. It can withstand temperature peaks of up to temperature peaks up to 450°C
BLACK LUBE CHAIN			-30 / 150	 Cables Chains Pins, hinges, bearings and bearings of small dimensions as well as precision mechanisms Forklift truck chain EP loads Plastics industry Foundry 	 Provided with anti-rust, anti-wear, extreme pressure (E.P.) and freeze point depressant additives that offer excellent results in the life of the chains in service Its studied formulation allows penetration in those points of reduced size, difficult access and subjected to high loads High resistance to dust and water jet washing. Low freezing point



CHAIN LUBRICANTS

PRODUCT	VISCOSITY INDEX	VISCOSITY INDEX 40°C, cSt	WORKING TEMPE- RATURE °C	APPLICATIONS	PROPERTIES	
CHAIN 350 SINT PLUS TEMP	140	350	-35 / 280	Fibreglass insulation manufacturing lines	 100% ester base oil Excellent high and low temperature properties Excellent decomposition and oxidation stability at high temperature High lubricating power and no lacquer formation Excellent regeneration capacity of new oil over old oil 	
CHAIN 400 SINT PLUS TEMP	145	400	-25 / 280	 Paint oven lines Surface painting and lacquering lines Textile stenter chains with working temperatures of 250°C Heated steel belts 		
CHAIN 320 SINT CATAFORESIS	232	320	-36 / 220	 Lubrication of paint oven chains by cataphoresis 	 Synthetic glycol type bases Completely free of silicones Good temperature stability Low volatility No formation of oxidation products in the chains Excellent rust protection elesa® CHAIN 320 SINT CATAFORESIS TF contains PTFE which acts as a safety lubricant and lowers the coefficient of friction 	



Our cable oils are developed to work as a protective element for steel cables. The differentiating elements between our products are: penetration time into the cable core, protection against corrosion over time, impermeability and non-drip properties of the product.

The WIRE range has great adhesion to metal surfaces, so we recommend brushing, dipping or spraying the product onto the cable to protect it from friction between the stranded wires, maintaining a thin outer layer that protects against the aggressive environment.

Other options:

Our Cutting Fluids catalogue offers soluble and pure lubricants for wire and rod drawing operations.

PRODUCT	NATURE	ADHERENCE	ANTI-DRIP	REDUCTION FRICTIONS	PENETRABILITY	EXTREME PRESSURE
WIRE BIO EUROMAR	SYNTHETIC BIODEGRADABLE			•	•	•
WIRE EUROMAR 32	MINERAL			•	•	
WIRE EUROMAR	SYNTHETIC	•		•	•	•





REGULAR

NOT SUITABLE

GOOD

EXCELLENT

CABLE LUBRICANTS

PRODUCT	ISO VG	WORKING TEM- PERATURE °C	APPLICATIONS	PROPERTIES
WIRE BIO	Fluid unctuous	-30 / 150	 Lubrication of steel wire ropes in ports and ships, forestry, agriculture, mining Wherever it is necessary to visualise the condition of the wire rope Withstands water and marine environments 	 Biodegradable ester type synthetic bases Contains E.P. additives, rust inhibitors, corrosion inhibitors and adhesion agents High tack and very high penetrability with excellent squeeze-off resistance Penetrates and impregnates the cable core Provides effective greasing with a clean and neat appearance on lubricated cables and mechanisms Keeps sheave surrounds clean and free of splashes Total protection against wear, corrosion and rust Extends regreasing times
WIRE SINT 480	480	-27 / 200	 Lubrication of steel ropes in steel mills, public works, alternative energies, graphic arts graphic arts, iron, chemical and steel industry Wherever it is necessary to visualise the condition of the cable Lubrication of cables in marine environments 	 Contains E.P. additives, rust inhibitors, corrosion inhibitors and adhesive agents Penetrates and impregnates the cable core Provides effective greasing with a clean and neat appearance of the cables Keeps sheave surrounds clean, free from splashes Facilitates the work of dosing and greasing because it is oil Maximum protection against wear, corrosion and rust Does not polymerise at high temperatures or under Ultra Violet light



mineral oil

synthetic oil aceite biodegradable

COMPRESSOR OILS AND PNEUMATIC SYSTEMS

elesa AIR

The primary objective of our vacuum pump, compressor and pneumatic oils is to improve the performance, çreliability and longevity of reciprocating, screw and vane compressors.

The elesa AIR range is formulated to achieve optimum lubrication of the mechanical elements of all moving parts, to limit wear and high temperatures caused by friction and lack of cooling and to reduce noise.

It reduces the formation of carbon deposits and dissipates the temperature produced in the movement.



COMPRESSOR OILS / AIR VACUUM PUMPS Mineral oil

PRODUCT	QUALITY LEVEL	INDEX VISCOSITY ISO 2909	ISO VG 40°C, cSt ISO 3448	WORK HOURS	APPLICATIONS	PROPERTIES
AIR BASIC	DIN-51506-VD DIN-51524, PART 2 AFNOR NFE 48603 (HM)	97	32, 46, 68, 100, 150	2000	 Screw compressors, rotary vane or reciprocating and 	 Specially manufactured ash-free and zinc-free oil High oxidation stability High rust protection No foaming and easy demulsibility Systems requiring low carbonaceous deposits with good wear protection Servo valves requiring special filterability characteristics
AIR PLUS	DIN-51506-VDL DIN-51524, PART 2 AFNOR NFE 48603 (HM)	97	32, 46, 68, 100, 150, 220, 320	3000	vacuum pumps	 Contains synthetic ester type bases High adhesion. No dripping or splashing Excellent oxidation and evaporation stability Good penetrability and wetting power for access to hard-to-reach places, especially on chains Protects against corrosion. Very important in ovens where products with high water content

