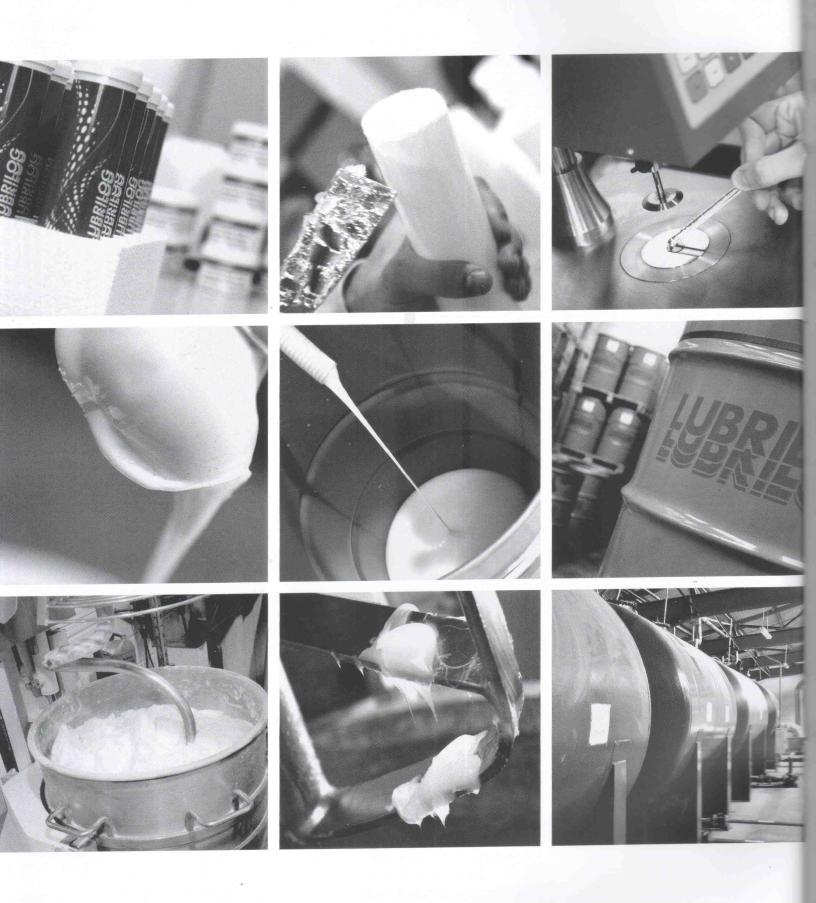


LUBRILOG EUBRILOG

LUBRICATION ENGINEERING

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LUBRICATION ENGINEERING



W W W . L U B R I L O G . F R

SUMMARY

LUBRILOG specializes in the conception and the manufacturing of speciality lubricants with a specific focus on perfluorinated lubricants. Whatever be the application requirements, LUBRILOG offers to develop customized high performance premium quality lubricants.

Since the launch of LUBRILOG in 1987 by a group of engineers, the company's resources were focussed on high performance lubricants for technically demanding industrial applications. Today LUBRILOG's solutions can be found in diverse industrial segments such as Automobile, Aerospace, Nuclear, Pharma, Food etc.

In 2009, The constantly increasing global demand for LUBRILOG solutions has allowed us to start a new manufacturing unit in Romans sur Isère based in the south of France. This unit is equipped with all the latest amenities while respecting the international safety norms in vigour. LUBRILOG is an ISO 9001: 2008 certified company and is in the process of getting the ISO 14001 certification.

Our complete range of perfluorinated lubricants are produced in a separate isolated unit free from all types of micro pollution and also far from other types of lubricants. Thus LUBRILOG ensures the delivery of premium quality, high performance lubricants all over the world.

