



Product's Guarantee

All the products manufactured by

ELECTROFILM ESPAÑOLA, S.A.

are GUARANTEED against any manufacturing defect from ONE YEAR period, since the purchase order to

2 ELECTROFILM ESPAÑOLA, S.A., guarantees, within this period, the replacement, at its judgment, of the product, provided that the product is shipped with postage prepaid to our factory and the inspection by our Quality Department confirms that the defect's cause is covered by the **GUARANTEE**.

ELECTROFILM ESPAÑOLA, S.A.

- 3 The guarantee doesn't cover the defects caused by:

 Accident, misused, handling or incorrect product installation.

 Products must be used and keep according to technical documentation provided by the Factory. If you don't have this documentation, please ask for it.
- 4 Productos not manufactured by **ELECTROFILM ESPAÑOLA, S.A.**, like raw materials, lubrication devices and others ... are subject to the original manufacturer's guarantee.

ELECTROFILM ESPAÑOLA S.A. maintains a policy of continuous development and product innovation. The company reserves the right to modify the product's formulations without previous notification.





















elesa® is ELECTROFILM ESPAÑOLA, S.A's mark, a big company

born in February 1965, thanks to its founder D. Teodoro Carvajal Gallego.

ELECTROFILM ESPAÑOLA, S.A. begins cooperated with *ELECTROFILM INC., USA* company, situated in West Lafayette (Indiana), importing its technology and lubricant products in all kind of formats.

Starting being an importing company and only dedicated to lubricant's marketing with so well-known marks such as Lubri-Bond and Everlube, manufactured according to American regulations MIL, **ELECTROFILM ESPAÑOLA**, **S.A.** reaches such a big dimension that motivate it to GROWN.

In 1985, *ELECTROFILM INC., USA's* management offered us its installation acquisition in West Lafayette. In those years, the Spanish government don't allow us to import the machinery from *USA. ELECTROFILM INC., USA* begins its talks with a big American chemical group, Great Lakes Chemical Corporation (GLCC). Nowadays we are completely independent.

Because our excellent relationship and professional cooperation, *ELECTROFILM INC., USA* decides, before belonging to GLCC in 1988 transfer to **ELECTROFILM ESPAÑOLA, S.A.** all of its technology, know-how and original formulations. That gives us the opportunity to grow as a company and undertake the great adventure, after a long import-export business career, to be specialized manufacturers in lubrication and industrial engineering sector.

That meant a new installation change, to the actual address. The American specialist technical group, were working with us until the factory and all the different production processes were settled up. Nowadays we manufacture more than 1800 product references.

Since our beginning, we are specialized in industry and specifically in lubricant and maintenance sector. Far from an artisan activity, production turned into an important technical process, examined by measurement and valuation systems.

The constant investigation carried out by our technicians, their dedication and their continued work in small-scale pilot plants, has allowed us a perfect and deep knowledge about the parameters that governing the reactions, mixtures, dispersions and emulsions, to offer in every moment an homogeneity in performance and properties of each of manufactured lubricants.

Nowadays all of our products are manufactured and supervised under a Quality System according to **UNE-EN-ISO** standards. Also, we design and manufacture tailor-made products for certain customers that have homologated our specific preparations.

All our products involved an add value that consists in an immediate personal attention, either in situ or through **our customer attention telephonic line 902 123 453,** implementation of lubrication studies, advice to avoid unnecessary stocking, lubricant analysis, investigation and tailor-made products design, applied engineering, CE mark, training, de activity licenses, etc.

Our working team is highly qualified in engineering, chemistry, mechanic, economy, quality assurance and environment, with the only purpose to satisfy all our customers' needs in their multiple sectors and meet the Global Market demands, so close and competitive.

We are always evolving towards a bigger products' performance, and that's why we are in contact with the leader additive suppliers that made the differences between similar products, researching, developing and demanding better results in their raw materials. All of that in keeping with security, hygiene and environment demands



Range of Products

We manufacture more than 1800 Special and Precision Lubricants references of, as well as Processing Products and other Chemical Products (degreasers, soaps, additives, metalworking fluids...).

All of them begin their name with *elesa®*a, our trademark.

We cover all industrial activities: agricultural, food, automotive, cement plants, nuclear and electrical plants, pharmaceutical, metallurgical, mining, shipbuilding, chemical textile, plastic, glass, public works, etc.



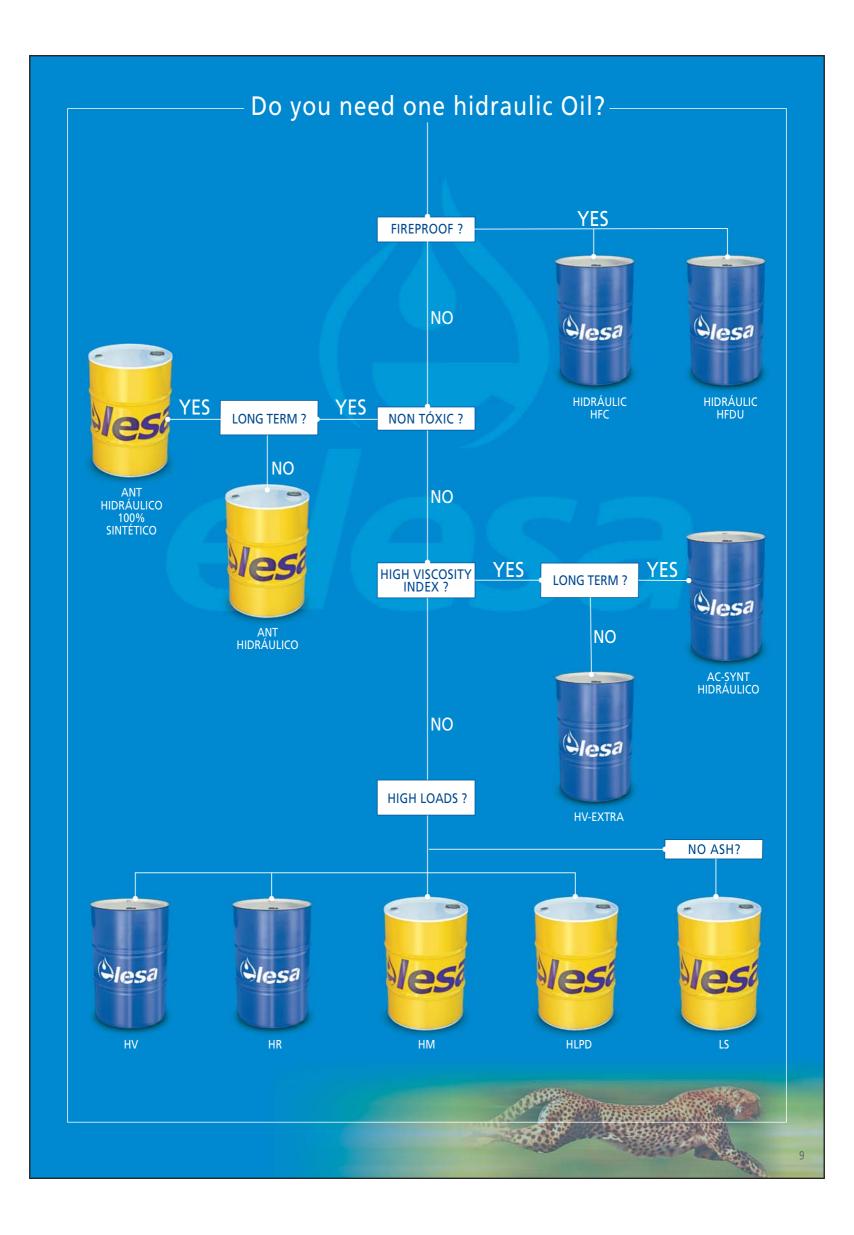
Aerosol Products	8
Hidraulic Oils	1
Gear Oils	1
Compressor / Tire Systems Oils	1
Motor Oils	1
Transmissions / Gearbox Oils	1
Thermal Oils	2
Oils for Chains, Bearings and Guides	2
Lubricants for Brake Systems	2
General Lubrication	2
Greases for Bearings, Rolling Bearings. etc. Temperature until 145℃	2
Greases for Bearings, Rolling Bearings. etc. Extreme Temperatures -70°C a 250°C	3
Greases for Gears, Chains and Wires	3.
Food Industy Grease. Clean Industries	3.
Pastas Antigripaje	3
Metalworking Fluids. Emulsifiables, Machining Oils, Drawing/Machining Oils	3
Metalworking Fluids. Oil for Demolding of Forge, Zamak, Glass, Stone	4
Antifreeze	4
Industrial Cleaning and Maintenance. Degreasers and Cleaners	4
Industrial Cleaning and Maintenance. Penetrating Oils, Cleaners and Protective	4
Green Industrial Maintenance. Biodegradables	4



aerosols products

<i>elesa®´s</i> Product	Working Temperature (°C)	General Features and applications
Dielectric Cleaner PRESTIGE	-	Dielectric degreaser with no residue. Recommended for degrease and machinery cleaning, switchboards, brakes, clutches and several pieces. Chlorinated products FREE. (520 c.c.)
Anti-Rust Protective Penetrating Oil NR	-50 to 50	Dielectric Lubricant moisture displacing in switchboards. Protects against corrosion, both in saline chamber and moist chamber, in corrosive, marine y salted environments .Finished parts and matrix protector. Engine cleaning. Spray - welding. Meets NSF-H2 .(520 c.c. y 210 c.c.).
Antioxidant Penetrating Oil SUPERSTAR	-50 to 50	High penetrability oil. Anticorrosive moisture displacing, developed to protect ferrous metals, finished pieces, machinery, tools and electrical equipment, etc facilitates de dismantling work. Very good compatibility with paints and joints. Dielectric and waterproof. (520 c.c.).
Penetrating Oil and Lubricant NR-ATOX	5 to 50	Penetrating oil, moisture displacing, dielectric, and protective. Eliminates squeaks and facilitates glides. Meets NSF-H1 (520 c.c.). For more corrosion protection, use elesa® NR NSF-H2 (220 c.c. y 520 c.c.).
Non toxic White Grease NT MULTITEC	-10 to 150	Snow-white synthetic grease with PTFE, adhesive and resistant to water washout. No pick and no stain. Anti-rust protection. Compatible with seals and elastomers. Meets NSF H1 (520 c.c.)
Extreme Temperature ALBA	-50 to 250	White and fluid synthetic grease with PTFE, designed for hot and cold extreme temperatures No pick, no stain, no smell. Especially for food industry, paper and textile. Meets NSF-H1 (520 c.c.).
Multipurpose Lubricant LUBRITEF	-10 to 150	Multi-application Nontoxic Lubricant with PTFE, for clean industries. Meets NSF-H1 (520 c.c.).
Non toxic Silicone FSA	-55 to 230	Non stick synthetic fluid, especially for chains and conveyor belts. Plastic film and paper cutting blades protector. Plastic and rubber mold release. Spray-welding. Meets NSF H-1 (650 c.c.)
Multipurpose E.P. Oil High Penetratión 28	-30 to 150	MOLY-LUBE with antioxidant, antiwear and pour point depressor. Applicable on cables, chains and small dimension bearings, submitted to high loads. Especially for difficult access points. (520 c.c.).
Bearings, Cables and Chains 38 - S	-15 to 150	Synthetic grease with no drop point, HIGHLY adhesive and resistant to hot water, acids and bases washout. With no asphalt neither plumb additives. High load capacity. Dust repels. (520 c.c.)
Teflon E.P. Grease ARIS - TF	-15 to 145	Cream colored multipurpose E.P. grease with PTFE. Application in rolling bearings, joints, ball-and-socket joints, wires and chains, open gears, spline, spreaders, cardan joints, long and high load spindles. Meets NSF-H2. (520 c.c.)
Screw Assembly ELECTRON AL-3	-20 to 700	Aluminum antiseizing for mounting threaded connections, for example: foundation drilling pipes. Electric contacts protective, prevents rust and electric arc formation. (520 c.c.)
Machining Drawing AE	-	Machining, drawing and metalworking oil. Strong E.P. additives, to achieve a better parts finishing and less tools wear. (520 c.c.).
Dry film lubricant (U.S.A.) LUBRI - BOND A	-200 to 200	Dry film lubricant imported from U.S.A., to protect threaded connections. Contains Molybdenum Disulfide and Graphite in a binder resin. Meets MIL-L-23398B. (330 c.c.)