OILS FOR AIR COMPRESSORS / AIR VACUUM PUMPS

PRODUCT	QUALITY LEVEL	INDEX VISCOSITY ISO 2909	ISO VG 40°C, cSt ISO 3448	WORK HOURS	APPLICATIONS	PROPERTIES
AIR SINT PLUS	DIN-51506- VCL y VDL. ISO 6743-3L-DAC y DAJ	90 , > 150	46, 68, 100, 150, 220	6000- 8000	 Screw, rotary vane or reciprocating compressors and vacuum pumps with continuous duty or long oil change periods 	 100% synthetic ester based oil High oxidation resistance and good corrosion protection Wear protection and minimal evaporation No deposits on valves, vanes and pistons. Excellent deaeration High detergency, avoiding that the lacquers generated with use from scratching the screw Specially designed for MATTEL vane compressors
AIR PREMIUM PAO	DIN-51506- VCL y VDL	130	46, 68, 100, 150, 220, 320	6000- 8000	 Screw, rotary vane or reciprocating compressors and vacuum pumps 	 100% Polyalphaolefin (PAO) base with high-tech additives. Oxidation stability Lower consumption due to low volatility and high flash and autoignition points Excellent deaeration and demulsibility, reducing fluid contamination and increasing compressor efficiency Good anti-wear protection, thus allowing to work at high pressures and does not reduce the life of the compressor Very low level of carbon deposits. Increased safety in the work of the compressor. High corrosion protection Very good compatibility with seals and paints Full compatibility with polycarbonate filter balls. Tested on Hoerbiger filters Reduces electrical energy consumption and lowers noise level

GAS COMPRESSOR OILS Oil for rotary compressors, piston, · With Polyalphaolefin (PAO) bases blended with ester breathing air and high-tech additives vacuum pumps, Oxidation stability biogas · Lower consumption due to low volatility and high flash Suitable for: and auto-ignition points Natural Gas, Carbon Corrosion protection of mechanisms AIR DIN-51506. Monoxide, Ethylene, Very high optimum service life of the oil PREMIUM 6000-46, 100, Methane-Bio Gas, 140 · Very low solubility of hydrocarbon gases, which PAO ISO 150, 220 8000 Propane, Butdiene, prevents loss of oil viscosity Butylene, Butane, BIOGAS 6743-3L-DAJ · Good compatibility with seals and paints

					VCM-Vinyl Chloride Monomer, Propylene, Ammonia. Safe gases: Air, Helium, Nitrogen, Carbon Dioxide-Dry Carbon Dioxide	 Optimum anti-wear protection of cylinder and piston rings due to a more resistant lubricating film Excellent deaeration and demulsivity Virtually no tendency to carbon and lacquer formation Reduces electrical energy consumption and lowers noise levels. Prevents oil oxidation
AIR SINT PFCV	DIN-51506 - VCL. ISO 6743-3L-DAJ	113	46, 100	6000- 8000	 High and medium speed reciprocating compressors. Oxygen, air, aggressive gases. Low pressure pumps. 	 100% perfluorinated polyether base Low molecular weight and controlled viscosity with low vapour pressure Inert fluid against most chemical reagents. Indispensable when the pump works in direct contact with gases such as UF6, F2, PCI3, BF3. Provides outstanding performance in HIGH VACUUM applications, especially systems exposed to aggressive gases Excellent compatibility with metals, plastics and elastomers Good resistance to aqueous and non-aqueous solvents High dielectric properties and good radiation stability Does not polymerise when exposed to oxygen, ionising radiation or accelerated subatomic particles The system remains FREE OF VARNISHES and fluid decomposition deposits Its high resistance to oxidation avoids explosion risks. Compatible with gaskets and paints



OILS FOR INDUSTRIAL REFRIGERATION COMPRESSORS

PROD	оист	QUALITY LEVEL	ISO VG 40°C, cSt ISO 3448	WORK HOURS	APPLICATIONS	PROPERTIES
AIR POL4	AR	DIN 51503 KA y KC NORMA WL-825 C	32, 46, 68	3000	 Industrial refrigeration compressors with refrigerants: Ammonia (R-717), Butane (R-600), Propane (R-290), Carbon dioxide (R-744) and chlorinated gases such as R12 and R22 	 Highly refined and hydrotreated 100% naphthenic bases Low flocculation point with Freon, reducing the precipitation of wax deposits at points such as valves or evaporator (wax free) Very low freezing point Good chemical stability and oxidation resistance Maximum protection for moving compressor parts. Resistant lubricant film Protects the mechanisms even in high temperature conditions and high pressures at the end of the compression stage in valves and discharge points
AIR A POLA		UNE-EN ISO21469:2006 DIN 51503 KAA y KC	32, 68, 100	6000- 8000	 Industrial refrigeration compressors with refrigerants: R-717, ammonia, R-40 or R-22. It works perfectly with HCFC's refrigerants: R-11, R-12 & 13, R-113 114 123-401A and B-402A and B-R408A R409A R401A-500-602-503 Miscible with many types of refrigerants, especially Ammonium (NH3) 	 100% Polyalphaolefin (PAO) base with high-tech additives Oxidation stability Lower consumption due to low volatility and high flash and auto-ignition points Excellent separation of air (deaeration) and water (demulsibility), thus reducing contamination of the fluid and increasing the effectiveness of the compressor Good anti-wear protection, which allows working at high pressures and does not reduce the life of the compressor Very low level of carbon deposits. Increased safety in compressor operation High corrosion protection Very good compatibility with seals and paints Full compatibility with polycarbonate filter balls. Tested on Hoerbiger filters Reduces electrical energy consumption and lowers noise level
AIR S POLA EV		UNE-EN ISO21469: 2006 DIN 51 503: KB y KD of refrigeration oils A-A-50634	22,32, 46, 68, 100, 150, 170	6000- 8000	Industrial refrigerant compressors: HFC type: R-448 A, R-404 A, R-422 D, R-134A, R-507, 509 A/B and 410 A, R-407 A and R-407 C. HFO type: R-1234 YF, 1234ZE and 1233ZE , R-449A, 452A and 513 HFCs, CFCs, HFOs and mixtures. Other gases: SUVA TMHP 62 (replacing CFC 502 Propane (R-290), Isobutane (R-600A), and Propylene (R-1270) CO2 (R-744) Partially fluorinated gases in heat pumps: R-245FA, 236A and 227EA	 100% polyester base coat designed to meet the specific requirements of manufacturers of refrigeration compressors working in deep-freezing Excellent anti-corrosion, anti-wear and anti-rust properties Prevents separation in cold lines by preventing waxes from flocculating Good thermal and chemical stability with low tendency to form deposits in evaporation systems (valves and discharge gates) Excellent compatibility with elastomer materials, seals, filters and paints present: EPDM, NYLON-6, NBR, HNBR, PTFE, etc.



elesa AIR SN

Our oils for pneumatic systems extend the operational use of machinery.