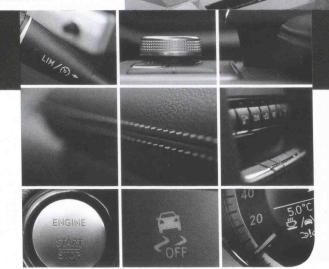
GREASES

FLUOSTAR.....P 04 Special perfluorinated greases for extreme applications FLUOLOGP 05 Standard perfluorinated greases for extreme applications FLUOSTAR FOOD GRADE......P 06 Perfluorinated greases food grade NSF H1 for extreme applications GRAFOLOG.....P 07 Greases for open gear drives LOGREASE......P 08 Multifunctional greases for basic standard applications STARPLEX P 09 General purpose high temperature greases STARGREASE P 10 High performance multi purpose long duration greases PLASTOGREASE P 11 Greases for small mechanical components and composite materials PLASTOPLEX P 12 Very high performance synthetic greases SPEED P 13 Greases for very high speed bearings SILOG et STARSIL.....P 14 Silicone pastes MOUNTING PASTE P 15 Mounting pastes for metallic and corrosion applications Lubrication of materials exposed to nuclear radiations

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OILS

LUBRILOG LY F Perfluorinated oils range with exceptional performa	ind	ces
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VISCOLOils for chains		
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FLUOSTAR®

FLUORINATED GREASE

FLUOSTAR® represents a range of high quality greases based on specific perfluorinated oils.
FLUOSTAR® greases are recommended when the other lubricants, mineral or synthetic, cannot meet the most demanding specifications.

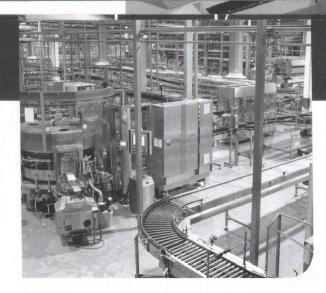
Products	Viscosity	Thickener	ickener Base oil	Temperature range °C		% Evaporation	Advantages			
	40° C mm ² /s			Mini	Maxi	after 24H	Advantages			
FLUOSTAR L 2 L	15	PTFE	PFPE	-60	120	10/120°C				
FLUOSTAR 2 L	150	PTFE	PFPE	-40	240	1,5/200°C				
FLUOSTAR H 2 PLUS	400	PTFE	PFPE	-30	260	0,9/200°C				
FLUOSTAR FH 2	500	PTFE	PFPE	-30	300	0,5/200°C	Exceptional stability at high temperatures			
FLUOSTAR LX 2	100	PTFE	PFPE	-50	200	2,5/150°C	Excellent chemical inertness to both gases and aggressive liquids			
FLUOSTAR MX 2	200	PTFE	PFPE	-50	250	1,5/200°C	Non-flammable and non-toxic			
FLUOSTAR HX 2	400	PTFE	PFPE	-40	300	0,5/200°C	 Total compatibility with plastics and elastomers Very long durability 			
FLUOSTAR SX 2	310	PTFE + Silica Gel	PFPE	-60	320	0,4/200°C	Cood resistance to muclear radiations			
FLUOSTAR SG 2	310	Silica Gel	PFPE	-60	320	0,4/200°C	Good resistance to nuclear radiations			
FLUOSTAR XL	32	PTFE	PFPE	-85	150	1,5/150°C				
FLUOSTAR XM	200	PTFE	PFPE	-65	280	0,5/200°C				
FLUOSTAR XS	700	PTFE	PFPE	-50	320	<0,1/200°C				



FLUORINATED GREASES

FLUOLOG® represents a range of greases based on perfluorinated oils.
FLUOLOG® greases are recommended when the other lubricants, either mineral based or synthetic based, cannot meet the desired specifications.

Products	Viscosity	Thickener	Base oil	Temperature range °C		% Evaporation	Advantages
	40° C mm ² /s			Mini	Maxi	after 24H	
FLUOLOG K 258	8	PTFE	PFPE	-70	80	10 / 90°C	All the second s
FLUOLOG K 259	15	PTFE	PFPE	-60	120	10 / 120°C	
FLUOLOG KEL	15	PTFE	PFPE	-60	120	8 / 120°C	
FLUOLOG LMX 2	85	PTFE	PFPE	-70	220	2,5 / 200°C	 Exceptional high temperature stability. Excellent chemical inertness (gas and aggressive liquids)
FLUOLOG KEM	90	PTFE	PFPE	-40	200	2 /150°C	Non-flammable
FLUOLOG LX 2	90	PTFE	PFPE	-40	200	2 / 150°C	 Total compatibility with plastics and elastomers Very long life time
FLUOLOG KES	220	PTFE	PFPE	-30	250	0,5 / 150°C	Very low frictionVery low vapor pressure
FLUOLOG 2 L	220	PTFE	PFPE	-35	250	0,7 / 150°C	Good resistance to nuclear radiations
FLUOLOG MX 2	220	PTFE	PFPE	-35	300	0,5 / 150°C	Non toxic
FLUOLOG MG 2	220	Gel	PFPE	-35	250	0,5 / 150°C	
FLUOLOG K 400	395	PTFE	PFPE	-30	260	0,7 / 200°C	[10] - 하드 마음(12] - 얼마 그림 그림 (14) - 1
FLUOLOG K 500	500	PTFE	PFPE	-30	300	0,3 / 200°C	# 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1