hydraulic oils

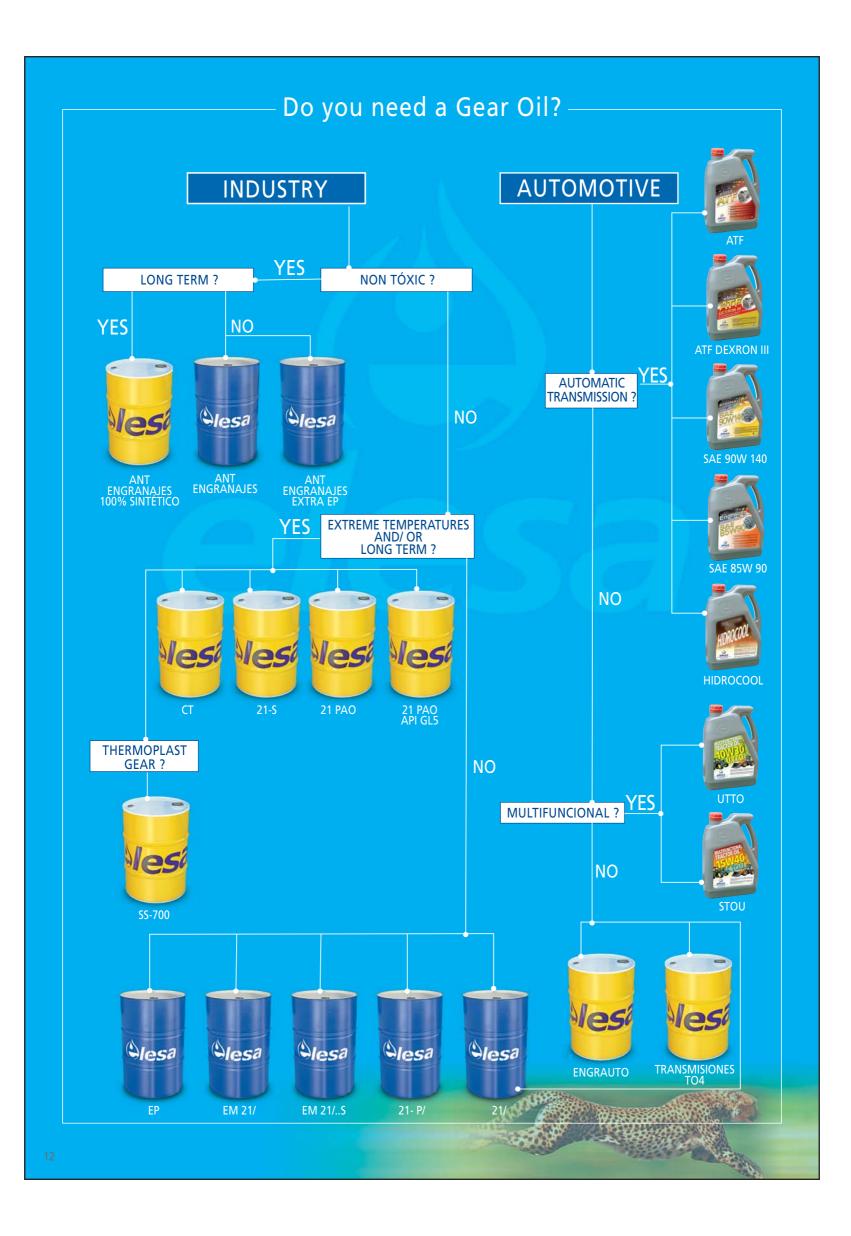
			MINE	RAL						
			Р	roduct´s	Descrip	tion				
<i>elesa®´s</i> Product	Va	riant		Var	riant Variant					
		ISO Viscosity (SAE) *40°C Viscosity) Visco	osity (SAE)		
AEG HYDRAULIC OIL					index, oxidation stability, corrosion and demulsibility, rication, general lubrication and total loss lubrication.					
AND GENERAL LUBRICATION		AEG-4					AEG			
LODRICATION	Hydraulic systems	46 (20)	·	total loss li	Ibricatio	n with antiqu	68 (. ,	loot: AFNOD NEE	
HIDRÁULICOS	48603-HL, DIN 5	1524 (HL).	ibrication and	total loss it	ubricatio	on, with antio.	xiuani d	additives. ivi	ieet: AFNOR NFE	
IIIDNAOLICOS		HIDRÁULIC				Н		LICO 68		
	Hydraulic systems	46 (20)	·	ıst antiwo	ar and a	ntifoam high	68 (A ENIOR NEE	
<i>HM</i> EP HYDRAULIC	48603-HM, DIN 5 HF-0, VICKERS M	1524 2 and 3	parts (HLP), C	INCINNAT S.	Y MILAC	CRON P-68, 6	9,70, D	ENISON HF	-2, HF-1 and	
SYSTEMS	HM-22	HM-32	HM-46	HM-		HM-100		HM-150	HM-220	
	22 (10)	32 (10)	46 (20)	68 (-	100 (30)		150 (40)	220 (50)	
HR E.P. HYDRAULICS	and low pour poi HR; DIN 51524 2	draulic oils with oxidation, corrosion and wear protection and with foam control, demulsibility, filterability of low pour point. Use it in hydraulic systems and hydrostatic system circuits .Meet: AFNOR NFE 48603-HM-R; DIN 51524 2 Y 3 PARTS (HLP); CINCINNATI MILACRON P-68, 69, 70; DENISON HF-2, HF-1 and HF-0; , VICKERS-2952-S / M-2950-S / I-286-S								
HIGH OUTPUT	HR-22	HR-32		R-46		R-68	HR-		HR-150	
	22 (10)	32 (10)		(20)		3 (20)		(30)	150 (40)	
HV & HV EXTRA HIGH OUTPUT HYDRAULIC	Hydraulic comma Systems where lo ELESA HV-EXTRA 68,69,70, DENISC HV-32 EXT	w viscosity var . Meet: AFNOI)N HF-2 and H	iation with hic R NFE 48603-H	h pressure IV, DIN 515 M-2952-S.	and ter 5 24 2 an	nperature is r	equired LP), CIN	d. The UPPE NCINNATY I	R range is called	
IV=150	32 (10)	10.1	46 (20)			68 (20)			00 (30)	
LS COMPRESSOR	Systems that requ	ire low carbor	naceous deposi	t content,	t, with good antiwear protection. Meet: Compressor DIN- AFNOR NFE 48603 (HM)					
AND ASHLESS	LS-32	LS-46	LS-68		100	LS-150		LS-220	LS-320	
HYDRAULIC HLPD HYDRAULIC DETERGENT		designed for soits. It has a half	systems where nigh detergent :ially recomme	for use the can be con and dispe nded for to (CLP), MAI	ntamina rsant cap ools mad N N-698- D 68	tion risk with pacity and tha chines. Meet t	ns and o water, at make	coolants, co es it does no	pooling fluids and ot separate from ements of: DIN	
ANT-HIDRÁULICO NON TOXIC	Hydraulic Oils wit circuits. They con H1(H1) with Reg	th medicinal g tain antioxida	nt, antirust, an	base, forr	nulated	for food indum additives. I	ıstry ap Vleet F L	plications a	and hydraulic	
HYDRAULIC		IIDRÁULICO		NT - 68 HI	DRÁULI	СО	AN	IT - 100 HID	DRÁULICO	
	46	(20)		68 ((20)			100 (3	30)	
				8						

hydraulic oils



SYNTHÉTIC

SYNTHETIC												
		Product's Description										
elesa®´s Product	Var		Variant			Variant						
			(Pot	ır Point.	Flash Po	oint)						
AC-SYNT HYDRAULIC	service life, optimi and very low pour oven chains lubric COMPRESSOR: D HYDRAULIC: DIN	hout ash, 100% Sylum antiwear prote point. Specially de ation, gears and e IN-51506-VCL Y VI -51524, PART 2, A	ction, high eveloped fo xtreme ter DL FNOR-NFE	oxidation or alternat mperature 48603 (H	and corro ive and ro s mechani V)	sion prot tary comp sms. Mee	ection, hig pressors, v t:	gh flash po acuum pu	oint, low vo Imps and bl	olatility owers,		
	AC-SYNT 46 HIDI 46 (130) [<-	RÁULICO AC-SYN 45245] 68 (1)		45245]	AC-SYNT 100 (13		RÁULICO 10245]	AC-SYNT 150 (13	150 HIDRA 30) [<-40	AULICO 0255]		
HIDRAULIC HFDU-46 FLAME	Flame retardant h	nydraulic oil. High n-pressure devices	corrosion	resistance	and chem	ical stabil	ity. Nonto	oxic and b	iodegradak			
RETARDANT			ŀ	IIDRÁULIC	IC HFDU-46							
HYDRAULIC		46 (187)			[-15310]							
HIDRAULIC HFC FLAME	Flame retardant h Applicable in high	nydraulic oil. High on- pressure devices	corrosion r n steel, pl	esistance astic or alu	and chemi uminum ex	cal stabil ktrusion i	ity. Nonto ndustries.	oxic and b	iodegradab	le.		
RETARDANT				HIDRÁU	LIC HFC							
HYDRAULIC	46 (187) [-47Not a]			
ANT-HIDRÁULICO SINTÉTICO NON-TOXIC	wear, and have ar	Oils for Hydraulic Systems, 100% Synthetics. Ideal for Food Industry. They protect against corrosion, rust and wear, and have an excellent relationship Viscosity-Temperature. Formulated to transmit power, to lubricate to protect hydraulic systems. Meet: FDA 21CFR 178.35 70 y NSF- H1(H1).								nd e and		
HYDRAULIC	ANT-32 HIDRA.	ANT-46 HIDRA.	ANT-68	HIDRA.	ANT-100	HIDRA.	ANT-150	HIDRA.	ANT-220 F	IIDRA.		
	32 (135) [<-60225]	46 (130) [<-55245	68 (130)	[<-45250]	100 (130)	[<-30250]	150 (130)	[<-30260]	220 (130) [<	-30260]		



gear oils

				MINE	RAL						
					Product's I	Description	n				
elesa®´s Product	Varia	nt			Variant			Variant			
	ISC) Visco	sity (SAE	E)		ISO Viscosity (SAE)					:)
AEG	Lubrication of gears, where de discharge	rolling b tempera	earing an ature is m	d hydra oderate	ulic circuits, s e, enclosed, s	steam turbir straight, hel	nes and v lical, co	vertical wa nical and	ater ti endle	urbiness ge	es, air compressors ears.
7120	AEG 100		AEG 15	0	AEG	220		AEG 320			AEG 460
	100 (80)		150 (85		220	` '		320 ()			460 (140)
ENGRANAJES	gear's systems in inc	ra-refined based oils, with a studied additives compensation that perfectly covers the nee <mark>ds of the general c</mark> ar's systems in industry, like steam turbines, chains, smooth bearings ,etc							of the general use		
MINERAL	E	ENGRANAJES 220						ENGRAN		320	
		220 (90)						320	()		
<i>EP</i> REDUCTORS	provide low friction	dustrial Gear Oils, with capacity to bear high shock loads (cylindrical, conical and helical provide low friction coefficient. Meet: U.S. Steel 224 and AGMA 250.04. and CINCINNATI 50 depending on viscosity. ELESA EP-100, 150, 220, 320, 460/S: With adhesiveness additional control of the cont						MIL	ACRON P-47 and		
KEDUCTOKS	EP-100 /100S	Е	P-150 /15	05	EP-220	/220S	EP-	320 /320	S		EP-460 /460S
	100 (80)		150 (85)		220	(90)		320 ()			460 (140)
EM 21/ ENGRANAJES Y COJINETES INDUSTRIALES	Industrial Gears E.P. Oil. Antioxidant, Antirust, Anticorrosion, Cylindrical, conical, helical and worm gears lubrication. They water contact. Meet: U.S. Steel 224; NSF H2, AGMA 9005.E(S1.53.101; Viscosity according to ISO 3448 and DIN 51519; 21/80-85-90-115-140-250/S: With adhesiveness additive (S).						pecially 51.517 ation IS	appropria part. 3 (C O L-CKC	ate w LP-40 (46 to	ith lo 5 a 6 8	w velocities and 80); David Brown
CARGADOS	EM 21/80	EM 2	1/85	EN	1 21/90	EM 21/115 EM 2			1/14()	EM 21/250
	100 (80)	150	(85)	22	20 (90)	320 () 460 (14			(140 <mark>)</mark>		680 (250)
21/	HIGH RANGE Multifu elesa® 21 with Moly								drolys	is, we	ear and corrosion.
GEARS	21/ 80 & 21/80	-SB	21/8	35 & 21	/85 -SB	21/ 90	& 21/9	0 -SB	2	1/ 14	0 & 21/140 -SB
	100 (80)			150 (8	35)	2	20 (90)			4	460 (140)
21P GEARS HIGH ADHESIVENESS	low velocity works. e LUBRICATES with aci	Lubricant for gears that support HIGH LOADS.VERY HI low velocity works. elesa® 21 P-900: Excellent perforn LUBRICATES with acids and water. Meet quality standa					kins of	crane fea ⁻	thers.	e, hiç eles	gh pressure and a® 21 P-4000 :
	21P 46	50			21P	900				21P	4000
	460 (14	460 (140)								400	00
ENGRAUTO	Gear automotive Oil for devices with helic	cal, cylir	ndrical, co	342N . nical, w	Gearboxes a orm and hy	and latest go poid gears.	eneratio			lubr	ication. Suitable
GEARBOXES		SAE 8							V140		
		220	(90)					460	(140)		



gear oils

ANT		Industrial Gear Oil for mach Pressure capacity. NSF appro	inery that works with food a oved for food industry. FDA -	and can be incidental food co -21 CFR. 178.3570 and NSF-H	ntact. It has a high Extreme 1, Register No. 136819.
GEARS		ANT-150	ANT-220	ANT-320	ANT-460
		150	220	320	460
ANT ENGRA	NAIF	Pressure capacity	inery that works with food a	and can be incidental food co	ntact. It has a high Extreme
EXTRA		ANT ENGRANAJES EXTRA EP-150	ANT ENGRANAJES EXTRA EP-220	ANT ENGRANAJES EXTRA EP-320	ANT ENGRANAJES EXTRA EP-460
		150	220	320	460

			S	YNTHETIC						
				Product's	Description					
elesa®́s Product		Variant		Var	Variant					
			osity (I.V.) Viscosity			(Pour Point.	Flash Point)		
21PAO	velocity and h	igh load cond 5.E02,David I	litions. For h		y elesa® 21 S.	lubrication in Meet: U.S. St e	eel 224, DIN 5	1.517 part.		
GEAR OILS		21 PAO 68		21 PAO			21 PAO 80W			
	68 (137)		.245]	128* (141)	[-39266]		` '	[-36266]		
CT-530 CT-570	lubricity and \	ng-lasting synthetic oil, ideal for High Temperature in chains and gears. Exceptional thermal stability, high oricity and Viscosity Index and very high load capacity. Compatible with elastomers. 3 to 4 times higher servic an mineral oils.								
CT-590		CT-530			570		CT-590			
	58* (192)		.250]	105* (188)	[-35278]		. ,	[-34280]		
CT-600	designed for a bronze worm-	Synthetic lubricant Oil with high load capacity. It has high thermal stability and high Lubricant power. Specially designed for all kind of mechanisms that work at high temperatures, speed reducers, Crown-worm gear with bronze worm-gear, vane vacuum-pump, calenders, oven chains, helical transmissions and worm gears. Non miscible with mineral oils. CT-600								
		320*	(199)			[-30.	.250]			
21S SPEED REDUCERS AND ROLLING BEARING AT HIGH	behavior at co	orrosive enviro ng bearings, o lesa® 21S/SB	onments and oven chains, is biodegra ontain MoS2		res. Ideal for sp ms range support	eed reducers s s up to 240°C.	The version e	verloading, lesa® 215/-		
AND LOW TEMPERATURES	21S80W85 /	80W85 -SB	21S 80W	90 / 80W90 SB	21S 85W115	/ 80W115 SB	21S 85W140	/ 80W140 SB		
TEIVIPERATURES	137* (137)	[-32316]	214* (132) [-32302]	300* (>115)	[-32302]	443* (125)	[-32302]		
SS-700	Industrial gea gear, cylindric	r E.P Oils. Cor al submitted t	rosion and V to high temp	Vear protection a peratures. Meet: I	nd high electro NSF- H1.	olytic and oxid	ative stability.	Use: Worm		
GEAR OIL HIGH TEMPERATURES		SS-700								
		(Fluid) [-20275]								
ANT- ENGRANAJES	Industrial gea gear, cylindric	dustrial gear E.P Oils. Corrosion and Wear protection and high electrolytic and oxidative stability. Use: ar, cylindrical submitted to high temperatures. Meet: NSF- H1.								
100% SINTÉTICO		IGRANAJES NTETICO		ENGRANAJES SINTETICO		IGRANAJES NTETICO		NGRANAJES INTETICO		
	150 (130)	[-46250]	220 (130	[-40250]	320 (130)	[-30200]	460 (130)	[-20200]		



compressor / tire systems oils

			M	INER.	AL						
				Pro	duct's [Descrip	otion				
elesa®´s Product	V			Var	iant		Variant			nt	
		ISO Viscosity *40°C Visco	y (I.V.) osity				\	/iscosic	dad ISO ((SAE)	
<i>LS</i> COMPRESSOR	Additivated to r	dditivated to maximize the work of rotative and alternative compressors, vacuum-pumps according to its visco leet standards: Compressor's DIN-51506-VDL and Hydraulic's DIN-51524 part 2 and AFNOR NFE 48603 (H							ng to its viscosity. NFE 48603 (HM).		
AND NO ASH HYDRAULICS	LS-32	LS-46	LS-	68	LS-1	00	LS-150	0	LS-220		LS-320
HYDRAULICS	32 (10) 46 (20) 68 (20) 100 (3				30)	150 (40))	220 (50))	320 ()	
<i>SN</i> PNEUMATIC	DENVER GARD	neumatic system's lubricant, with excellent E.P., antioxidant, antiwear and antirust features. Meets standards: ENVER GARDNER; INGERSOLL RAND (ROCKDRILL-433); JOY (RD01); SIDERURGIE FRANCAISE-FT.174; CHICAGO IEUMATIC (ROCKDRILL-1061); API GL-4.									
TOOLS		SN-6							SN-16		
		68 (20))					22	20 (90)		
<i>POLAR</i> REFRIGERATION	oxidation resist Anhydride (R-74	Refrigeration Compressor's Lubrication. Very low pour point, low flocculation point, chemical stability, voxidation resistance and high dielectric strength. Ammonia (R-717), Butane (R-600), Propane (R-290), Can Anhydride (R-744) and chlorinated gases like R12 y R22. Meets standard: DIN 51503 KA and KC.						ability, with 290), Carbonic			
COMPRESSORS		POLAR 4	46			POLAR 68					
		46 (20))			68 (20)					
ANT COMPRESORES	elesa® ANT-46	d Oils, with med and 68 COMPR et standards FD	ESORES	are appl	ied in sc	rew ro	tary and al	ternativ	e compre r No. 136	ssors, 826.	depending on
NON TOXIC OILS	ANT-46 C	OMPRESORES		ANT	-68 CON	IPRESO	RES	Α	NT-100 C	OMP	RESORES
	4	46 (20) 68							10	100 (30)	
ANT PNEUMATIC	Pneumatic syste antioxidant, an	em´s lubrication tirust and antiw	in Food. ear prop	Pneuma erties. N	tic cylino leet stan	ders, tu dards F	rbines and FDA-21 CFF	valves a R. 178.3	activation 570 and I	, etc. NSF- F	With good I1(H1).
NON-TOXIC OILS	ANT-32	NEUMÁTICO		AN	IT-46 NE	UMÁTI	CO		ANT-68	NEU	MÁTICO
		32 (10)			46 (20)			6	58 (20))



compressor / tire systems oils

Product's Description iant Variant Variant ISO Viscosity (I.V.) *40°C Viscosity (Pour Point...Flash Point) 100% Synthetic with Polialphaolefine (PAO's) base. Long life in rotary and alternative compressor and lubrication of oven chains, gear and mechanisms at extreme temperatures. Last generation