This range is based on lubricants with special additives for the lubrication of these systems, which increase the life of the equipment in mist or cup applications.

The variant with very low micron solid additives to further reduce friction should only be applied in thin tubes which have to be cleaned periodically to avoid caking of the additive.





OILS FOR PNEUMATIC SYSTEMS

PRODUCT	QUALITY LEVEL	INDEX VISCOSITY	ISO VG 40°C, cSt ISO 3448	APPLICATIONS	PROPERTIES
AIR BIO SN	API GL-4. DENVER GARDNER. JOY (RD 01). CHICAGOPNEUMATIQUE (ROCKDRILL 1061). INGERSOLL RAND (ROCKDRILL 433) SIDERURGIE FRANCAISE FT 174	190	46, 48	Closed and open circuits with compressed air flow	 100% biodegradable ester base High loading capacity (EP) Stable emulsification capability with water Provides excellent performance in water/air drilling jobs Prevents scuffing of pistons, tips, etc. Avoids temperature rises Protects against rust and corrosion even during machine downtime More effective than conventional drilling oils Adhesiveness and solubility, reduces mist formation and oil consumption
AIR SN	API GL-4 DENVER GARDNER JOY (RD 01) CHICAGOPNEUMATIQUE (ROCKDRILL 1061) INGERSOLL RAND (ROCKDRILL 433) SIDERURGIE FRANCAISE FT 174	≈110	22, 32, 46, 68, 100, 150, 220, 320, 460, 600	Closed and open circuits with compressed air flow	 It is provided with extreme-pressure additives, antioxidant and rust and corrosion inhibitor, which ensure the best performance and excellent protection of the machinery driven by compressed air. High adhesiveness, reducing mist formation and oil consumption High load capacity (EP) Prevents stick-slip effect, facilitating smooth sliding Stable emulsion capacity with water Provides excellent performance in water/air drilling jobs
AIR SN TF	API GL-4	110	6000- 8000	Closed and open circuits with compressed air flow	 Variant with the same properties as AIR SN and additional micronised PTFE additive, which acts as a solid additive and reduces the friction coefficient compared to the previous ones (lower energy cost)
	mineral oil		synthet		odegradable oil

HEAT TRANSFER FLUIDS

The lubricant should be chosen according to the temperature we need to reach and according to its miscibility and viscosity.

elesa TÉRMICO

Our range is based on highly refined mineral oils, preferably hydrogenated and direct cutting, synthetic or alkylbenzene oils, all of which are designed to withstand high temperatures.

FLUIDS FOR HEAT TRANSFER SYSTEMS

PRODUCT	QUALITY LEVEL	INDEX VISCOSITY ISO 2909	ISO VG 40°C, cSt ISO 3448	WORK HOURS	APPLICATIONS	PROPERTIES	
		95 22,32 - 10 / 280 • Boilers, heat generators, heating		generators, heating	Ultra-refined paraffinic based oils (hydrogenated and dewaxed)		
TÉRMICO	ISO 6743 -Q	95	68	10 / 320	 systems Closed heat transfer circuits with forced recirculation 	 High heat transmission coefficient providing faster and more economical heating High thermal stability at working temperature, with very low oxidation tendency 	
	DIN 51522	95	320	-7 / 300		Low vapour pressure at working temperature, allowing to work at atmospheric pressure; avoids cavitations	
		87	460, 600	-7 / 340	Heat transfer baths without forced recirculation	 and load losses Protects the circuit from corrosion and keeps the mechanisms lubricated Valid for industrial tanks where heating and cooling are carried out in the same equipment 	
TÉRMICO SINT	SO 6743 -12-Q DIN 51522		16, 22	- 40 / 340	 Boilers, heat generators, very high or very low temperature heating systems Closed heat transfer circuits with forced recirculation where there is no contact with the contact with oxygen 	 100 % synthetic bases of alkylbenzene nature Excellent anti-corrosion, anti-wear and anti-rust properties High heat transmission coefficient providing faster and more economical heating High thermal stability at working temperature, high inertia to oxidation It protects the circuit from corrosion and keeps the mechanisms lubricated, avoiding decantations Valid for industrial tanks where it is heated and cooled in the same equipment High boiling and flash point 	
TÉRMICO SINT BAJA PRESIÓN	ISO 6743 -12-Q DIN 51522		32	-3 / 345	 Boilers, heat generators, heating systems Non-pressurised or low-pressure recirculating closed circuits with recirculation, without contact with oxygen 	 High thermal stability at working temperature, high inertia to oxidation High thermal transmission coefficient providing faster heating High boiling and flash point which helps to have a low volatility Excellent detergency that avoids the decantation of oxidation products that could produce overheating points 	
TÉRMICO 144 POLAR	ISO 6743 -12-Q DIN 51522		16, 22	- 32 / 115	• Refrigeration systems. Heat pumps. Gas water heaters and hot water heaters	 Monoethylene glycol base fluid that facilitates heat transfer and reduces corrosion and freezing of the circuit Very high heat transfer coefficient, providing much faster and more economical heating Suitable for all types of materials commonly used and compatible with the metals and alloys present in cooling circuits: aluminium, copper, cast iron, brass and the most modern alloys Wide temperature range Increases the life and efficiency of the circulation pump. High thermal conductivity Prevents the formation of sludge and slurry. Prevents clogging of the cooling circuit Excellent corrosion protection. Protects the cooling circuit for long periods of time 	

synthetic oil

mineral oil

biodegradable oil

GREASE

At elesa we have different ranges of greases formulated to cover all types of mechanisms and working conditions. For this, all types of oils and thickeners are used, which are combined to achieve optimum performance for each application.