FLUOSTAR® FOOD GRADE

FOOD GRADE

FLUOSTAR® regroups a range of premium quality greases based on specific perfluorinated oils. FOOD GRADE series should be used for the lubrication of bearings, seals and various assemblies operating in extreme conditions with potential risk of incidental contact with food. FLUOSTAR® FG / SX and LUBRINOX greases were approved NSF H1 along with all the benefits of a classic FLUOSTAR® range.

Products	Viscosity 40° C mm²/s	Thickener	Base oil	Temperature range °C		Advantages
				Mini	Maxi	
FLUOSTAR FG 0	500	PTFE	PFPE	-30	300	
FLUOSTAR FG 1	500	PTFE	PFPE	-30	300	 Exceptional stability at high temperatures. Excellent resistance to water and chemicals.
FLUOSTAR FG 3	500	PTFE	PFPE	-30	300	 Excellent resistance to water and chemicals. Non-flammable. Full compatibility with plastics and elastomers. Very long life.
FLUOSTAR SX 1	310	PTFE + Gel	PFPE	-60	320	Very low friction.Good viscosity-temperature behavior.Very low vapor pressure
FLUOSTAR SX 2	310	PTFE + Gel	PFPE	-60	320	 Good resistance to nuclear radiation. Non-toxic : Approved USDA-H1
LUBRINOX 2	510	Gel	PFPE	-30	350	LUBRINOX 2



GRAFOLOG®

GRAFOLOG®

The GRAFOLOG® range of greases are dedicated to the lubrication of heavy duty open gear drives used in the following industries: Cement, ore, steel, coal lines in the thermal stations, fertilizers, chemicals (lateral transmissions of furnaces, grinders, dryers, coolers, mixers and rotating tubes in general)

Products	Viscosity	Thickener	Base oil	Temperature Base oil range °C		Avantages
	40° C mm²/s			Mini	Maxi	
GRAFOLOG H 0	500	Aluminium Complex	Mineral	-20	120	
GRAFOLOG H 0 +	1100	Aluminium Complex	Mineral	-10	180	Aluminium complex based soap thickener
GRAFOLOG H 2200	2200	Aluminium Complex	Mineral	0	200	High purity mono crystalline graphite
GRAFOLOG M FLUID	3000	Aluminium Complex	Mineral	-10	120	 Exceptional resistance to seizing Excellent antiwear and extreme pressure resistance properties
GRAFOLOG MT FLUID	7500	Aluminium Complex	Mineral	0	140	 Resistance to high temperatures Excellent performance under heavy loads and slow speeds
GRAFOLOG H 00 R	320	Aluminium Complex	Mineral	-10	200	
GRAFOLOG R FLUID	2000	Aluminium Complex	Mineral	-10	120	



LOGREASE®

LOGREASE®

LOGREASE® range of multifunctional greases offer a combination of benefits: excellent grip, high temperature resistance, load resistance and resistance to water.

Products	Viscosity	Thickener	Base oil	Temperature range °C	
	40° C mm ² /s	Line (A)	المنابية	Mini	Maxi
LOGREASE 000	100	Lithium	Mineral	-25	110
LOGREASE 00	100	Lithium	Mineral	-25	120
LOGREASE 0	100	Lithium	Mineral	-25	120
LOGREASE 1	100	Lithium	Mineral	-30	130
LOGREASE 2	100,	Lithium	Mineral	-30	130
LOGREASE 3	100	Lithium	Mineral	-30	130
LOGREASE M 2	100	Lithium + MoS2	Mineral	-30	150

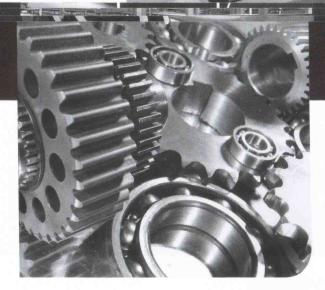




HIGH TEMPERATURE GREASES

The greases form STARPLEX® range are commonly used in mechanical and heavy industries. They are mainly employed for the medium and high temperature applications in presence of water and/or steam. These greases are also applied for the lubrication of bearing exposed to shocks and high vibration levels.