AC-SYNT COMPRESSORS

Compressor's Oil 100% Synthetic with Polialphaolefine (PAO's) base. Long life in rotary and alternative compressors, vacuum pumps and lubrication of oven chains, gear and mechanisms at extreme temperatures. Last generation additives. Optimal antiwear, oxidation and corrosion protection, high flash point and low volatility. Meet standards: DIN-51506 VCL y VDL.

AC-SY	NT - 46	AC-SY	NT - 68	AC-SYI	AC-SYNT - 100		NT - 150	AC-SYNT - 220	
46 (130)	[<-45245]	68 (130)	[<-45245]	100 (136)	[<-40245]	150 (130)	[<-40255	220 ()	[255]

POLAR-SYNT REFRIGERATION COMPRESSORS

100 % Synthetic Oil designed for refrigeration compressors and heat pumps. Excellent resistance to thermal oxidation and very low evaporation. Compatible mainly with ammonia (R717) and CO2.Unsuitable to work with sulfur dioxide (SO2).

POLAR-	SYNT 3	POLAR-	SYNT 4	POLAR-SYNT 5			
32 (135)	[-60>215]	46 (135)	[-55>220]	68 (140)	[-45>250]		

ANT-SINT COMPRESORES ATÓXICO NON TOXIC

Compressor's Oil 100% synthetic, ideal for Food Industry. Protects against corrosion, wear and rust. Lubrication of rotary compressors (ISO-46 y 68) and alternative compressors, blowers and vacuum pumps (ISO-100 y higher). Meet standards: FDA 21CFR 178.35 70 and NSF- H1(H1).

ANT-46	COMPR.	ANT-68	COMPR.	ANT-100 COMPR.		ANT-150 COMPR.		ANT-220 COMPR.	
46 (130)	[<-55245]	68 (130)	[<-45250]	100 (130)	[<-30250]	150 (130)	[<-30260]	220 (130)	[<-30260]

X-PFC V 100

COMPRESSORS

100% Synthetic Inert Lubricant perfluoropolyether type, with high thermal stability. For systems exposed to aggressive gases, even pure oxygen, chemistry and radiations, fireproof, high dielectric properties and good environmental features.

CUUM PUMPS	X PFC V 100						
	345 (135)	[-26260]					



motor oils

MINERAL elesa®'s ISO Viscosity (SAE) Monograde Oil for Diesel and Gasoline engines. Low ash content, antiwear and antioxidant properties, and very high resistance to shearing. Lubrication of atmospheric and turbocharged diesel motors with high velocity and **MOTOR** long-distance. API CF. **MONOGRADO** Monograde Oil for Diesel and Gasoline engines. Low ash content, antiwear and antioxidant properties, and very high resistance to shearing. Lubrication of atmospheric and turbocharged diesel motors with high velocity and **MOTOR J 300** long-distance. API CF. 20W50 15W40 Multigrade Oil for Diesel and Gasoline engines. Low ash content, antiwear and antioxidant properties, and very high resistance to shearing. Lubrication of atmospheric and turbocharged diesel motors with high velocity and long-distance 15W40 SHPD: API CH4/SJ; ACEA E5/E3; MB 228.3; VOLVO VDS-2; MAN M 2375; MTU Type 2; MACK EO-M; ZF TE-ML 04C; CUMMINS 20071/20072; RENAULT RD/RD-2. 20W50: API CF4/CF/SJ; ACEA A3/B3/B4/E2; MB **MOTOR SHPD** 228.1; VOLVO VDS; MAN M271. 15W40 20W40 20W50 Last generation Motor Oils. Four-stroke diesel motors with normal aspiration or turbocharged. Euro-4, Euro-3, and Euro-2 engines. Meet standards: API CI-4/CH-4/CG4/CF-4/CF/SL; ACEA E7-04/E5-02/E3-96#4/A3-02/B3-98#2/B4-02; GLOBAL DHD-1; MB 228.3 VW 501/5; MAN M3275; VOLVO VDS-2, VDS-3; MACK EO-M, EO-M plus; **MOTOR E7** CUMMINS 20071/76/78; 20072/77; MTU Type2; ALLISON C4. 15W30 E7 Last generation semi-synthetic Oil for four-stroke diesel engines with normal aspiration or turbocharged of a varied fleet. Antiwear and antioxidant properties, high viscosity index and good fluidity. Appropriate for Euro-4, Euro-3, and Euro-2 engines. Compatible with engines WITHOUT diesel particles filter and with engines equipped with EGR valve and selective catalytic reduction systems (SCR NOx). Meet standards: API CI-4/CH-4/CG4/CF-4/CF/SL; ACEA E7-04/E5-02/E3-96#4/A3-02/B3-98#2/B4-02; GLOBAL DHD-1; MB 228.3; VW 501/5; MAN M3275; VOLVO VDS-**MOTOR** 10W40 SHPD 2, VDS-3; MACK EO-M, EO-M plus; CUMMINS 20071/76/78; 20072/77; MTU Type2; ALLISON C4.



motor oils

	SYN [*]	ГНЕТІС					
		Product's Description					
elesa®´s Product	Variant	Variant	Variant				
	ISO Viscosity (I.V.) *40°C Viscosity		(Pour PointFlash Point)				
MOTOR 5W30	100% Synthetic "Fuel Economy". Low volati and corrosion resistance. High-end cars and Ford WSS M2C 913-B; Ford WSS M2C 913-A	direct fuel-injected diesel. N	osity Index, thermal stability and oxidation leet standards: API SJ/CF/EC; ACEA A1/B1;				
SINT		MOTOR 5W30					
	45* (191)		[-33>200]				
MOTOR 5W40 100%	Lubricant Oil Synthetic 100% with "excepti sedan and sports cars with direct fuel-inject 98; MB-Approval 229.3; VW 502.00/505.00;	tion diesel and gasoline. Me	et standards: API SL/CF, BMW Long Life-				
SINT		MOTOR SAE 5W40					
	86,97* (173)		[-33>210]				
<i>MOTOR VHPD</i> HEAVY DIESEL	Last generation Synthetic motor Oil, recommended for four-stroke diesel motors, with normal aspiration or turbocharged trucks, buses and public works machinery with heavy service and long periods of change. Euro-4, Euro-2, Euro-3 engines. Meet standards: ACEA E7/E5/E4; MB 228.5; MAN M3277; VOLVO VDS-3; SCANIA LDF; DAF HP 1/2; CUMMINS 20077/20076/20072/20071; MTU Type 3; RENAULT VI RXD.						
		MOTOR 5W30 VHPD					
MOTOR 10W40 UHPD	Recommended in diesel engines with overfeeding and heavy vehicles with high loads and long periods between drains and low emissions. Meet standards: API CI-4; ACEA E7-08; MB 228.3; MAN 3275; VOLVO VDS-3; RENAULT VI RLD-2; MTU Type 2; MACK EO-M PLUS; CAT ECF-1-a.						
100V40 UHPD	МОТО	R 10W40 UHPD 100% SINTÉ	TICO				
	(151) [-36		[-36>220]				
MOTOR 10W40 LOW SAPS 100%	Very high yield, recommended in heavy diesel engines with very low ash, phosphorous and sulfur content en (Low SAPS). Suitable for diesel engines WITH particles filter (DPF), continuous regeneration trap (CRT) and selective catalytic reduction systems (SCR). Meet standards: ACEA E6-08 / E4-08 / E7-08; DAF HP-2; MAN 3277 CRT; MAN M 3477; SCANIA LA; MB-Approval 228.51/228.5; JASO DH2-05; MTU Type 3.1; VOLVO VDS-3; Renault RLD-2/RXD.						
SINT	MOTOR 10W40 LOW SAPS 100% SINTÉTICO						
	85,1* (153)		[-33>228]				
мото 2т	Synthetic Oil for Two-stroke "scooters", 27 detergency power, "smokeless" technolog	r, with independent lubricati y and low ash content Stan	on (self-mix). High lubricating and dards: JASO FC; API TC; ISO-L-EGC.				
SINT		MOTO 2T SINT					
	8,9**		[-18>70]				
	* 40°C Viscosity	The motor Oil	[-18>/0] market is in constant evolution, check availabil for other viscosities and standars				
		MITP	OR THIS SHOP S				

transmissions / gearbox oils

			MINERAL							
	Product's Description									
elesa®´s Product	Vari	ant	Var	iant	Va	ariant				
	I	SO Viscosity (SA *40°C Viscosity	E)		ISO Viscosity (S	AE)				
ATF	Fluid for automati	Fluid for automatic and power shift transmissions. Meet specification DEXRON® II D.								
DEXRON II			DEXR 46	ON II (20)						
ATF Automatic		acity. Standards: GN	ters, turbo-clutches // DEXRON® II D; MI / 14.							
Transmissions			A ⁷ 46 (1							
ENGRAUTO	Automotive Gear Oils API GL-5 and MAN 342N. Gearbox lubrication and last generation differentiation cylindrical, conical, helical, hypoid and worm gears									
	ENGRAUTO SAE 75W80	ENGRAUTO SAE 80W80	ENGRAUTO SAE 80W90	ENGRAUTO SAE 85W90	ENGRAUTO SAE 85W140	ENGRAUTO SAE 90W140				
TRACTOR UTTO	Multifunctional Lubricating Oil for hydraulic systems, transmissions and wet brakes. Ford M2C 134 John Deere JDM 20C/D; Case New Holland MAT 3525/3526; API GL-4; ALLISON C4; Massey Ferg 1145 y M1141(permatran III) M1143, M1135; Denison UTTO HF-0 a HF-02; Eaton Vickers (Mobile systems-Brochure 694); Ford M2C86-B Massey Ferguson M1110/1127A & B/1129A; Caterpillar T MS 1204/1206/1207/1209; Kubota UDT; JCMAS HK P-041 & P-042; John Deere J20A/B; AGCO-Alli PowerFluid PF-821 XL; Ford ESN M2C 41B/48B/53A; White Q-1826; Volvo WB101; ZF TE ML 03E									
	UTTO ·			10W30						
	62* (10W30)									
TRACTOR STOU	Multifunctional Oil. ONLY ONE oil for the entire machine. Meet the specifications of the have to be lubricate: Multigrade Engine: API CF/CE/SF; CCMC D4; Mercedes Benz 227.1. Transmissions (manual and automatic): ZF TE ML 06 parts B&C ALLISON C4; API GL-4 Wet Brakes and hydraulic systems: STOU (MASSEY FERGUSON M1139 / M1144, JOHN DEE M2C159 B, FNH Material Specifications-82009201/2/3) and UTTO (MASSEY FERGUSON M JOHN DEERE J20C/D, FORD M2C134-D).				RE J27, FORD					
		STOU 10W30			STOU 15W40					
	Now tochnology of	65* (10W30)	ud machanisms with	high friction statis	114* (15W40)					
TRANSMISIONES	transmissions, diffe	rentials, torqué co .868.1; Allison C4	(off road); Caterpi	s, gearboxes, clutch Ilar TO-2 (obsolete	nes Meet standa	rds: Caterpillar TO-				
TO-4	SAE 1	0W	SAE	30		AE 50				
	36* (1	0W)	100	(30)	17!	5* (50)				



transmissions / gearbox oils

SYNTHETIC

elesa®'s Product

Product's Description

Variant Variant V

ISO Viscosity (I.V.)
*40°C Viscosity

(Pour Point...Flash Point)

ATF DEXRON III H

Transmissions and Power shift transmissions

Automatic and power shift transmissions. Fluid type DEXRON III. Excellent for modern automatic gearboxes. Meet standards: GENERAL MOTORS DEXRON III-H • FORD MERCON (97) • ZF TE-ML 2F/03D/04D/14A/17C • ALLISON C-4 • SCANIA (nivel) • M.BENZ 236.1 • VOITH 55.6335.34 (ex.G-607) • MAN 339 V1/Z1 (ex.339 F) • CAT TO-2 • VOLVO (Transmission oil 97341).

ATF DEXRON III

46 (10W) [-39..>200]

21 PAO 100% SINT API 100% synthetic Lubricant Oil. Special for axles and transmissions under severe work conditions and/or high loads. It reduces the work temperature. Allow changed for up to 300.000 km. Recommended in heavy and light vehicles or with hypoid gears that are under high efforts.

21 PAO 80W90 100% SINTETICO: **API GL-5, MAN 342 Typ S** 21 PAO 21 PAO 75W80, 75W85: **API GL-4 ENGRANAJES**

	75W80 ICO: API GL-4	21 PAO 100% SINTETI		21 PAO 80W90 100% SINTETICO: API GL-5		
65 (80)	[-42>240]	80 (85)	[-42>250]	75 (90)	[-42>250]	

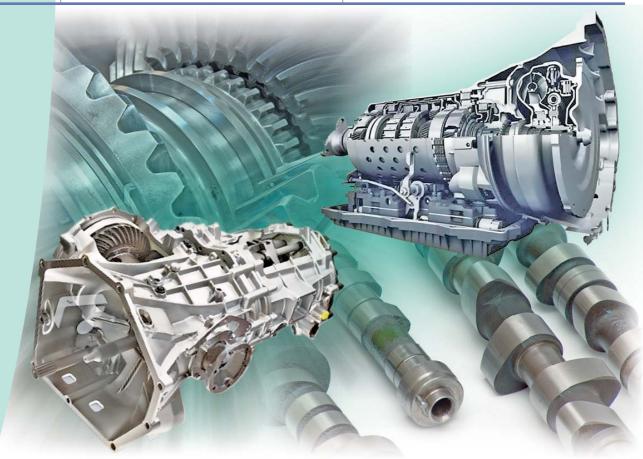
HIDROCOOL 100% SINTÉTICO Automatic

Transmissions

ATF that allows soft changes and high temperature works. Formulated to meet the viscosity and friction requirements in transmissions and power shift transmissions that work not only in normal conditions but also in very severe conditions .High-end hydraulic systems Not use is CVT type transmissions .Meet standards: JASO M315 Type 1A; Toyota T-IV; Nissan MATIC Fluid C/D/J; Hyundai; Subaru ATF; Isuzu BESCO ATF-III; G.Motors DIII-H; Ford MERCON®; Mitsubishi SP-III; HONDA ATF Z-1; Allison C-4 (level).