The different alternatives are grouped into ranges classified according to the thickener.

elesa ALFA, LITHIUM, SUPERLIT, ARIS

Multi-purpose lithium soap greases with excellent thermal stability and a tough lubricating film that prevents metal corrosion.

elesa MOLYT

Multipurpose lithium soap greases and a range of solid additives, including molybdenum disulphide.

elesa GRAF

Multi-purpose lithium soap greases and graphite as a solid additive.

elesa COMPLEX

Multi-purpose lithium soap greases and graphite as a solid additive.

elesa LUBE

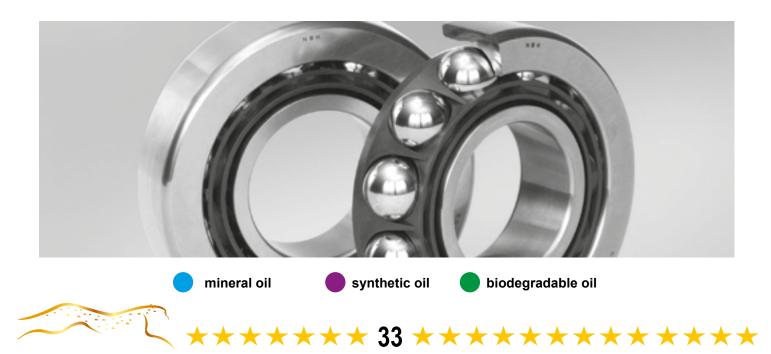
Multipurpose greases mixed lithium and calcium soap and different additive content.

elesa CAPLEX

Calcium sulphonate multipurpose greases with different additive content.

elesa NODROP

Synthetic infusible thickening greases, without dropping point and different additive content.

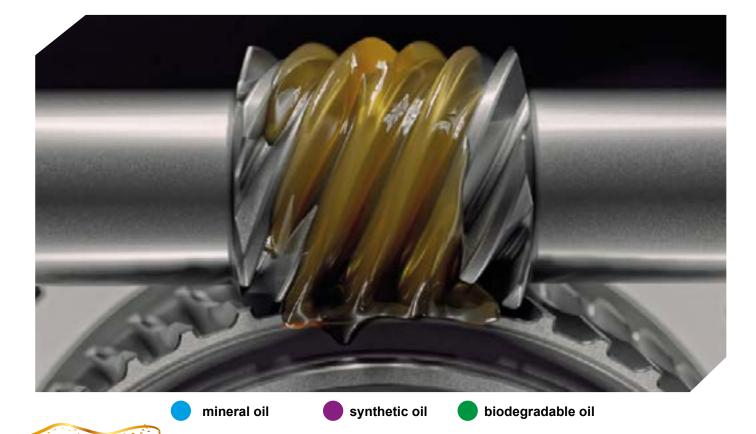


LUBRICATING GREASES: LITHIUM SOAP

PRODUCT	QUALI" ISO 6743	TY LEVEL DIN 51502	WELDING LOAD EP (KG)	NLGI	WORKING TEMPERATURE, °C	APPLICATIONS	PROPERTIES
ALFA	L-XB- CEB	KPK-20	200	000,00,0, 1,2,3,4	-20 a 120 POINTS OF 140	 Bearings, bushings, rollers, couplings 	 Multi-purpose grease with excellent resistance to oxidation Good mechanical stability
ALFA EP	L-XB- CEB	KPK-20	315	000,00,0, 1,2,3,4	-20 a 120 POINTS OF 140	 Spherical plain bearings, roller bearings 	Multi-purpose grease with ALPHA properties and extreme pressure
ALFA SINT	L-XE- CEA	KPK-50	400	0, 2	-54 a 120	 Ski resorts, snowmobiles: Bearings, bearings, rollers, couplings 	 Multi-purpose PAO based grease, developed for general purpose use at low temperatures
LITHIUM EP	L-XB- CEB	KPK-20	250	000,00,0, 1,2,3	-20 a 120 POINTS OF 140		 Colour greenish brown. Multipurpose grease with high load carrying capacity and excellent stability
SUPERLIT	L-XB- CEB	KPK-20	200	000,00,0, 1,2,3	-20 a 120 POINTS OF 140	Bearings, bearings, rollers, couplings	Green colour. Multi-purpose grease with excellent resistance to oxidation
SUPERLIT EP	L-XB- CEB	KPK-20	400	000,00,0, 1,2,3	-20 a 120 POINTS OF 140		 Multi-purpose grease with excellent oxidation resistance and very high EP Very good mechanical stability
SUPERLIT EP FILM	L-XB- CEB	KPK-20	400	000,00,0, 1,2,3	-20 a 120 POINTS OF 140	• Ball joints, Seals, couplings	 Multi-purpose grease with the same properties as SUPERLIT EP but with added adhesion to the mechanisms
SUPERLIT WHITE	L-XB- CEB	KPK-20	400	2	-20 a 120 POINTS OF 140	• Bearings, bearings, rollers, couplings	 Multipurpose grease with the same properties as SUPERLIT EP, but white in colour
ARIS TF	L-XB- CEB	KPK-20	500	000,00,0, 1,2, 2/3	-20 a 120 POINTS OF 140	 Severe service, high loads. Bearings, joints, cables, open gears 	 Multi-purpose grease with PTFE additives, which gives it a very low coefficient of friction and acts as a solid safety lubricant
MOLYT	L-XB- CEB	KPK-20	250	000,00,0, 1,2,3	-20 a 120 POINTS OF 140	 Automatic systems in automotive and Public works 	Multipurpose Grease with Molybdenum Disulphide as solid EP additive
MOLYT EP	L-XB- CEB	KPK-20	620	00,0,1,2,3	-20 a 120 POINTS OF 140	 Bearings with high loads, vibrations and shocks. Steel industry, mining, public works 	 Multipurpose grease with a very high content of Molybdenum Disulphide as a solid lubricant Extra anti-rust and rust inhibitor additives
MOLYT 034 GEAR EP	L-XB- CEB	KPK-20	400	00/000	-20 a 120	Gearboxes, gears, lifetime lubrication	 Semi-fluid grease with synthetic bases that give it high chemical and oxidation stability Reduces up to 25% the temperature in the reducer Adhesiveness and anti-wear protection
MOLYT 064	L-XB- CEB	КРК-20	800	2	-20 a 120 POINTS OF 140	 Bearings with very high shock loads Very severe services CV joints Humid environments 	 Very high load capacity Excellent protection against corrosion, wear and oxidation, even in saline environments High molybdenum disulphide content 20 to 30 times longer life than conventional grease
GRAF	L-XB- CEB	KPK-20	250	0, 2, 3	-20 a 120 POINTS OF 140	Ball joints, suspension arms, hoses, etc.	 Multipurpose lithium grease with graphite as a solid additive, which acts as a natural anti-friction
GRAF SINT	L-XB- CEB	КРК-20	400	2	-20 a 120 POINTS OF 140	• Bearings where there is a lot of EP and low temperatures	 Multipurpose grease based on PAO and mineral oil, with Extreme Pressure additives and graphite as a solid lubricant High anti-rust, anti-rust, anti-wear and EP with shock load resistance Graphite prevents abrasive dust particles from getting inside the mechanisms in dusty environments. dusty environments