Products	Viscosity	Thickener	Base oil	Temperature range °C		Speed factor	Advantages		
riododio	40° C mm²/s			Mini Maxi		(N.Dm)			
STARPLEX G 1	110	Lithium Complex	Mineral	-20	150	> 400 000			
STARPLEX G 1 M	110	Lithium Complex + MoS ₂	Mineral	-20	150	> 400 000			
STARPLEX G 2	110	Lithium Complex	Mineral	-20	180	> 400 000			
STARPLEX G 2 M	110	Lithium Complex + MoS ₂	Mineral	-20	180	> 400 000	High mechanical and thermal stability.		
STARPLEX GM 2	150	Polyurea	Mineral	-25	160	> 500 000	Resistance to washing.Resistance to shocks and vibrations.		
STARPLEX GM 500	460	Polyurea	Mineral	-20	180	> 300 000	Highly adhesive.Reinforced anti-corrosion protection.		
STARPLEX HT 462	460	PTFE/Gel	Ester	-20	200	> 300 000	 Decreased frequency of lubrication. Excellent, inherent antiwear and extreme pressure 		
STARPLEX GS 2	100	Polyurea	Pao/Ester	-40	200	> 600 000	properties.		
STARPLEX HT 2 LIGHT	32	Lithium Gel	Pao/Ester	-50	190	< 800 000			
STARPLEX HT 2 MEDIUM	150	Nano PTFE	Special Ester	-40	210	< 500 000			
STARPLEX HT 2 HEAVY	460	Nano PTFE	Special Ester	-20	230	< 250 000			



STARGREASE®

MULTI-PURPOSE, LONGLASTING, HIGH-TECH GREASES

STARGREASE® range of lubricants are made from semi-synthetic base oils and high technology sulphocarbonates complexes. Thanks to their composition, these greases have exceptional, inherent antiwear and extreme pressure properties coupled with excellent resistance to heat, steam and diluted chemical agents.

Products	Viscosity	Thickener	Base oil	Temperature range °C		Speed factor	Advantages		
	40° C mm²/s			Mini	Maxi	(N.Dm)			
STARGREASE LIGHT	68	Sulfonate-carbonate / Complex	PAO / Mineral	-40	150	> 600 000			
STARGREASE MEDIUM	220	Sulfonate-carbonate / Complex	PAO / Mineral	-25	150	> 400 000	 Excellent protection against corrosion. High thermal and mechanical stability. 		
STARGREASE HEAVY	1000	Sulfonate-carbonate / Complex	PIB / Mineral	-20	150	> 250 000	 Very high pressures resistance. Resistance to washing. Non-toxic (No heavy metals) Long service life even at high temperatures. 		
STARGREASE HV	420	Sulfonate-carbonate / Complex	Mineral	-25	180	> 300 000	Highly adhesive Excellent alternative to the greases based on Barium soap		
STARGREASE LSK 2	460	Complex / Complex	PIB / Mineral	-20	160	> 100 000			



PLASTOGREASE®

GREASES FOR SMALL MECHANISMS AND COMPOSITE MATERIALS

PLASTOGREASE® range was formulated by LUBRILOG from saponified synthetic oils. These greases can be used for a variety of industrial applications such as automotive, micro mechanics and connectors. These greases are of particular interest wherever the plastics are involved or wherever a low friction at low temperature is required.

Products	Viscosity		Base oil	Temperature range °C		Speed factor	Advantages
Trodocio	40° C mm²/s			Mini	Maxi	(N.Dm)	
PLASTOGREASE BASE	22	Lithium	PAO	-50	150	>800 000	
PLASTOGREASE TIXO	32	Lithium + Gel	PAO	-50	150	>800 000	 Good compatibility with plastics and elastomers. Good thermal and mechanical stability
PLASTOGREASE TAC	46	Lithium	PAO	-50	150	>500 000	 Very low coefficient of friction. Excellent antisqueack properties. Can be used at very low temperatures. Very good viscosity index.
PLASTOGREASE TF	32	Lithium + PTFE	PAO	-50	150	>500 000	 Good adhesion, depending on grades. Non-toxic
PLASTOGREASE TFH	750	Lithium + PTFE	PAO	-40	150	>250 000	



PLASTOPLEX®

HIGH PERFORMANCE SYNTHETIC GREASES

PLASTOPLEX® range offers a low traction coefficient favouring the energy savings and long durability of the bearings. They are also applicable for the lubrication of plastic pieces in the automotive industry.