HIDROCOOL 100% SINTÉTICO

32* (174) [<-42..190]



thermal oils

MINERAL

elesa®´s Product

Product's Description iant Variant Variant ISO Viscosity (SAE)

Heat transfer Oils with ultra-refined paraffinic base. High heat transfer coefficient.

elesa® AC-TERM-X-68: Closed high transfer WITH forced recirculation, working between -12°C and 320°C. Boling point of 420°C.

AC-TERM-X
THERMAL OILS

elesa® AC-TERM-X-460, -800: Heat transfer baths WITHOUT forced recirculation and with work temperatures between -7°C and 290°C or 300°C respectively. Boiling point of 548°C.

AC-TERM-X-68	AC-TERM-X-460	AC-TERM	1-X-800
68 (20)	460 (140)	850* (2	250)

High-end of heat transfer with very high oxidation stability:

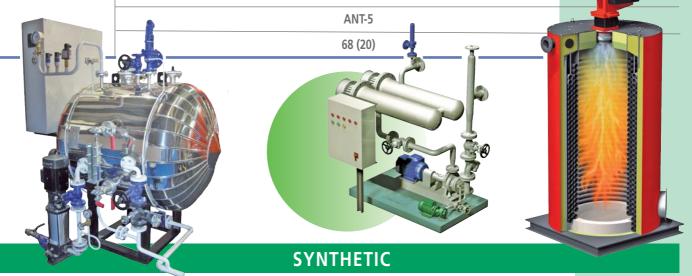
T THERMAL OILS

elesa® T-3: Closed circuits WITH forced recirculation, working between -12°C and 288°C. Boling Point of 350°C. elesa® T-5: Closed circuits WITH forced recirculation, working between -12°C and 320°C. Boling point 420°C. elesa® T-70: eat transfer baths WITHOUT forced recirculation and work temperatures between -7°C and 300°C. Boiling point of 548°C.

T-3	T-5	T-70
32 (20)	68 (20)	850* (250)

ANT-5 ATOXIC THERMAL

Heat transfer Oil with ultra-refined paraffinic base. Recommended for closed circuits with forced recirculation, working between -12°C and 320°C. Meet standards FDA-21 CFR. 178.3570 and NSF-H1(H1).



elesa®'s Product

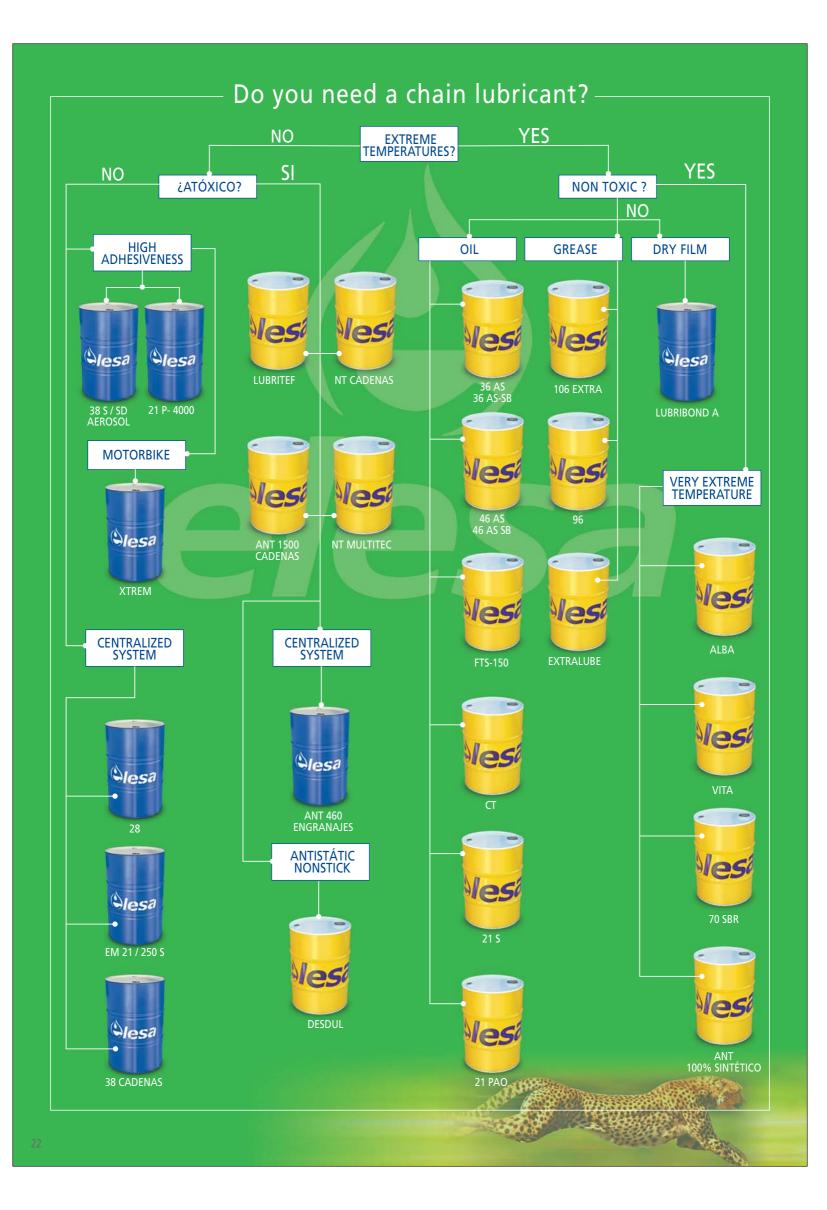
Variant Variant ISO Viscosity (I.V.) *40°C Viscosity (Pour Point...Flash Point)

ANT-TÉRMICO SYNT THERMAL

S

100% Synthetic heat transfer Oils with synthetic base, high oxidation stability and wide work temperature range. Close heat transfer circuits WITH forced recirculation, working between -40 and 340°C. Meet standard FDA 21 CFR 178.3570 and NSF-H1(H1). NSF-H1 Registration N° 140331.

THERMAL SYNTHETIC OILS	ANT-3 TÉRM	MICO-SYNT	ANT-5 TÉRM	MICO-SYNT	
	32 (135)	[<-60234]	68 (134)	[<-45	250]



oils for chains, bearings and guides

MINERAL

			Product's	Description			
elesa®´s Product	Vari	Variant Variant				Variar	nt
	١	SO Viscosity (SAE *40°C Viscosity	Ξ)		ISO Viscosity ((SAE)	
21-P BEARINGS	slow velocities. ele	ngs that suffer HIG sa® 21 P-900: Exce leet quality standa	ellent performance	on the skids of the			
HIGH ADHESIVENESS	21-P	460	21-F	900	2	1-P 40	00
ADITESTVENESS	460 (140)	900	* ()	4	000 (-	-)
MOTOSIERRAS	Lubrication of cha demulsibility and h	insaw and general nigh adherence.	lubrication, with h	igh viscosity index,	oxidation and	corros	on stability,
100-150							
LUBRITEF NONTOXIC OIL PTFE	Excellent lubricant with PTFE. Nontoxic. High adherence to the metallic surfaces, great penetration, water displacing, with anti-rust properties, antiwear and corrosion protection. Designed for all kind of Clean Industry. Meet standards FDA-21 CFR. 178.3570 and NSF-H1(H1). NSF Registration N°.136827						
OILFITE			12	25*			
EUROMAR	Synthetic Oil with high adhesiveness and penetration. Lubrication of wires and chains in saline environments. Does not polymerize at high temperatures.						
<i>SW</i> OIL FOR GUIDES	Anti-stick-Slip special for lubrication of guides and sliding of Tool Machines. E.P., Adhesiveness and Lubricity features, those avoid the Stick-Slip effect in Slow Movements. High Loads even in Vertical Guides because of its anti-drip behavior. High Oxidation Resistance. Also applicable in hydraulic circuits (elesa® SW 6) and in Hea Engine Systems (elesa® SW 16).						es because of
OILTON GOIDES		SW - 6			SW - 16		
		68 (20)			220 (90)		
16 GRAPHITE	16-B-Train gears a	n and C-Heavy. vipers and soft-load nd with high-load s liding and cursor el	sliding elements.		atures.		
SUSPENSION	16	- A	16	- B		16 - 0	
	32 (95)	[-12>210]	100 (95)	[-12>245]	>500* (95)		[-9>300]
ANT 1500 CADENAS		ems that suffer hig conical and helical.				en ge	ars and worm
ATÓXICOS			15	500			



oils for chains, bearings and guides

					SY	NTHE	ETIC							
						Pro	duct´s	Descript	Description					
<i>elesa®´s</i> Product			١	/ariant				Variant						
Houdet			ISO V *40	iscosity °C Viscos	(I.V.) ity				(Pc	ur Poi	ntFla	ash Poin	t)	
ELECTRO- GRAPH 18	Repels o	dust. Bear	ings an	d boilers	parts, o	oven chai	ns, pied	es forged	wastes an I, etc. eles ng mainte	a® 18E	B is app	olied in th	e lubr	
GNAFII 18		ELECTRO	-GRAPI	H 18F		ELE	CTRO-	GRAPH 18	3B		ELECT	ΓRO-GRAI	PH 18E	ВВ
	>70	* (180)	[- 45240		>320* (180)	[-30.	260]	Pasta	fluida	(180)	[-30	260]
26	Econom Ceramio	nic synthe c tyle Ind	etic oil f ustry. W	or lubrica Orks bet	ation of ween -	chains, g	guides a I 265°C.	and rollin	g bears a	t high t	tempera	atures. Hi	gh adh	nerence.
BEARINGS AND GUIDES				26							26 AS			
	290* () [-13.			3265]			130 (-	-)		[-36	5265]			
36 BEARINGS AND ROLLING BEARINGS		ubrication of high-end bearings. Rolling bearings and coils. No waste.					s and o	oven chains. Molybdenum disulfide dispersion in synthetic						
NO WASTE			7	0* (180)						[-	40245	[]		
36 AS/AS-SB	Lubrica The var	Lubricant for temper and painting Oven Chains. Excellent properties at HIGH and LOW TEMPERATURES. The variant elesa® 36AS/-SB does not contain MoS2.												
OVEN CHAINS	90* (85)							[-	35250]				
46 AS	Lubrication of Oven chains and bearings, excellent featur no waste and fumes. Long-lasting. elesa 46 AS-/SB don't				ires again ít contair	ıst oxidati n MoS2.	on, ver	y high h	nydrolytic	stabili	ty and			
OVEN CHAINS WITHOUT FUMES		46 AS ar	nd 46 A	S-SB		46	AS-C ar	nd / AS-CC and / AS-CC-SB			SB			
	14	0* (140)		[-25326	[i]	254* (1	140)	[-33.	310]	4	100 (145	5)	[-30	300]
FTS-150		nic synthe nce and r							Good pen	etration	n and m	noisturizir	ng pow	er, high
			1.	50* (114))			[-20246]						
570 590	Synthet mineral	ic oil app l oils neit	licable her oth	in lubrica er synthe	ation po etic oils.	oints und Work Te	er high mperat	tempera ture: -30 t	tures, no to 200°C.	waste ·	formati	on. No m	iscible	with
HIGH TEMPERATURE				570					/	- 1	590			
OILS	Lubulaa	105* (18		lant that		0274]			170* (196				1276]	
X-PFC PERFLUOROCARBON	pumps, Oxygen	because	of its h hly corr	igh chen osive pro	nical sta oducts.	bility an	d very	low evap	electrical oration lo and FDA	evel. Su	iitable 1	for works	with	
LUBRICANT							X-	PFC						
			3	45* (135)						[-	25260]		
ANT-POLAR	approve with joi	ed for FD	A 21 FC aints. Lo	R 178.35 ubricatin	70 for i	incidenta or Chains	l food that wo	contact. N ork under	lustry. Syr Vleet stan very low	dard N	SF-H1. \	Very good	d comp	atibility
CHAINS		POLAR		POLAR		POLAR enas		8 POLAR lenas	ANT-100 Cade		ANT-15 Cad	0 POLAR lenas	ANT-22 Ca	20 POLAR denas
	15	[-6080]	32	[-60225]	46	[-55245]	68	[-45250]	100 [-	30250]	150	[-30260]	220	[-30260]

oils for chains, bearings and guides

		SYNTHETIC		
		Product's	Description	
elesa®´s Product	Vari	ant	Variant	
rroddet	ISO Visco *40°C \	osity (I.V.) ⁄iscosity	(Pour PointFlash Po	oint)
BIO LUB X-46	Synthetic biodegradable Oi works.			
	46 (190)	-50 (220)	
FSA ANTISTICK	Antistick non-colored Synthe Antistick in hot cutting blad- process. Available in aerosol. allows easy pulverization. M	chains. relding 00 that		
SYNTHETIC FLUID	FSA-	·100	FSA-	1000
	68 ()	[-55>275]	765 ()	[-50>320]

lubricants for brake systems

MINERAL									
		Product's	Description						
<i>elesa®´s</i> Product	Variant	Variant							
	ISO Viscosity (SAE *40°C Viscosity	i)			(SAE)				
HIDROFRENOS	Excellent yield in hydraulic systems ar hydraulic systems and ALLISON C4	nd automatic trans	missions. y VICKER	S M-2950-S for	mobile au	tomatic			
		100	(20)						
TRACTOR UTTO	Multifunctional Lubricating Oil for hydraulic systems, transmissions and wet brakes. Ford M2C 134 A/B/C/D; John Deere JDM 20C/D; Case New Holland MAT 3525/3526; API GL-4; ALLISON C4; Massey Ferguson CMS 1145 y M1141(permatran III) M1143, M1135; Denison UTTO HF-0 a HF-02; Eaton Vickers (Mobile Hydraulic systems-Brochure 694); Ford M2C86-B Massey Ferguson M1110/1127A&B/1129A; Caterpillar TO-2; Case MS 1204 / 1206 / 1207 / 1209; Kubota UDT; JCMAS HK P-041 & P-042; John Deere J20A/B; AGCO-Allis-Chalmers Power Fluid PF-821 XL; Ford ESN M2C 41B/48B/53A; White Q-1826; Volvo WB101; ZF TE ML 03E y 05E.								
	62* (10W30)								
TRACTOR STOU	have to be lubricate: Multigrade Engine: API CF/CE/SF; Ci Transmissions (manual and automat Wet Brakes and hydraulic systems: S	Engine: API CF/CE/SF; CCMC D4; Mercedes Benz 227.1. ns (manual and automatic): ZF TE ML 06 parts B&C ALLISON C4; API GL-4 and hydraulic systems: STOU (MASSEY FERGUSON M1139 / M1144, JOHN DEERE J27, FORD FNH Material Specifications-82009201/2/3) and UTTO (MASSEY FERGUSON M1143 & M1135,							
	STOU 10W30			STOU 15W4					
	65* (10W30)			114* (15W	,				
TRANSMISIONES TO-4	New technology oil for machinery an transmissions, differentials, torque co 4; Komatsu KES07.868.1; Allison C4 S, Eaton-Fuller*, Dana* o Tremac/T	nvertors, wet brake (off road); Caterp i ГС* (* Where it is a	es, gearboxes, cluto I llar TO-2 (obsolet sked for TO-4).	hes Meet star	dards: Cat lid, Vicker	erpillar TO-			
10-4	SAE 10W		E 30		SAE 50				
	36* (10W)	100	(30)		175* (50)				

lubricants for brake systems

SYNTHETIC

elesa®´s

Product's Description

riant

Variant

ISO Viscosity (I.V.)
*40°C Viscosity

(Pour Point...Flash Point)

LIQUIDO DE FRENOS-DOT 3, 4 & 5

Hydraulic brakes systems and clutches at automotive industry. DOT 4 meet standards: UNE 26-109-88 certified by INTA, SAE J-1704, FMVSS N-116 DOT 4, ISO 4925

LIQUIDO DE FRENOS DOT - 3, -4, -5



general lubrication

MINERAL

Product's Description

elesa®'s Product

Variant

Variant

Variant

ISO Viscosity (SAE)
*40°C Viscosity

ISO Viscosity (SAE)

AEG-100

100 (30)

AEG HYDRAULIC AND GEARS Lubricants for gear lubrication, rolling bearings and hydraulic circuits, steam turbines and vertical water turbines and air compressors where the discharge air temperature is moderate, close straight gears, helical, conical and worm gears.