LUBRICATING GREASES: LITHIUM COMPLEX SOAP

PRODUCT	QUALITY	LEVEL DIN 51502	WELDING LOAD EP (KG)	NLGI	WORKING TEMPERATURE °C	APPLICATIONS	PROPERTIES
COMPLEX TECH	L-XB- CEB	KPK-20	400	000,00,0,1,2,3	-20 a 160 POINTS OF 180	Electric motors and brakes, wheel bearings, rollers, joints, mills, etc	 High load capacity and high dropping point With anti-rust and anti-wear additives Resistant to water washout
COMPLEX MOS2	L-XB- CEB	KPK-20	500	1, 2	-20 a 160 POINTS OF 180	Metal to metal contacts in steel industry, cement, mining, OP	COMPLEX TECH variant with the same properties and added Molybdenum Bisulphide, which increases resistance to shock loads
COMPLEX SINT	L-XE- CEA	KPK-40	400	00, 2	-40 a 160	• Ski resorts, snowmobiles: Bearings, bearings, rollers, couplings, electric motors	 Special grease formulated with PAO synthetic oil, which allows operation at very low temperatures Longer lubrication periods than a mineral grease Resistance to shock loads as well as water washout
COMPLEX SINT TF	L-XE- CEA	KPK-40	400	2, 3	-40 a 160	 Ski resorts, snowmobiles: Bearings, bearings, rollers, couplings, highly loaded seals, electric motors 	 COMPLEX SINT variant with PTFE additive to reduce the wear of friction elements Severe work on mechanisms subjected to long periods of relubrication in humid environments or in alkaline vapours, acids or cutting oils
COMPLEX WIND	L-XB- CEB	KPK-20	400	1/ 2	-40 a 160	• Wind turbines	 Grease formulated with PAO synthetic bases specifically to withstand sudden changes in temperature without lowering performance Free of solid lubricants High shock loads Outstanding corrosion protection



LUBRICATING GREASES: ALUMINIUM SOAP

PRODUCT	QUALITY	LEVEL DIN 51502	WELDING LOAD EP (KG)	NLGI	WORKING TEMPERATURE °C	APPLICATIONS	PROPERTIES
ALPLEX VISCOGEL 091			620	gel Fluid	-10 a 120	 Open gears, gearboxes Machinery where there are dripping problems with traditional lubricants, such as overhead cranes, conveyor belt reducers, power transmissions, geared motors in rolling mills, straightening machines 	 Excellent wear protection, both sliding and rolling-crash High pumpability. pumpability High adhesiveness API GL-4; DIN 51517 : PARTE 3 CLP USS: 224; AGMA: 9005/D94
ALPLEX 003 OGL	L-XACIB	OGP- FK-10	800	0/00	-10 a 120	• Open gears, girth gears with	 Very high viscosity base oil. viscosity Slow moving Very high workability Very good water resistance Very high extreme pressure High pumpability
ALPLEX 005 OGL	L-XACIB	OGP- FK-10	0/00	0, 2	-10 a 120	spraying systems	 Soap-based fluid grease, highly pumpable with spraying systems Contains Extreme Pressure additives Very high workability Very good water resistance

LUBRICATING GREASES: MIXED SOAP Lithium + BIO CALCIUM

PRODUCT	QUALITY	Y LEVEL DIN 51502	WELDING LOAD EP (KG)	NLGI	WORKING TEMPERATURE,°C	APPLICATIONS	PROPERTIES
ALFA BIO	L-XDD- HB	KPEN- 40	200	000,0, 2	-40 a 140	 Public works. Works with risk of spillage into the environment 	 Biodegradable High resistance to water washout, water works and oxidation Easy pumpability. Excellent stability to mechanical work
GRAF BIO	L-XDD- HB	KP- FEN-40	250	0/00	-10 a 140	 Bearings, bearings, rollers, couplings 	 Biodegradable Contains solid additives that can withstand shock loads and E.P High wear protection

LUBRICATING GREASES: MIXED LITHIUM + CALCIUM SOAP

PRODUCT	QUALITY	DIN 51502	WELDING LOAD EP (KG)	NLGI	WORKING TEMPERATURE °C	APPLICATIONS	PROPERTIES				
LUBE BETA	L-XBCIB	KPK-20	250	00,0,1/0, 1,2,4	-20 a 120	 Bearings with water. Systems requiring grease to provide a sealing effect 	 Excellent washing and water resistance properties High adhesion and anti-rust properties 				
LUBE WATER	L-XDDHB	KPK-20	400	00,0,1,2	-20 a 120 POINTS OF 140	 All types of mechanisms with water High EP loads 	 Excellent washing and water resistance properties Very high adhesion, anti- corrosion and anti-rust. High extreme pressure Withstands up to 50% water 				
LUBE WATER TF	L-XDDHB	KPK-20	400	000,00,0, 1/0, 1,2	-20 a 120 POINTS OF 140	 All types of mechanisms with water High EP loads 	 LUBE WATER variant with solid PTFE additive that reduces the coefficient of friction, provides higher water resistance and improves shock load behaviour 				

LUBRICATING GREASES: ALUMINIUM SOAP

PRODUCT	QUALIT	Y LEVEL	WELDING LOAD EP (KG)	NLGI	WORKING TEMPERATURE °C	APPLICATIONS	PROPERTIES
LUBE WATER GRAF	L-XBCIB	KPFK-20	500	2	-20 a 120 POINTS OF 140	 Bearings, rolling bearings, CV joints which are outdoors 	 Special paraffinic based lubricating grease with additivated lithium/calcium soap thickener, which gives it excellent washing and water resistance properties Very high extreme pressure
LUBE WIRE	L-XBCIB	KPFK-20	400	FLUID GREASE	-20 a 120	 Cables and chains with high loads Centralised or spray sytems 	 High adhesion and extreme pressure Resistant to working with water and with very high anti-rust protection