Products	Viscosity	Thickener	Base oil	Temperature range °C		Speed factor	Advantages
	40° C mm²/s			Mini	Maxi	(N.Dm)	
PLASTOPLEX 32	32	Lithium Complex	PAO	-50	150	>800 000	
PLASTOPLEX 100	100	Lithium Complex	PAO	-50	150	>800 000	 Good compatibility with plastics and elastomers Good thermal and mechanical stability Very low traction coefficient Excellent antisqueak properties
PLASTOPLEX 220	220	Lithium Complex	PAO	-50	150	>500 000	Applicable even in the low temperaturesVery good viscosity indexGood adherence depending upon the grades
PLASTOPLEX 460	460	Lithium Complex	PAO	-50	150	>500 000	• Non-toxic



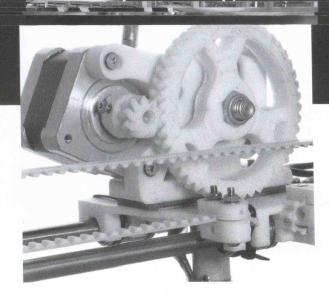


VERY HIGH SPEED BEARING GREASES

SPEED® range has been designed by LUBRILOG from synthetic saponified oils for the lubrication of very high speed bearings (N.Dm: 1 000 000). These lubricants offer low friction and low torque even at very low temperatures.

Products	Viscosity 40° C mm²/s	Thickener	Base oil	Temperature range °C		Advantages
				Mini	Maxi	Advantages
SPEED GB 1	46	Barium Complex	PAO	-45	160	 Applicable for very high speeds High thermal and mechanical stability
SPEED GB 2	46	Barium Complex	PAO	-45	180	Very low coefficient of friction
SPEED GL 2	14	Lithium	Ester	-70	130	Very good viscosity index Non-toxic

OILS



SILOG® & STARSIL®

SILICON PASTES

Conceived from a selection of silicon oils the complete range of SILOG® and STARSIL® greases serve a wide range of applications involving friction. They reduce friction, offer sealing and serve as assembly aid for mounting modern materials such as plastics, elastomers, mixed assemblies (metals/plastics) over a wide range of temperatures without any toxicity.

Products	Viscosity 40° C mm²/s	Thickener	Base oil	Temperature range °C		Speed factor	Advantages
		Market and the		Mini	Maxi	(N.dm)	
SILOG 1, SILOG 2	350	Gel	Silicone	-50	180	>300 000	
SILOG 1352	5000	Gel	Silicone	-50	180	>200 000	
SILOG 33	350	Lithium	Silicone	-50	180	>500 000	 Very good compatibility with plastics and elastomers Very good stability to extreme temperatures Excellent antisqueak properties
SILOG 111	10 000	Gel	Silicone	-40	200	>100 000	 Excellent viscosity index Good adherence according to grades Very low friction in presence of PTFE - thickener Completely non-toxic without any odour.
STARSIL 2	350	PTFE	Silicone	-50	180	>300 000	
STARSIL HT 2	125	PTFE	Silicone	-50	200	>600 000	



MOUNTING PASTES

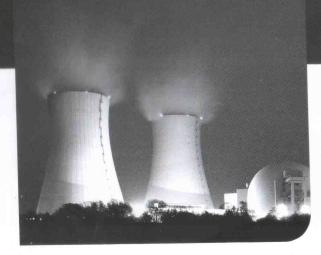
PIGMENTED ANTI 'CORROSVE' MOUNTING PASTES

These compounds, incorporating a high amount of mineral or organic pigments are particularly developped by **LUBRILOG** for the applications involving the metallic assemblies exposed to high temperatures or aggressions such as :