AEG-68

68 (20)

AEG-22 AEG-32 AEG-46 22 (10) 32 (10) 46 (20) AEG-150 AEG-220 150 (40) 220 (50)

ANT

General lubrication oils, hydraulic systems, gears and compressors without extreme conditions and loss lubrication. Approved for NSF for Food Industry. **FDA-21 CFR. 178.3570 and NSF-H1 registration N°. 136819.**

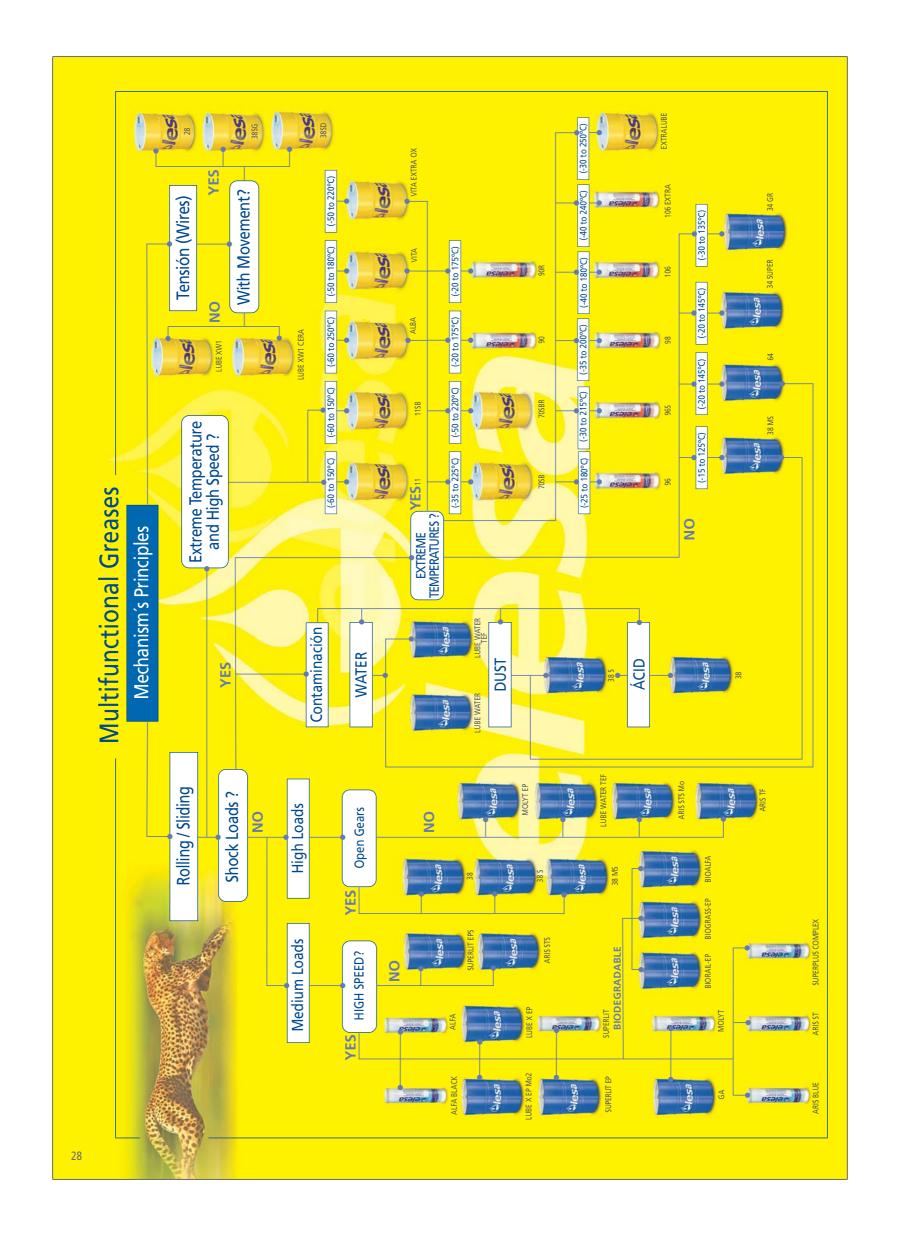
ANT-5 ANT-8 ANT-10 ANT-16 68 (20) 100 (30) 150 (40) 220 (90)



general lubrication

			SYN	THETIC					
		Product's Description							
elesa®´s Product		Variant				Var	iant		
		ISO Vis	cosity (I.V.) Viscosity			(Pour Poin	tFla	sh Poi	nt)
ANT 100% SINTÉTICOS	oven chains, f H1(H1) and F	orming and st DA 21 CFR 17	amping and ro 8.3570.	SINT	ors. (elesa® /	nperature (-60 ANT-5 SINTETIO	CO) . M	ANT-	ndards NSF- -30 SINT
FSA ANTISTICK SYNTHETIC FLUID	Synthetic nonstick colorless fluid. Lubrication and maintenance of rubber, mechanisms and plastic gears, no in blades for hot cutting and demolding in plastic forming. Anti-projections in welding. Available in aerose elesa® FSA PULVERIZABLE is a variant of elesa® FSA-100 that facilitates spray it. Meets standards FDA 21CFR 178.35 70 and NSF- H1(H1).							gears, nonstick	
	68	3()	[-55	>275]	76	5*()		[-50	>320]





greases for bearings, rolling bearings, etc. Temperature until 145°C **Product's Description** elesa®'s Welding Load **Product Dropping Point Working Temperature Velocity Factor NLGI** 4 Ball test (kg) Range (°C) (°C) Grease with good penetration and high antirust protection. Product developed mainly for padding and protection of prestressing steel wires. Applicable at room temperature. Meet Ministry of development's standard ISO HP8-LUBE-XW1 96 and the euro-standard EN 1537. **LUBE XW-CERA-B** nivertical. Para usos industriales LUBE XW-CERA-**Tabletas CERA-LD240-1** e desvaste y favorece el deslizamiento. Producto destinación a protection devales in astille os receive de la lor osión Multipurpose lithium Grease with high mechanical work resistance, high pour point and excellent stability to aging. Ideal for general industry lubrication. Works in wide velocity range. Medium load and temperature. ALFA ALFA & **BLACK** contains Extreme Pressure solid additives. ALFA BLACK 250 / 400 250 / 400 400.000 -10 to 145 206 General purpose grease, with extra E.P. additivation. High resistance to mechanic Works, high dropping point, aging stability and high adhesiveness. General lubrication of excavators and aggregate plants. LUBE-X-EP Multipurpose lubricant Grease for industrial use and automotive industry. Stable to oxidation. High antirust protection. Meet standard NSF-H2(H2). It is recommended 1 or 0 consistency for centralize systems **SUPERLIT** 500.000 206 315 -20 to 145 Grease for bearings and rolling bearings under high continued loads, vibrations and shock loads. Industrial and automotive use. Stable to oxidation. High antitrust protection. Also available in NLGI 3, 1, 0, 00, 000. Meets standard NSF-H2(H2). Variant SUPERLIT EPS for steel industry, cement industry, public works, etc. SUPERLIT EP/2 **SUPERLIT-EPS** 206 400 500.000 -20 to 145 300.000 -20 to 145 206 400 Technical Grease for industrial and automotive use. Excellent for applications where high temperatures are reached, but are not SUPERPLUS COMPLEX TECH due to the efforts but due to the environment where it works. High resistance to oxidation and E.P. Meets standard NSF-H2(H2). 500,000 250 Multipurpose Extreme Pressure grease for industrial use (steel, mining, chemistry, automotive, navigation, etc.) Advisable in plain and rolling bearings under high loads, shocks and vibrations. Green color. Meets standard NSF-ARIS - ST H2(H2). 500.000 -20 to 145 Multipurpose Extreme Pressure Grease with low and medium velocities, for industrial use (steel, mining, chemistry, ARIS - STS automotive, navigation, etc.) and automotive. Advisable in plain and rolling bearings under high loads, shocks and vibrations. Green color. Meets standard NSF-H2. elesa ARIS STS-MoS2 is a variant that contains Molybdenum ARIS STS Disulfide as solid security Extreme Pressure additive. MoS2 300.000 206 >400 Grease with high PTFE content. Hydrophobic, stable to oxidation and supports shock loads and long-lasting lubrication periods. Excellent yield in screw. Ideal for industry and automotive. Meets standard NSF-H2(H2) **ARIS-TF** 500,000 Lithium lubricating Grease and Extreme Pressure for industrial use and automotive. Specially indicated in points with strong shock loads and loaded sliding movements. High adhesiveness and resistance to wash with water. Excellent for bearings, guides, caps, working mechanisms at slow to medium velocity for any kind of industry. Meet standards NSF-H2 and DIN-51825:KP2N-20. **ARIS BLUE** 300.000 -20 to 145 Multipurpose E.P. Grease. It contains antirust additives, very active and oxidation inhibitors. Advisable in plain and rolling bearings under high loads, vibrations and shocks. With Molybdenum Disulfide as a security additive, **GA** that gives it it's color. Meet standard NSF-H2(H2). 500.000 Higher grease for automatic systems in Automotive and Public Works Industry. Formulated with Extreme Pressure additives and Molybdenum Disulfide. High protection against corrosion and oxidation resistance. **MOLYT** 500.000 Grease ideal for mechanisms where Extreme Pressure and water washout are required. Excellent for plain and rolling bearings under high loads, vibrations and shocks. Steel industry, mining, chemistry, navigation, cement **MOLYT EP** industry, automotive and Public Works Machinery.

206

620

-20 to 145

500.000

greases for bearings, rolling bearings, etc. Temperature until 145°C

elesa®'s		I	Product's Descriptio	n							
Product	NLGI	Dropping Point (°C)	Welding Load 4 Ball test (kg)	Velocity Factor	Working Temperature Range (°C)						
ELESA 24 EP	loads, shocks, overloa	Precision and Extreme Pressure Lubricant for Heavy Industry that needs extraordinary properties to resist high oads, shocks, overloads, water contamination and temperature changes between -25 and 120°C. Special interest in Steel industry, cement, navigation, mining and chemical.									
	2	185	700	500.000	-20 to 145						
ELESA 34	Grease for universal u	ise, formulated to lengt s, universal joint couplir	hen three or four time ngs, etc.	s the duration of lubric	ation in maintenance						
	2	206	800	500.000							
ELECTRO- MOLY 34	in high responsibility	ligh load capacity and excellent stability. Meets the most severe services in automotive and industry. Application high responsibility points, with difficult access, long lubrication cadences and LIFETIME LUBRICATION. High extreme Pressure additives content. Meets: NSF-H2 (H2) and MIL M 7866.									
SUPER	2	206	800	500.000	-20 to 145						
64	wet environments or multiplied by 10. Exce	Adhesive and HYDROPHOBIC. Developed to hard Works in mechanisms under long-term lubrication periods, in wet environments or with alkaline or acid steams or in contact with coolants. The lubrication intervals are multiplied by 10. Excellent for bearings and rolling bearings, automatic car washes, bottling plants, canning, poultry slaughterhouses, etc. Meets standard NSF-H2(H2).									
	2	>180	800	500.000	-20 to 145						
LUBE WATER LUBE WATER TEF	as its EP properties. NELESA LUBE WATER	Formulated for working in all kind mechanisms with water, keeping its stability and consistency grade, as well as its EP properties. Meet NSF-H2(H2) and standards MIL-G-24139, COD-OTAN-G-450 and DEF-STAN-91-28/1. ELESA LUBE WATER TEF variant of LUBE WATER that contains PTFE, providing greater water resistance and better Extreme Pressure features. Excellent results in Steel industry.									
	2	190	400	300.000	-20 to 135						
BIORAIL - EF		ilway wheels and needle nge. It protects against	e changes. It supports h wear and doesn't cont	ligh loads, Dust, Water aminate environment.	, UV light and a Available in NLGI 2						
BIOGRASS-E	Biodegradable general antirust protection.	al lubrication grease. Wa	ge temperature range.	It supports works with	water and has a good						
BIOALFA		al lubrication grease. Watency. Lubrication in ne		public Works, agricult	ure, and renewal						