LUBRICATING GREASES: CALCIUM SULPHONATE SOAP

PRODUCT	QUALITY ISO 6743	LEVEL DIN 51502	WELDING LOAD EP (KG)	NLGI	WORKING TEMPERATURE °C	APPLICATIONS	PROPERTIES
CAPLEX OP	L – XBEIB	KPP-20	400	1,2,3	-20 a 160	 Bearings, bearings, rollers, couplings Mechanisms working with 	 High base oil viscosity Excellent water and high E.P. behaviour High rust protection
CAPLEX OP TF	L – XBEIB	KPP-20	400	1,2,3	-20 a 160	water • Spherical plain bearings, roller bearings	 Same properties as CAPLEX OP with PTFE as a solid additive that reduces wear on friction surfaces and increases water resistance
CAPLEX OP GRAF	L – XBEIB	KPP-20	400	4	-20 a 160	Dual mass clutches	 With friction modifying additives, achieving uniform damping of vibrations coming from the engine High anti-wear and resistance to oxidation
CAPLEX RPM	L – XBEIB	KPP-20	400	1,2,3	-20 a 160	 Bearings, bearings, rollers, couplings. Specific for high revolutions Mechanisms working with water 	 High EP performance Adhesiveness, high loads Wide working temperature range
CAPLEX SINT	L-XBCEB	KPK-40	400	1,2,3	-40 a 180	 Bearings, bearings, rollers, couplings Low and high temperature 	 For systems requiring high adhesion at high speed High resistance to water washout Synthetic bases for increased stability and working temperature range Excellent wear protection
CAPLEX SINT TF	L-XBCEB	KPK-40	400	1,2,3	-40 a 180	mechanisms	 Grease with the same properties as CAPLEX SINT with PTFE as a solid additive to reduce wear on friction surfaces and increase wear on friction surfaces and increases water resistance
CAPLEX 038 FILM	L-XBCEB	KPK-20	400	2	-20 a 160	 Open gears, cables, chains, guides Slow movements and heavy loads 	 Very high MoS2 graphite content Excellent damping effect Extends the relubrication interval by 5 times Resistant to water, acids and alkalis Very high adhesiveness
CAPLEX 040 FILM	L-XBCEB	KPK-20	620	2	-20 a 160	 Open gears, cables, chains, guides Cranes and overhead cranes Medium-low speed bearings 	 With micronised graphite Very high load capacity Extends the relubrication interval by 5 times Minimal dust adhesion
CAPLEX 140 FILM	L-XBCEB	KPK-20	400	2	-20 a 160 POINTS OF 180	 Open gears, cables, chains, guides Mechanisms at high temperatures 	 Very high load capacity Very high temperatures Extends the relubrication interval by 5 times Free of solid additives



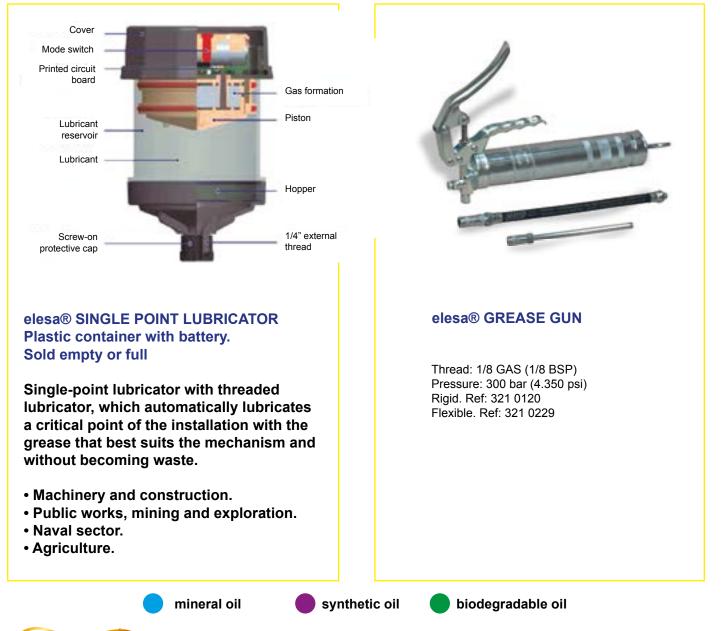
LUBRICATING GREASES: SYNTHETIC No dropping point

PRODUCT	QUALIT	Y LEVEL DIN 51502	WELDING LOAD EP (KG)	NLGI	WORKING TEMPERATURE °C	APPLICATIONS	PROPERTIES
NODROP 011 SINT	L-XEDHB	KPEP-60	200	2	-75 a 150	 Bearings and mechanisms at high and very low temperatures Bearings and mechanisms 	 100% synthetic oil Exceptional low temperature performance F.V. up to 1,000,000
NODROP 011 SINT MOS2	L-XEDHB	KPEP-60	250	2	-75 a 150	greased for life Very high speed mechanisms 	NODROP 011 SINT variant with MoS2 as EP and safety lubricant
NODROP 070	L-XDGEB	KPFPU-40	500	2	-35 a 225	 All types of mechanisms in contact with hydrocarbons and solvents Protection of seals and elastomers 	 Extreme High Pressure Very high and low temperatures No carbonaceous residues
NODROP 070 MoS2	L-XBCEB	KPFP-20	500	2	-35 a 225	 All types of mechanisms in contact with hydrocarbons and solvents Protection of gaskets and elastomers 	 Grease with the same properties as SINT 070, with the addition of Molybdenum Disulphide as a safety lubricant Very high EP
NODROP 090 EP MoS2	L-XBCEB	KPK-20	500	1,2,3	-20 a 175 POINTS OF 200	 Ball and roller bearings in steel mills, paper mills Bearings and worm and wheel 	 Excellent shock load protection Low speeds and medium-high loads High temperatures
NODROP 090 EP TF	L-XBCEB	KPK-20	400	1,2,3	-20 a 175 POINTS OF 200	 gears Bearings in acidic, corrosive environments Chemical industry, cement plants 	 With PTFE which lowers the coefficient of friction and improves water behaviour Low speeds and medium-high loads High temperatures
NODROP 091 EP	KPF2P-20	XBEFB-2	315	2	-20 a 150 POINTS OF 180	 Mechanisms subjected to occasional high temperatures. Non-infusible Ball and roller bearings, bearings and mechanisms rotating at medium speeds and subjected to high loads 	 Excellent chemical stability and oxidation resistance High corrosion protection Resistant to water washout and acid solutions
NODROP 090 RPM MoS2	L-XBEFB	KPFP-20	620	1,2,3	20 a 175 POINTS OF 200	 High speed ball and roller bearings Motor bearings Crushers, mills, screens and centrifuges 	 With MoS2 which gives very high E.P High temperatures High velocities (PV 600.000)
NODROP 090 RPM TF	L-XBCEB	KPK-20	500	000,00,0, 1,2, 2/3	20 a 175 POINTS OF 200	 High speed ball and roller bearings Motor bearings Bearings in the presence of water 	 With PTFE which lowers the coefficient of friction and improves performance with water High temperatures High speeds (FV 600.000)
MOLYT	L-XBCEB	KPK-20	250	000,00,0, 1,2,3	-20 a 120 POINTS OF 140	 Automatic systems in automotive and public works 	 Multipurpose Grease with Molydenum Disulphide as solid additive EP
NODROP 096	L-XBCEB	KPFR-30	620	2	-25 a 180 POINTS OF 300	 Lubrication of bearings and bearings subjected to high temperatures, such as chains and oven extractors in paper, textile and paint dryers 	 Suitable for use in corrosive environments Withstands very adverse conditions of pressure and temperature Very high loads Very high temperatures
NODROP 106	L-XBCEB	KPFEU-40	620	2	-40 a 240 POINTS OF 250	 High temperature mechanisms and bearings Packaged bearings for life Paint oven chains Mechanisms that withstand very high high loads 	 Suitable for use in corrosive environments With Molybdenum Disulphide (MoS2) for lubricity and EP properties Service life 10 times longer than other synthetic greases Very high temperatures