greases for bearings, rolling bearings, etc. Extreme Temperature,-70°C to 250°C

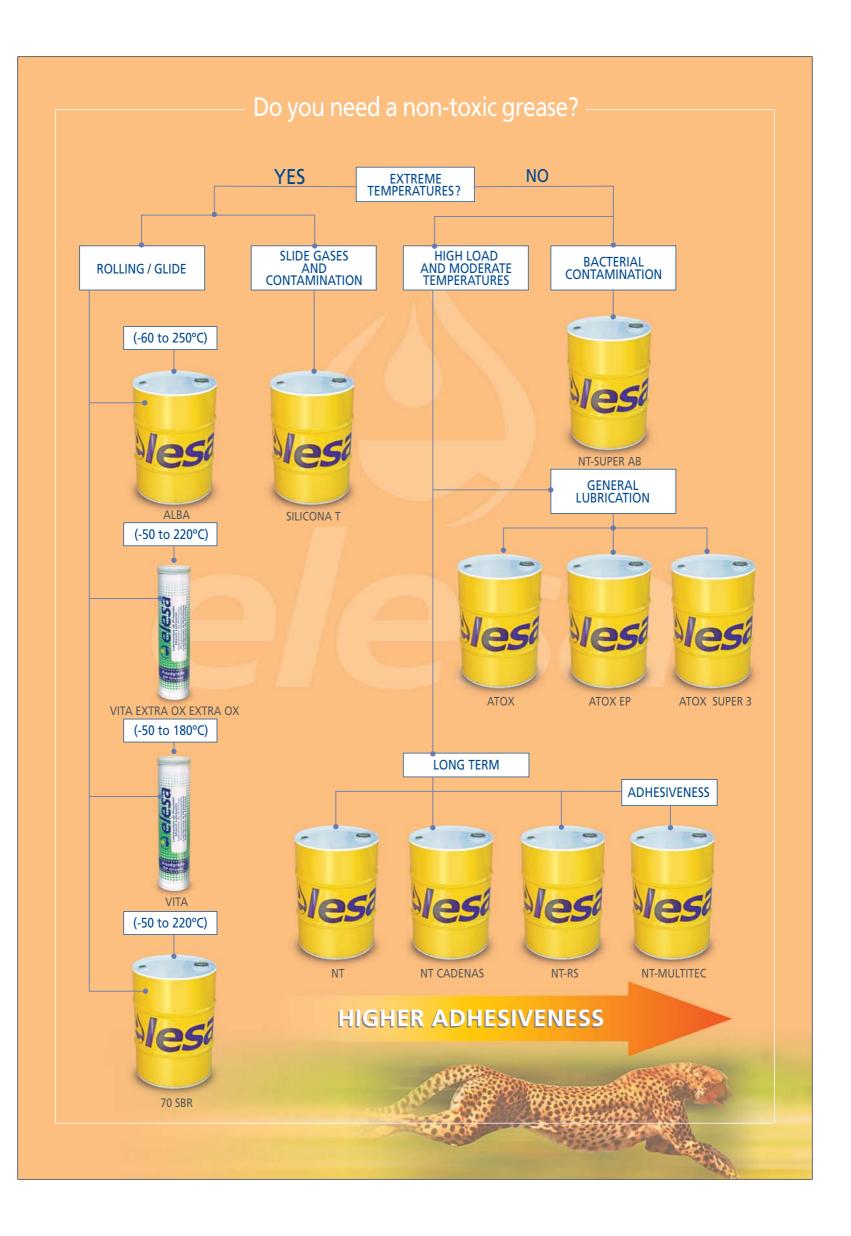
-104	Product's Description					
elesa®ś Product	NLGI	Dropping Point (°C)	Velocity Factor	Working Temperature Range (°C)		
ELECTRO- MOLY 11	Bearings and mechanisms under very low temperature and/or very high revolutions. Precision mechanisms packed for life. Cream color. Its variant ELESA ELECTRO-MOLY 11 contains MoS2 (Molybdenum Disulfide).					
& 11 SB	2	>250	>1.000.000	-70 to 150		
VITA	Excellent grease for extended lubrication and that has top up with extreme temperatures and high loads, in rolling bearings and mechanisms where can be incidental contact with food. Ex.: bottle packaging, can closers, pelleting feed, etc. Meet standard NSF-H1 (H1) with N°.140329 and FDA-21-CFR.178.3570.					
	2	>260	600.000	-50 to 180		
VITA EXTRA-OX	in rolling bearings and mech packaging, can closing mach	Excellent grease for lubrication at high temperatures and with VERY HIGH LOADS and high steam concentration in rolling bearings and mechanisms where can be incidental contact with food. Ex: Decanters-centrifuges, bottle packaging, can closing machines, pelleting feed, etc. Meet standard NSF-H1(H1) and FDA-2 1-CFR.178.3570.				
	2	>260	500.000	50 to 220		
ELESA 70-SBR	Designed for systems that wo low TEMPEATURES. Excellen Centrifuges, oven chains and	t for sliding bearings, rolling	bearings, joints, gears, can c	losing machines, etc.		
	2	>300	500.000	-50 to 220		
ALBA	Designed for critical points with extreme temperatures, free of waste. High PTFE content, Does not sag neither smear, being very appropriate in industrial bakery chains, textile industry and air painting chains Meets standards NSF-H1 (H1) and FDA-21-CFR.178.3570. Available in aerosol.					
	000	-	-	-60 to 250		
Synthetic Grease free of waste. High content in MoS2 (Molybdenum Disulfide). Capable to wit Resistant to gaseous hydrocarbons and chlorinated solvents. Compatible with all elastomers. Su connections in city - gas. ELESA 70-SB is White and does not contain MoS2						
	2	>300	200.000	-35 to 225		
90	Lubrication of bearings, rolling bearings, mechanisms at medium-high or high temperature with frequent lubrication. Water and aggressive pollutant resistant. Contains MoS2. Other available consistencies NLGI 3, 1, 0. Formulated according to DIN 51825-KPF2P-20 and ISO-L-XBEFB-2					
	2	>300	100.000	-20 to 175		
90-R	Variant of Elesa 90 with higher velocity factor. Has very good E.P that gives extra protection against shocks and vibrations. Specially designed for centrifugation systems in steel industry.					
	2	>280	500.000	-20 to 175		
90 TEF	Grease for low/medium velo and concentrated alkaline o	cities and high loads thanks r acid solutions washed. High	to its PTFE particles. Very adh n corrosion protection.			
	2	>300	100.000	-20 to 175		
ELECTRO -MOLY 96 ELECTRO	Lubricant grease without dropping point that allows it to work with adverse conditions of temperature, pressure and corrosive environments. Excellent for bearings and rolling bearings under high temperatures, rolling mills in Steel industry. High oxidation resistance. High load capacity. Corrosion protection. Ideal for ovens like paper dryers and rolling bearings and oven extractors in cement industry and eccentric in corrugated cardboard, where there is also a shock work. Pressure valves in thermal power plants, glass industry, etc. High content in MoS2. ELESA ELECTROMOLY 96S has more additives, putting up with temperatures until 215°C.					
-MOLY 96S	2	>300	100.000	-25 to 180		
ELECTRO -MOLY 98	High-Temp grease without dropping point. Formulated specially for mechanisms and rolling bearing lubrication, oven chains for paint drying, dryer batteries in paper mills, in a wide temperature range. Very high corrosion and oxidation protection. Enhanced with high MoS2 content. Meets standards MIL-G-23549-C, OTAN Code TG-01					
(EE)	2	>300	250.000	-35 to 200		

greases for bearings, rolling bearings, etc. Extreme Temperature,-70°C to 250°C

elesa®'s Product	Product's Description				
	NLGI	Dropping Point (°C) Velocity Factor		Working Temperature Range (°C)	
ELESA 106	Lubricant with minimum evaporation at high temperatures, does not cracking neither leave gummy residues, and has a high load capacity. Contains MoS2. Ideal lubrication of electric fans in furnaces and glass camps. Biodegradable grease.				
	2	>260 400.000		-40 to 240	
ELESA 106 EXTRA	VERY RESISTANT grease at HIGH TEMPERATURES. Specially developed for rolling bearings in ovens with long-lasting lubrication periods. Free of waste and lacquer. Pass standard DIN-KPF-E-2-U-40.				
	2		200.000	-40 to 240	
EXTRALUBE	PTFE grease, able to work co solvents attacks, and highly lubrication, rollers, sheaves	c continuously for a year at 250° C. Stable at Works with pure Oxygen, chlorinated organic hly corrosive products. Has PTFE, E.P properties. Excellent for ball rolling bearings ves of drying tunnels, etc. Meets standard NSF-H1(H1) .			
	2-3	>300	300.000	-30 to 250	

grease for gears, chains and wires

					040404	
elesa®'s	Product's Description					
Product	NLGI	Dropping	Point (°C)	Working Temper	rature Range (°C)	
28	percentage. Applicable in wires, high	Superfluid Grease with additives antioxidant, antiwear, EP, pour point depressor and high Molybdenum Disulfide percentage. Applicable in wires, high loaded chains and rolling bearings with reduced dimensions. Because of its high penetrability, it is ideal for difficult access points. Available in aerosol.				
	'		-		o 150	
ELECTRO MOLY 34-GR	required the use of grease. It allows	Synthetic Grease expressly formulated for gearbox lubrication, in which, because of its special features, it is required the use of grease. It allows lower the working temperature in the gearbox approximately in 20-25%.				
WOLT 34-GK	0-00	1	96	-30 t	o 150	
38	Grease for lubrication of wires, chains and open gears. Does not attract dust. Very high adhesiveness and very high load capacity, for outside Works: dredging, public Works, cement industry, shipbuilding, crane gears turning (* Drain Temperature). 38 CADENAS is a variant of ELESA 38 with higher fluidity for an easier application.					
	0	8	0*	-10 1	o 50	
38-MS 38-MSD	Lubricant Grease for chains and gears with Molybdenum Disulfide, with high adhesiveness, high EP, resistant to work and washes with water. Excellent for open gears and STONE CUTTING chains. High yield in crane skids lubrication. Excellent corrosion protection, even in saline environment. elesa® 38-MSD is a variant that allows being applied with pulverization.					
	0 -1		72	-15 to		
38 S	Very adhesive, resistant to hot water, acids and bases washes and very good lubricity and load capacity. Does not attract dust. Open gears, wires, chains and guides with slow movements under high loads. Recommended for crow crane and crane in blast furnaces and shipbuilding industry. Also available in aerosol. elesa® 38 SD is a variant of 38S but more fluid for an easier application in chains and wires.					
	2	Does no		-15 to 150		
38 SG	Recommended for mechanisms under the most severe working conditions in Cement industry, Quarries, Public Works, Shipbuilding machinery, Stone cutting chains and drag slides on cranes. Allows visualize the mechanisms. elesa® 21 P 4000-SB for an oil application.					
	1/2	172	/190	0 to 125 / 0 to 135		
ARIS-TF		Grease with high PTFE content. Hydrophobic, stable to oxidation and withstand shocks loads and long-lasting lubricating periods. Available in aerosol. Meets standard NSF-H2(H2).				
	2	190	500	500.000	-20 to 145	
LUBE WATER		With PTFE, providing greater water resistance and better Extreme Pressure features. Excellent results in Steelmaking. Meets standard NSF-H2(H2) and MIL-G-24139, COD-OTAN-G-450 and DEF-STAN-91-28/1.				
	2	190	400	300.000	-20 to 135	



food industry grease Clean Industries

elesa®'s	Product's Description				
Product	NLGI	Dropping Point (°C)	Velocity Factor	Working Temperature Range (°C)	
BIANCA	Non-toxic white-translucent Grease, without drop point, versatile for multiple points of application in industry, especially in food sector. Machinery lubrication in clean industry. Free of solid lubricants: avoids the clogging of lubricating circuits. Multipurpose general lubrication. Transport sheaves, bottling, guides, zippers, packaging clips, etc. Meets NSF-H1 y FDA 21 CFR 178.3570 and it is registered in In S-H1 with N°. 1795810.				
	2	>260	600.000	-25 to 150	
ATOX ATOX EP	Multifunctional grease because of its relation quality-price-versatility. High EP, stable to oxidation and good corrosion protection. Oily White and with Teflon, do not stain or odor-producing. Ideal for all kind of industry, multiple applications. <i>elesa®</i> ATOX meets standards NSF-H1(H1) and FDA-21-CFR. 178.3570 and it is registered in Ins-H1 with N°. 1795806. Variant <i>elesa®</i> ATOX EP with higher EP.				
7 11 071 21	2	>260	500.000 300.000	-25 to 150	
ATOX GR ATOX SUPER 3	industry and especially for fee	Non-toxic greases with PTFE and without dropping point, prepared for withstand high loads. Ideal for all kind of industry and especially for feed pelleting, decanters, centrifugal machines and pharmaceutical industry. Meets standard NSF-H1(H1) and FDA-21-CFR.178.3570.			
	1/3	>260 / >260	500.000 / 500.000	-25 to 150 / -25 to 150	
NT	Grease for lubrication of rolling bearings and mechanisms in food industry. Excellent EP features and protection against corrosion. Feed pelleting, cutting machines Meet standard NSF-H1(H1) with Registration N°. 140324 and FDA 21 CFR 178.3570. Available also in NLGI 1, 0, 000.				
	2	>260	500.000	-30 to 150	
NTRS	Grease with High EP and high adhesiveness, especially recommended for works with water and steam. Can closing machines, bottled machines, corking, zippers, packing forceps, sugar industry devices, etc. Meet food standard NSF-H1(H1) with Registration N°. 140325 and FDA 21 CFR.				
	2	>260	400.000	-25 to 150	
NT MULTITEC	Grease with high EP, protects against sliding and rolling. High oxidation stability and excellent corrosion protection. High adhesiveness and resistant to Works with water and steam. Wide work temperature and velocity range. Especiall suitable for can closing machines sand washed lines. Meets standards NSF-H1(H1) and FDA-21-CFR.178.3570.				
	2	>260	150.000	-15 a 150	
NT SUPER-AB	Grease for Food industry that gives bactericide protection to the lubricated system. Avoids bactericide grown, bad odors and all the associated problems.				
	2	>260	400.000	-25 to 150	
NT CADENAS	Non-toxic fluid grease to improve penetration and to make easier the application by spraying. With Teflon, White and without dropping point. Especially recommended for machinery lubrication in clean industries. Meets food standard USDA-H1 and FDA 21 CFR 178.3570.				
	-	>260	600.000	-25 to 150	
NT - ePACK	Non-toxic White grease, especially designed for automatic Brick packaging machinery, in food industries. For lubrication in clean industries where a lubricating film that does not spot is needed (ex. textile industry). Does not contain solid lubricant. Especial for centralized system conductions. Meets food standard NSF-H1 y FDA 21 CFR 178.3570. Recommended for ELOPAK.				
	2	>260	600.000	-25 to 150	



food industry grease Clean Industries

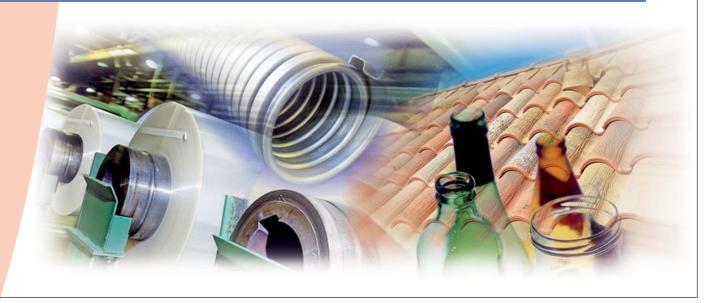
elesa®´s	Product's Description								
Product	NLGI	Dropping Point (°C)	Velocity Factor	Working Temperature Range (°C)					
VITA VITA KOSHER	Excellent synthetic greases for prolonged lubrication and that has to put up with extreme temperatures and high loads in bearings and mechanisms where can be incidental contact with food. Ex.: bottle packaging, roller guides in can closing machines, feed pelleting, oven bearings, etc. Meets standard NSF-H1(H1) with Registration N°. 140329 and FDA-21-CFR.178.3570. Variant elesa® VITA KOSHER with the KOSHER certificate.						loads in bearings and mechanisms where can be incidental contact with food. Ex.: bottle packaging, roller guides in can closing machines, feed pelleting, oven bearings, etc. Meets standard NSF-H1(H1) with Registration N°. 140329 and		
	2	>260	600.000	50 to 180					
VITA- EXTRA-OX	Excellent synthetic grease for high temperatures lubrication and with VERY HIGH LOADS and high steam concentration in bearings and mechanisms where can be incidental contact with food. Ex.: Decanters-centrifuges, bottle packaging, can closing machines, feed pelleting, etc. Meet standards NSF-H1(H1) and FDA-21-CFR.178.3570.								
	2	>260	500.000	50 to 220					
70-SBR 70-SBR	Designed for systems that Works with extreme conditions of high EP, very high VELOCITIES and TEMPERATURES very high or very low. Excellent for sliding rolling bearings, bearings, kneecaps, gears, etc. Centrifuges, oven chains and freezing, Meet standards NSF-H1(H1) with Registration N°. 140330 and FDA 21 CFR 178.3570. Variant elesa® 70-SBR KOSHER with KOSHER certificate.								
KOSHER	2	>300	500.000	50 to 220					
ALBA	Designed for critical points with extreme temperatures, free of waste. High PTFE content. Does not take down and does not spot, being very suitable for chains in industrial bakeries, textile industries and air painting. Meets standards chains NSF-H1(H1) and FDA-21-CFR.178.3570. Available in aerosol.								
	000	-	-	-60 to 250					
SILICONA T	Is not applicable to metallic be washed with hot water, cold washed with hot water.	earings. Joints and elastomer water and steam, so as to other	bearings, joints, pistons and opportunity protection. Especial for perister chemical agents: chloric, am 1(H1) and FDA-21-CFR.178.35	altic pumps. Resistant to monia Dialectical, electric					
	2	>260		-55 to 160					





antigripaje pasta

elesa®'s		Product's Description						
Product	NLGI	Dropping Point (°C)	Welding Load 4 Ball Test (kg)	Working Temperature Range (°C)	% Solids			
ELECTRO- MOLY 22	Bearings that work at formation of gums ar	Bearings that work at 500°C in a continuous way. Excellent results in ceramic, glass and plastic industries. No formation of gums and resins. Meets standard MIL-L-25681 and NATO-S-1735.						
WIOLI 22	2	>200	high	-20 to 500	50			
ELECTRO- MOLY 32		Compatible with all kind of seals and elastomers. High lubricity. Without carbonaceous wastes at high temperatures. Together with <i>elesa®</i> A-32 oil, they are an excellent lubricant in maintaining valves of liquefied gas conductions.						
	2	>300	high	-40 to 500	60			
ELECTRO- MOLY 44	Especially designed fo Avoids stick-slip in ma	r machinery manufacture achine tools guides.	ers. Its additives avoid s	eizure and stiffness unde	r extreme conditions.			
	1	>300	high	-20 to 300	60			
66	conductor. It is visco-st	Cupper paste resistant to high temperatures and high loads Excellent sealing properties. Thermal and electrical conductor. It is visco-static, preventing the leakage, internal corrosions and welds. Puts up with saline environment. Screws and bearings in Steel and chemical industries where it is required long time periods of assembly / disassembly.						
	2		high	-40 to 1100	40			
ELECTRON AL-3	Antiseizure paste in t aluminum contacts, p aerosol.	Antiseizure paste in the assembly of threaded connections, ex.: drilling pipes in foundations and for electrical aluminum contacts, protecting them against rust and electric arc formation, lengthen their lives. Available in aerosol.						
	2	>206	high	-20 to 700	20			
COBRIX	and protects the slidi	Assembly paste that decreases the torque, making easier the assembly and disassembly in screws. Lubricates and protects the sliding sleeves in percussion drilling pointers. Reduces metal to metal contact, reducing the operating temperature and lengthen the pieces'life. <i>elesa</i> ® COPPER variant with less cupper content.						
	2	210	high	-20 to 1100				
ELECTRON CU-3	under vibrations, high	Metallic paste made of micronizes antiseizure cupper with long duration, in mechanism and threaded connections under vibrations, high temperature and corrosive atmospheric conditions, even in marine environment. Resist longer periods of disassembly. Conducting paste, avoids the electric arc's formation.						
	2	210	high	-30 to 1100				
SILICONA TEF	of joints and elastom	Silicon assembly paste, with high PTFE content, special for joints and articulations, with sealing effect. Protection of joints and elastomers. Resistant to cold, hot water washed and steam, and also to other chemical agents: chloric, ammonia, acids Dielectric, protection of electric contacts. Meets standards NSF-H1 and FDA-21-CFR.178.3570.						
	2	>260			-60 to 160			



PRODUCT	STEEL	STAIN LESS STEEL	CUPPER (Cu)	ALLOYS (Cu)	ALUMINUM (AI)	ALLOYS ALLOYS (AI)	ZINC (Zn)	ALLOYS (Zn)	BRASS	FERROUS METAL	NON FERROUS METAL	GALVANIZED Die Casting	CONCRETE	METHACRYLATE	STONE	GLASS	Vis 40°C cst
AE	•		•	•	•	•			•	•	•						85
AE - 1 + DNI		•	•	•						•	•						
AE - ALU					•	•											53,1 (20°C)
AE - INOX / 10	•	•								•							8
AE-PLUS, AE-PLUS LIGERO y AE-PLUS-220																	650, 500, 220
AMP-XL y AMP			•	•	•	•					•	•					-
COAL 25-7			•	•													1,5
COAL 25-32			•	•	•	•		•			•						1,5
COAL 25-34			•	•	•	•		•		•	•						46
DAZA					•							•					20
DAZA - 3			•	•													1,1
DG - 19, DG - 19 VARIEDAD - 2	•	•	•	•	•											•	Paste
DG - 19 PULVERIZABLE		•	•	•	•											•	Fluid
DL-3															GEMSTONE	•	2
FCD	•	•			•						GOLD						28
FCD - 15		•					A			•	0105	A PARTY OF					15
FCD - 68			•			•	5				•						
MC	•	•	•							•	•	\$					2
TB y TB - ESPECIAL	•		•	•	•	Ą				•	•		•				1
2	•	•			000	L.				0.0	100			•		•	
TV - ESPECIAL		•	•	•		•				•			Service of the servic			•	1
16 - CR	•	•							•							•	46
18		•							•							•	80
27		•							•							•	NLGI-1
DFT 400							I										

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	PRODUCT TYPE	MILLING	THREAD	DRILLING	BROACHING	CUTTING	REAMING	GRINDING	PUNCHING	STAMPING	DRAWING	FOLD	STRECHING	DEMOLDING	FORGING, STAMPING	THICKNESS (mm)
	ACEITE		•						•		•	•	•			2,5 thickness 50 deep
AE - 1 (+ DNI)	ACEITE								•		•	•	•		•	4
AE - ALU	ACEITE EVAPORA								•	•	•	•				1,5
AE - INOX / 10	ACEITE EVAPORA	•	•	•					•	•	•	•	•			2,5 thickness 10 deep
AE-PLUS, AE-PLUS LIGERO y AE-PLÚS-220	ACEITE								•	•	•	•	•			5 thickness 40 deep
AMP y AMP-XL	ACEITE EVAPORA									•	•	•				0,5
COAL 25-7	ACEITE		•							•	•	•				
COAL 25-32	ACEITE	•	•			•		K	•	•	•	•				0,2
COAL 25-34	ACEITE								•	•	•	•				0,5 thickness 6 deep
DAZA	ACEITE													•		
DAZA - 3	ACEITE EVAPORA										•	•		•		2,5
DG-19, DG-19 VARIEDAD-2 y DG - 19 PULVERIZABLE	GRAFITO													•	•	
DL-3	ACEITE EVAPORA							-		5						
FCD	ACEITE	•	•	•	•	•	•		•	•		•				
FCD - 15	ACEITE EVAPORA	•	•	•	•	•	•		•	•	•	•				0,4 mm, stainless steel
FCD - 68	ACEITE			K	0.00				•			•	2			2,5
МС	ACEITE EVAPORA						7 Page	100 M		70	EMBEDDED					
	EMULSIÓN BLANCA	•	•			•	•	100	1000		EMBEDDED					
TB - ESPECIAL	ÍDEM H ₂ O DURAS		•		•			0.0			EMBEDDED	-00				
	EMULSIÓN TRANSPARENTE		•	000	200			•		Service Control						
TV - ESPECIAL	EMULSIÓN TRANSPARENTE		•	1		•	•	•	W. C. W.	1000		4	3			
16 - CR	ACEITE + GRAFITO											7		•	•	
	ACEITE SINTÉTICO + GRAFITO													•	•	
	GRASA + GRAFITO													•		
REF. 488														•		

metalworking fluids

elesa®´s Product	EMULS	IFIABLE
TB	Emulsifiable oil in water (coolant) for Steel machining ar and corrosion protection and bactericide. Concrete mold	nd all kind of metals. Provides good lubrication, cooling I release.
COOLANT	ТВ	TB - ESPECIAL
COOLANT	Milky White	Milky White with more emulsion stability and higher resistant to hard water.
TV ESPECIAL SYNTHETIC	Synthetic fluids, water-soluble, for machining operations Optimal rust protection and high bacteriostatic protection of work performed. Free of nitrites, chlorides, phosphoro	with medium-low severity, ground and sharpened. on. They are use in aqueous solution, ratio as the type ous, sulfur and boron. Perfect work piece visibility.
COOLANT	TV - ES	PECIAL
COOD 1111	Trans	parent

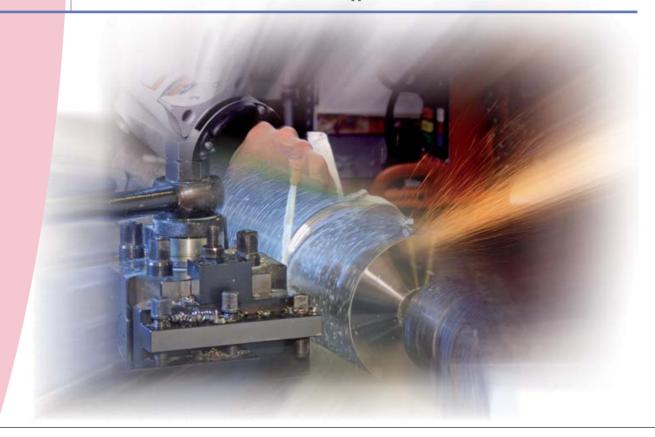


		MACHIN	ING OILS		
elesa®́s		Product's D	Description		
Product	Variant	Vari	ant		Variant
	40°C Viscosity (c	St)		40°C Viscosi	ty (cSt)
AE-INOX - 10 MACHINIG OIL	Lubricant for ferrous metal machinin	g, especially stainles	ss Steel. High coo	lant power.	
STANLESS STEEL	25				
FCD METALWORKING	Universal Metalworking Fluid for dire Threading, drilling, milling. Allows a MATRIX, MAAG, HURTH, TOS, FELLOV	perfect finish both	in surface and de		
FLUID	FCD			FCD - 15	
. = 4.5	28			15	
DL - 3 METALWORKING FLUID	Lubricant developed for cutting hard	Stone in jewelry (q	uartz) Good lubri	cating properti	ies. High flash point.
INE IAEN ORKING LEGID		-	-		

	DRAV	VING / MACHINING	OILS
elesa®'s		Product's Description	
Product	Variant	Variant	Variant
	40°C Viscosity (cS	t) 4	10°C Viscosity (cSt)
<i>AE</i> PURE OIL	Drawing Oil, for carbon steel, mild ste surface finished, without pitting or sci	eel, special steel, aluminum and its allo ratches.	bys, cupper and its alloys. Superb
TOKE OIL		80	
AE - PLUS	Deep Drawing Oils. elesa® AE-PLUS blow. Deep drawing, pressing, punch the matrix's life.	make easier the operations of sheet's ing, drilling. Allows more précises dir	plastic deformation cooling with mensions in finishing and increases
PURE OIL	AE - PLUS	AE - PLUS LIGERO	AE - PLUS 220
	650	500	220
AE - 1	Deep Drawing Oil with high viscosity. character. In combination with <i>elesa</i> ®		oricating properties, EP and coolant
AE - I		AE 1	
		800	

metalworking fluids

	DRAI	VING / M	ACHININ	G OILS	
e <u>l</u> esa®'s		Product's [Description		
Product	Variant	Vari	ant	Variant	
	40°C Viscosity (c	5t)		40°C Viscosity (cSt)	
FCD 68 y 220	with stall alwaying and alwaytale and			kness higher than 2.5 mm. Allows worker.	
PUNCHING	FCD - 68			FCD - 220	
	68			220	
COAL	COAL-25-7 Evaporating mineral oil for COAL 25-34. Special Oil for machining threading of castings or stamping, tur	and forming of fer	rrous and nonferr	ninum alloys. Does not spot the piece. ous metals. Excellent for gear cutting,	
	COAL 25 -7 (Nonferrous a	alloys)		COAL 25 - 34	
	1,5			46	
AMP EVANESCENCE	Evaporative mineral Oils for machinin sheets, like cupper alloys, aluminum a that assures good film on metal surfa	lloys, galvanized, w	ith thickness up to	0,4 mm. Excellent wetting properties	
OIL	AMP			AMP - XL	
	1,32			0,9	
DA74 2	Evaporable Oil for stamping. Excellen stamping, punching and profiling me	Evaporable Oil for stamping. Excellent properties antiwear and protection against corrosion. Pure Oil for stamping, punching and profiling metal sheets. Thickness up to 2,5 mm.			
DAZA, 3	DAZA 1			DAZA 3	
	5,0 1,13			1,13	
AE - ALU	Lubricating and cooling Fluid for cutt work end and no residue formation.	ing aluminum prof e <i>lesa</i> ® AE-ALU REF	iles and aluminun ORZADO has bett	n drawing. Total evaporation at the er E.P features (*20° viscosity).	
AE - ALU	AE - ALU			AE - ALU REFORZADO	
	53,1				
	Oil for rubber joint built in galvanized	d iron caps. Lubrica	tes the joint and	extends its life.	
MC		N	1C		
			-		



metalworking fluids

-l®'		Droduct's F)occription —			
elesa®´s Product	Various		Description			
	Variant	Vari		100C Viscosit	· /cC+)	
	40°C Viscosity (cSt)			40°C Viscosit	y (CSL)	
16 - CR	Lubricant fluid with graphite, for demogood results and no fumes. Designed f the pan with a protective, creamy and	or glass demoldir	ng, brass stamping	n with high stak and hot forgin	pility. Allows work with g mold release. Cover	
			- CR			
			46			
27	High stable graphite suspension that a stamping. Gives cleaner surfaces, more	llows demolding regular and with	in different mater out orange peel.	ials: glass, forge	e, brass and Steel hot	
21		2	2.7			
		Fluid	Grease			
DG - 19	elesa® DG-19 – High stable graphite stable does not produce fumes elesa® release of part-die, avoids die wear, do	DG-19- Variedad	d-2 is applicable to	the stainless st	eel forging. Promotes	
		DG -19 & DG	-19 Variety 2			
	LIQUID			PASTE		
18	Synthetic lubricant fluids of high temporation with a wide spectrum of application. The at high temperatures and very high load MIL-G-17745 (NORB).	eir main applicati	ons are in forging	and stamping, a	is a elements' lubricant	
	18 F	1	8 B		18 BB	
	>70*	>:	320		Fluid Paste	
D 4 7 4	Zamak Demolding Fluid. Protects again in the aluminum and zamak injection a	st corrosion and i at high pressure.	t is compatible wi	th paintings. De	molding and lubricant	
DAZA	DAZA					
		5*				
_	Direct use lubricant. Excellent for synth	etic stone demol	ding. Rubber molo	ls. Ref. 488-D fo	or spray application.	
Ref. 488		Ref.	488			
		-	-			
FSA	Demolding in plastic roll Anti-projecti variant of elesa® FSA-100 that makes					
		FS	. A			