LUBRICATING GREASES: PERFLUOROCARBON

	QUALIT	YLEVEL	WELDING		WORKING		PROPERTIES	
PRODUCT	ISO 6743	DIN 51502	LOAD EP (KG)	NLGI	°C	APPLICATIONS		
FLUORLUBE	L – XED- HB	KP- FFKU-30	> 800	1, 2/3	- 30 a 250 POINTS OF 270	 Works with pure oxygen Withstands acids, 	 Provided with anti-rust and EP additives Speed factor 300.000 The grease is suitable for high temperature operation Long lubrication life due to additional PTFE additives Optimum lubrication 	
NODROP 011 SINT MOS2	L – XED- HB	KPEP-60	> 800	2	- 24 a 288 POINTS OF 295	 bases and gases Mechanisms working at very high temperatures Lifetime lubrication 	 Very high viscosity oil Speed factor 200.000 Provided with anti-rust additives Withstands shock and EP loads Grease is suitable for high temperature operation Long relubrication period due to additional PTFE additives Optimum lubrication 	

ACCESSORIES



ANTI-INFLUENZA PASTES

elesa PASTA

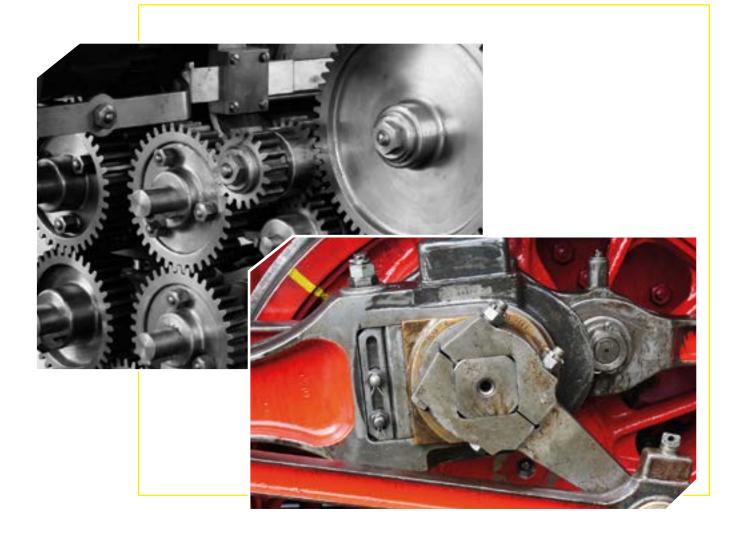
Its purpose is to maintain a lubricating film to prevent seizure and to assist in the assembly/disassembly of metallic elements over time.

They have great anti-corrosive and anti-wear power. They withstand high temperature ranges.

Their main applications are:

- As anti-seize on threaded connections.
- Shimming of shafts.
- Assembly of seals and elastomers.
- Guides.
- Bearing of mechanisms.
- Teeth of gears with problems.
- Any mechanism that may suffer friction when starting up a new machine.







ASSEMBLY PASTES

AUCL							
PRODUCT	QUALITY LEVEL DIN 51502	SOLIDS	COLOR	NLGI	WORKING TEMPERATURE °C	APPLICATIONS	PROPERTIES
PASTA BIO CERAMI- CA	KPF2U-50	> 35%	Pearl grey	2	-50 a 2.000	 Anti-cracking on bolts and nuts. Provides tightening torques Assembly paste for axle shafts, valves, stud bolts, anchor pins, bolts, plain bearings, chains and guides 	 OECD-301B. Biodegradability >75%. Biodegradable assembly paste with high load carrying capacity, low coefficient of friction and high solids content Optimum resistance characteristics against moisture and salt water Protects against environmental corrosion Preserves mechanisms from wear and prevents scuffing
PASTA PAG GRAFITO	KPF12U-40	50%	Black	2	- 35 a 550	 Impregnating agent for neutral rubber, synthetic rubber and other elastomers in seals, gaskets and sealing rings 	 Assembly paste formulated with polyalkylene glycol base oil with high concentration of graphite Metal screws including aluminium or nickel elements Suitable for non-metallic materials Does not attack natural or synthetic rubbers or bearings made of plastic materials Does not form rubbers or varnishes, as its thermal decomposition products are volatile, the graphite remaining as a solid lubricant
PASTA ALUMINIO	KPF2U-60	ALUMINIO 20%	Metallic grey	2	- 20 a 700	 Assembly of shafts, valves, bolts and nuts, friction bearings, studs, anchor pins, spindles, chains and guides Protection of electrical contact protection 	 Preserves mechanisms from seizure and corrosion and facilitates disassembly work Electrically conductive
PASTA COBRE LIGHT	KPF2U-20	> 12,5%	Copper	2	-20 a 150°C Grease in continuous. -20 a 200°C Flashing. -20 to 1100°C Anti-grip.	 Drilling collars Gripping clamps for steel and glass 	High performance assembly pasteElectrically conductive
PASTA COBRE MEDIUM	KPF2U-30	> 25%	Copper	2	- 30 a 1100	 Anti-cracking in mechanisms and threaded connections subjected to vibrations, high pressures, high temperature or corrosive atmospheric conditions including in marine environment Lubricant for threads, gas-flow torch nozzles, studs, anchor pins, screws, etc Tooling thrust shafts Valves and fittings. Pressure adjustments Nozzles and dies in plastic injection and foundry 	 Provides hermetic sealing in connections, achieving tightening torques similar to those of tightening Electrically conductive Provides a continuous surface on electrical contacts and protects them against oxidation or sulphation
PASTA COBRE HEAVY	KPF2U-40	> 36%	Copper	2	- 45 a 1100	 Protection of electric meters and avoids surface deformation caused by arc flashover Welding robots Lubrication of threads in drilling in the following industries: oil, mining, quarries, public works, etc 	 Non-drop point assembly paste, consisting of a fluid and solid lubricants forming a uniform viscostatic matrix that prevents leakage, internal corrosion and welding between adjacent components Allows for temperature transfer, both in heat dissipation and heat transfer in applications such as probe filling Corrosion protection, even in a saline environment

ASSEMBLY PASTES

PRODUCT	QUALITY LEVEL DIN 51502	SÓLIDS	COLOR	NLGI	WORKING TEMPERATURE °C	APPLICATIONS	PROPERTIES
PASTA MOS2	KPF1U-20	> 60%	Black	1	- 15 a 500	 Reducers, avoiding pitting and reducing running-in times Couplings and universal joints, extending the life time of these mechanisms Lubrication of mobile carriage guides and machine tool feed screws to prevent stick-slip For axle fittings, assemblies, valves, splined shafts, etc Where it avoids seizures, contact corrosion and welding 	 Effective lubricant film with high tenacity and adhesion Prevents premature wear and seizure when starting up new machinery or after repair and assembly With a high amount of micronised molybdenum disulphide
PASTA PAG MOS2	KPF1U-40	> 50%	Black	1	-40 a 500	 High temperature bearings and bearings Elements of high temperature chains and bearings made of non-metallic materials Impregnating agent for neutral rubber, synthetic rubber and other elastomers in seals, gaskets and sealing rings Sealing and anti-cracking in valves, taps and pipe threads of liquid and gaseous chemical products 	 Assembly paste on synthetic polyalkylene glycol base with high concentration of molybdenum disulphide It does not form gums or varnishes, as its thermal decomposition products are volatile, leaving molybdenum disulphide as a solid lubricant
mineral oil synthetic oil biodegradable oil							

CARE PRODUCTS INDUSTRIAL SECTOR

PERSONAL HYGIENE

CLEAN PASTA MANOS

Degreasing paste with non-abrasive particles and fresh scent, very effective for cleaning hands in workshops. Removes especially grease, inks and carbon deposits. Leaves hands soft and perfumed as a result. How to use: with a small amount, rub hands dry until all dirt is removed from the hand, then rinse with plenty of water until the dirt and soap are completely removed.

CLEAN GEL MANOS

Citrus scented gel. Powerful degreaser, water soluble, pleasant smelling and specifically prepared for hands working in difficult conditions and in contact with grease, inks, coals and sludge. Can be diluted with 2 parts water without losing its cleaning effect.

CLEAN GEL MANOS PLUS

Viscous gel with particles, with a pine scent. Removes all types of oil, carbon deposits and industrial grease. The presence of natural scap combined with surfactants allows a very high degree of cleanliness and develops a softening action on the epidermis.



GENERAL CLEANING AND DEGREASING

CLEAN BIO A4 UNIVERSAL 🗢

Concentrated alkaline water-soluble degreaser based on biodegradable surfactants. Cleans surfaces containing oil, grease, carbon and all types of dirt. Restores the original appearance. Formulated on the basis of user and environmentally friendly compounds. Fast evaporation. Dosage: Cold 5-20 % - Hot 40-80 °C 1-10 %. Hot 40-80 °C 1-10 %.

CLEAN BIO A4 LIMON 🗢

Concentrated multi-purpose degreaser cleaner with lemon scent. Removes all types of greasy dirt and leaves a pleasant smell. Based on biodegradable solvents and surfactants. Specially designed for clean industry. Dosage: Cold 5-20 % - Hot 40-80 °C 1-10 %.

ADITIVO PTFE FLUID

Stable dispersion of PTFE in mineral oil designed to be added as a PTFE additive to mineral, PAO or ester based lubricating oils or greases, thus improving the anti-wear and extreme pressure properties of lubricants, thanks to the very low coefficient of friction of PTFE. It considerably reduces electricity consumption.

ADITIVO SISTEMAS HIDRÁULICOS

Anti-friction additive to be added to mineral based lubricating oils in hydraulic systems to increase oxidation stability. Reduces viscosity variations with temperature. Improved low temperature behaviour and improved adhesion of the oil to metal. Prevents wear of the elements and extends their life.

PROTECT METAL BASIC

Highly concentrated, thin waxy film protective coating on metal surfaces, which withstands more than 50 hours in a 52°C salt chamber. High dielectric strength. Direct use.

PROTECT METAL EXTRA PLUS

Protective oily coating. Specially designed for cleaning and protection against corrosion on metal surfaces: finished parts, machinery, tools, electrical equipment, weapons, etc. Water repellent: displaces moisture and protects against corrosion in highly severe saline conditions. High cleaning power of grease, sludge, tar and oxides. Excellent, highly concentrated anti-corrosive, with more than 150 hours in a saline chamber at 52°C. Direct use.

RELEASE AGENTS

DESMOL PLÁSTICO

Synthetic non-stick, lubricating, release and polishing fluid. Silicone free. Release agent for plastic and rubber moulding. In injection, compression or vacuum processes. One thin layer is sufficient for several successive demoulding processes. Direct use.

DESMOL LUBE SILICONA

mineral oil

Synthetic anti-adherent fluid for use on plastics and elastomers. Dielectric. Resistant to oxidation, aggressive environments, water washout, alcohols and most organic solvents. Cutting blade protector.

synthetic oil

biodegradable oil



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