antifreeze

ANTIFREEZE *elesa®'s* Product **ANTICONGELANTE** Antifreeze for automotive and industrial cooling systems. Protects against corrosion to different metals **PURO** that are part from the circuit. Provides low freezing point and high boiling point. Anticongelante 30% and 50% are products for direct use. Meet standards MB-BL-II and Ford Glassware. **ANTICONGELANTE** 30% (-18°C) **FREEZING POINT BOILING POINT** WATER **BOILING POINT** elesa® **ANTICONGELANTE** (%) (°C) ATM. PRESSURE **PRESSURE PURE** (°C) 103k Pa (°C) **ANTICONGELANTE** 20 80 -9 102 121 50% (-39°C) 33 67 -18 104 125 60 40 -26 106 127 50 -39 50 129 **elesa®** ANTICONGELANTE-H1 is U.S.P. grade, making it suitable for food industry when can be incidental contact with food. Meet standards NSF-H1 y FDA-21-CFR.178.3570. **ANTICONGELANTE ANTICONGELANTE** elesa® ANTICONGELANTE-H2 is suitable for use in food industry where cannot be any contact with food. NSF-H2. **H2** Antifreeze specially formulated to cover the hardest requirements of the cooling systems in actual vehicles and static engines. Suitable for all kind of materials, specially aluminum and alloys. Excellent corrosion protection. Protects the cooling circuit during long periods of time. In any kind of vehicles: de cars, buses, **ANTICONGELANTE** trucks, public work's machinery, agricultural... Quality level for the 50% antifreeze: VW TL 774D (G12), **ORGÁNICO 30%** FORD WSS-M97B44D and GM 6277M. elesa® **FREEZING POINT BOILING POINT** WATER **ANTICONGELANTE ANTICONGELANTE** PRESSURE ATM. (%) $(^{\circ}C)$ **ORGÁNICO 50%** ORGÁNICO (°C) 130 30 70 -18 50 50 -34 145



industrial cleaning and maintenance

DEGREASERS AND CLEANERS

elesa®'s Product

General Features and Application

WATER-SOLUBLE

DQI - 1AQUEOUS
DEGREASER

Industrial degreaser soluble in water. High penetrating and cleaning power. Designed for industrial cleaning of metallic surfaces in the degreaser work prior painting or passivation treatments and for cleaning in automotive industry. Protects temporarily against corrosion. Designed for cleaning of more resistant products like graffiti, adhesives or dry residues too embedded. BIODEGRADABLE.

DQI - 1 H2 UNIVERSAL DEGREASER

Universal Degreaser, high cleaning power and detergency. Security level NSF-H2(H2). Designed to meet industrial cleaning equipment and floors at food industry.

DQI - 11S - H2 DEGREASER

Degreasing gel for hands.

Hand-cleaning paste BAXOL Powerful degreaser in paste form, very efficiency for cleaning hands, specifically prepared for hands that work in hard conditions and in contact with greases, inks, charcoal and mud: capable of removing heavy dirt with minimum consumption.

PRESTIGE

DIELECTRIC CLEANER

Degreaser with high dielectric strength, high solvent power, compatible with Metals and the majority of plastic materials. High effective in Industry, Electricity, Automotive, DIY, Home and Gardening. Rapid evaporation. Zero waste.

REF. 393ENERGETIC CLEANER

Biodegradable assertive Solvent-cleaner. Very high solvent power. Low toxicity, compatible with metals (check with plastics), high flash point. Eliminates dry and resistant waste. Excellent for industrial equipment, automotive and cleaning at Graphic arts industries, Textile, Shoes, Toys, etc.

REF. 538ENERGETIC CLEANER

Glue and general waste cleaner. High cleaning power, high evaporation rate, does not attack almost any plastic, maybe can dry rubber. Dielectric, Flammable. Good for glue cleaning in Wood edging and shoe industry, pieces cleaning and machinery and cleaning of electrical circuits without tension.

DD - 6 ORGANIC DEGREASER

Degreaser and cleaner with high efficiency. Excellent in mechanical industry, glue cleaning at shoes and wood industry. High penetrability.

DD - 8 / DD - 9 ORGANIC DEGREASER

Industrial Solvents, dielectric with high flash point. DD-9 is excellent for dry waste. Applicable in Industry, Electricity, Automotive, Watersports.

DNI DNI - **10**ORGANIC
DEGREASER

Industrial Solvents those are not flammable. Compatible with all kind of mineral oils and a wide range of synthetic oils. Specially designed for the metal degreasing: ferrous, copper, zinc, lead, tin, silver and even aluminum and its alloys.

elesa® DNI-10 is a variant of **elesa® DNI**, with higher solvent and descale power, without modify the other features, including dielectric. Metal degreaser. Degreased in both liquid phase and vapor

DUO, DUO - LDIELECTRIC CLEANER

Dielectric Degreaser with high Flash Point., high Dielectric Strength and high solvent power, compatible with Metals and the majority of Plastic Materials. Odorless. High efficiency in Industry, Electricity, Automotive, DIY, Home and Gardening.

DHAPINONTOXIC ORGANIC
CLEANER

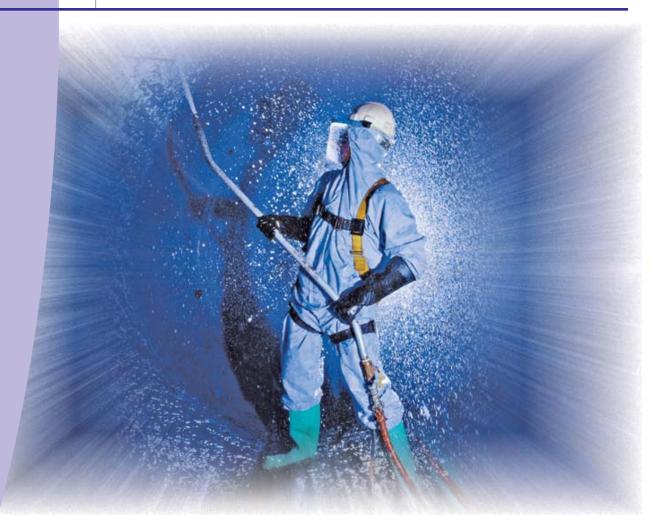
Dielectric organic cleaner with high flash point for food industry. High cleaning power. Odorless. FDA-21-CFR.178.3570 and NSF-H1 with Registration N°. 140332.



industrial cleaning and maintenance

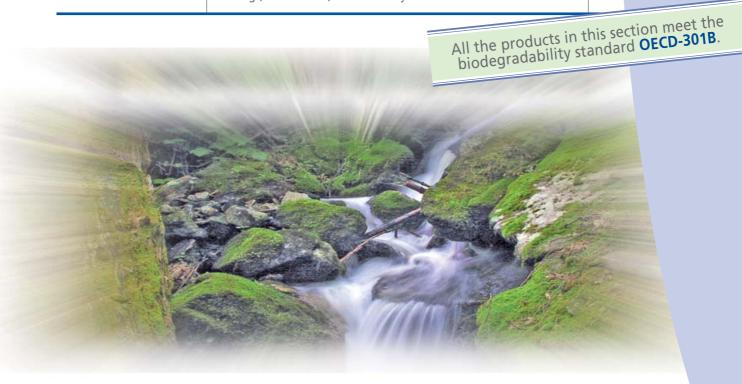
PENETRATING OILS, CLEANERS AND PROTECTIVE

elesa®´s Product	Product's Description
DQI - PROTEC PROTECTIVE AND ANTIRUST	Excellent antirust protective that DOES NOT leave an oily film on the surface that has to be treated. Avoids unnecessary deoxidation works or rejection of parts. Avoids cleaning of parts, like happen with the oily protective.
NR PROTECTIVE AND ANTIRUST	Moisture displacing lubricant at the start of electrical motors, with excellent results in saline mist chamber and humidity chamber. High penetrability that makes it good penetrating oil. Essential in corrosive environment, like salting or naval. Protection of molds and finished pieces. Dielectric. Meets standards NSF-H2 (H2) and MIL-C-81309E. (520 c.c. y 210 c.c.). Available in aerosol.
NRX 1 PENETRATING OIL AND PROTECTIVE AND ANTIRUST	Penetrating Oil with high penetrability. Moisture displacing and antirust protector. Has very good compatibility with paints and joints.
NR - ATOX NONTOXIC PROTECTIVE PENETRATING OIL	Wet film protective fluid, antirust and penetrating oil, for food industry. Lubricates and contain PTFE. Dielectric. Working temperature range (-30 to 50°C). FDA-21-CFR.178.3570 and NSF-H1 with Registration N°. 140328.
SUPERSTAR HYDROPHOBIC PENETRATING OIL	Penetrating Oil with very good penetrability Anticorrosive moisture displacing, developed for ferrous metal protection, finished pieces, machinery, tools, electrical equipment, etc. Facilitates the dismantling Works. Very good compatibility with paints and joints. Hydrophobic and dielectric.
ANTIPROYECCIONES - ACU ANTIPROYECCIONES	elesa® ANTIPROYECCIONES-ACU is a water-based product. Free of silicones. No flammable. Facilitates the removal of projections during long period of time. elesa® ANTIPROYECCIONES is organic-based.



green industrial maintenance

	BIODEGRADABLES	
Denomination	Application	Standars meet
11	Synthetic grease formulated for High Revolutions and very low Temperatures.	NSF - H2
11 SB	elesa® 11 Without Molybdenum Disulfide.	NSF - H2
REF. 393	Energetic Cleaner High Performance.	NSF - H2
46 AS - SB	Synthetic Oil for Chains with High Temperatures.	NSF - H2
BIO LUB X	General Lubrication Oil.	NSF - H2
BIOHIDRAULIC	It has been developed for hydraulic systems and hydrostatic circuits. Its good antiwear, lubricity and BIODEGRADABILITY > 80% features, make it able for machinery general lubrication that works outside and can have spillage risks. Its low pour point facilitates winter work. Meets OECD-301B.	
OLIV-68	General lubrication Oil con vegetal base. Meets NSF-H1.	
OLIV-68- HIDRAULIC	Hydraulic vegetal base oil. Meets NSF-H1.	
DQI - 1	Universal aqueous degreaser.	
BIORAIL-EP	Grease for sides of railway wheels and needle changes. It supports High loads, Dust, Water, UV light and a wage temperature range. It protects against wear and doesn't contaminate environment. Available in NLGI 2 and 00-000.	
BIOGRASS-EP	Biodegradable general lubrication grease. Wage temperature range. It supports works with water and has a good antirust protection.	
BIOALFA	Biodegradable general lubrication grease. Wage application field in public Works, agriculture, and renewal energies. Fluid Consistency. Lubrication in needle changes.	
21S - SB	Gear synthetic lubricant. Low evaporation, no carbon residues and excellent E.P features. Very good performance in corrosive environments and high temperatures. Ideal for gear under overload, dryer drum bearings, oven chains, centralized systems	

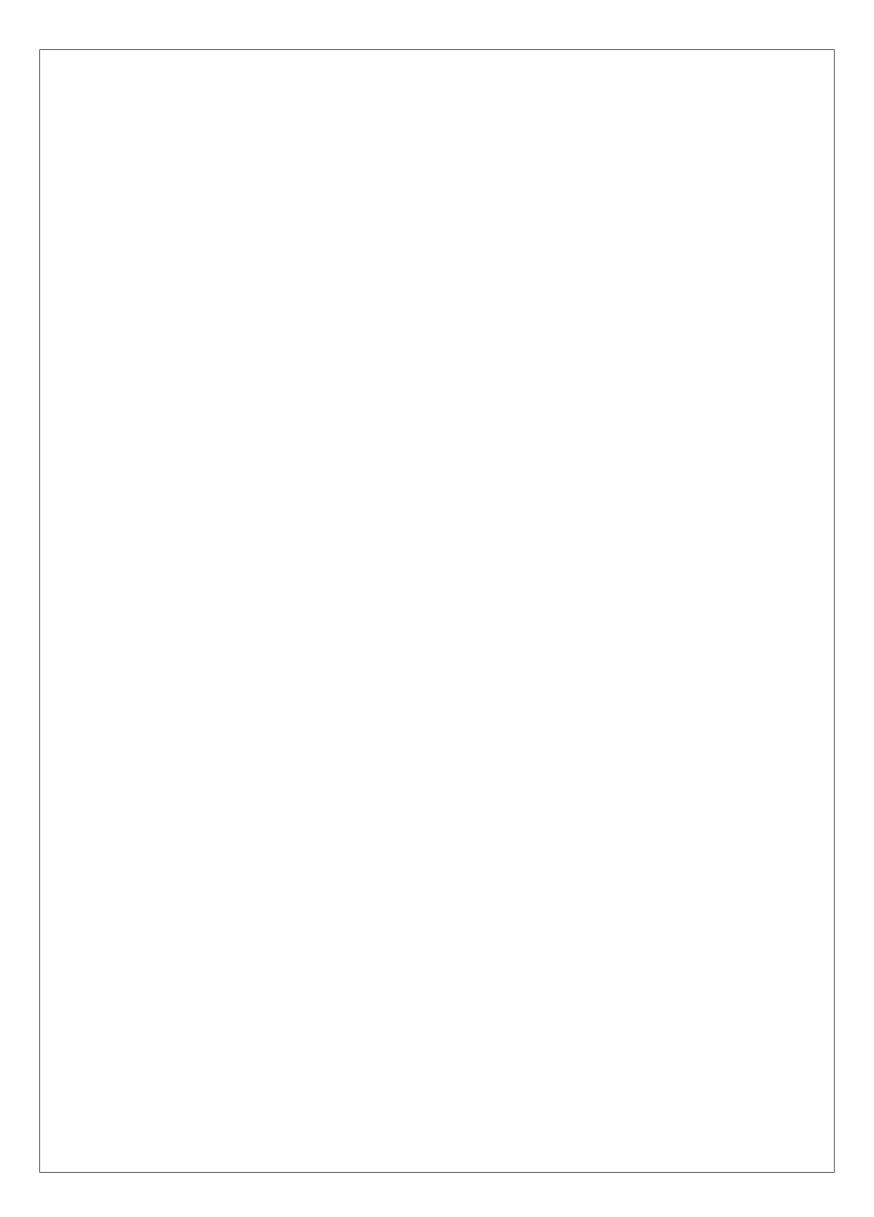


Cleaner Products Board

For a proper selection of the cleaning product, see the following scheme:

CLEANING CAPACITY TOXICITY EVAPORATION VELOCITY FLASH RESISTANCE 393







- Lubrication Studies
- Training in Maintenance and Precision Lubrication
- Lubricant's Energy Efficiency









MADRID

Tel.: **902 123 453** Fax: **902 24 24 29**

Tel. Spain: +34 918 719 360 Fax: +34 918 719 831

www.elesalubricantes.com





