- Fretting corrosionOxidation
- Galvanic corrosion

Products	Viscosity	, Thickener s	Base oil		erature je °C	Advantages
	40° C mm ² /s			Mini	Maxi	
CERILOG	460	Sulfo-card/ complex	Mineral	-30	160	
CUPROLOG G 1	150	Lithium + Cooper	Mineral	-30	1000	
ALUSTAR G 1	150	Lithium + Aluminium	Mineral	-30	600	
GRAFINOX G 1	68	Gel + Inox	PAO	-50	1000	 No heavy metals. Efficient even after liquid phase disappearance. Facilitate both electric and thermal conductivity.
FLUORINOX	460	Gel + Inox	PFPE	-30	1000	 Excellent anti-seizing properties Eliminate static electricity Exceptional anti-corrosion properties
GALVASIL P	750	Gel + Zinc	Silicone P	-60	650	
GALVAFLUOR Y	500	Gel + Zinc	PFPE	-30	650	
LUBRINOX 2	510	Gel	PFPE	-30	350	

NUCLEAR



LUBRICATION OF MATERIALS UNDER NUCLEAR RADIATION

Recommended	A STANFAST		Gear	box		Rall joints	Screws,
bricants depending on the absorbed radiation dose	Low speed bearing N.dm <100 000	Low speed bearings N.dm > 100 000	Normal loads with oil	Heavy loads with grease	Open gears	Ball-joints, chains, slides	bolted parts, shaft seal
0 < D ≤ 10 K.Gray	LUBRILOG LX CEHB 3 NG	LUBRILOG LX CEHB 2 NG		Conventional	lubricants		LUBRINOX 2*
10 < D ≤ 1000 K.Gray	LUBRILOG LX EEHH 2 FLUOSTAR FH 2*	LUBRILOG LX EEHH 2 FLUOSTAR FH 2*	LUBRILOG LY PAO 68N FLUOSTAR LY F 220*	LUBRILOG LX EEHH 00 FLUOSTAR 0 L +*	LUBRILOG LX EEHH 2 FLUOSTAR 2 L +*	LUBRILOG LX EEHI 2 FLUOSTAR FH 2* FLUOSTAR CHAIN 320*	FLUOSTAR FH 2*
1000 < D ≤ 10 000 K.Gray	LUBRILOG LX AGFH 2	LUBRILOG LX AGFA 2	LUBRILOG PY PPE 360	LUBRILOG LX AGFH 00	LUBRILOG LX AGFI 2	LUBRILOG LX AGFI 2	1
D > 10 000 K.Gray			Consult LUBF	RILOG			

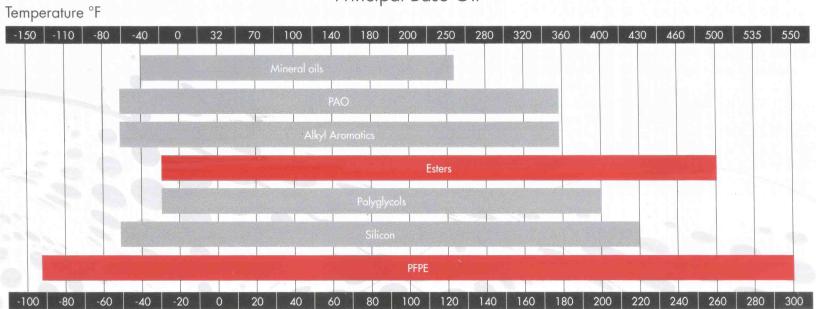
^{*} Lubrifiants without hydrogen

All lubricants mentioned in the above table were certified by group AREVA

TECHNICAL INFORMATION

TEMPERATURES RANGE

Principal Base Oil



Temperature °C

MISCIBILITY

Principal Base Oil

Base oils	Flourinated	PPE	Silicones (phenyl)	Silicones (methyl)	Polyglycols	Esters	Mineral
Mineral	No	Yes	Yes	No	No	Yes	
Esters	No	Yes	Yes	No	Yes		Yes
Polyglycols	No	No	No	No		Yes	No
Silicones (methyl	No	No	Yes		No	No	No
Silicones (phenyl)	No	Yes		Yes	No	Yes	Yes
PPE	No		Yes	No	No	Yes	Yes
Fluorinated		No	No	No	No	No	No

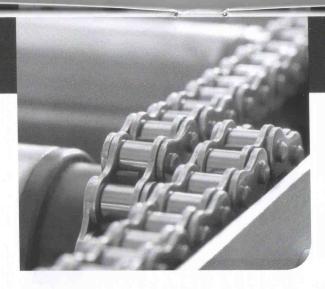


LUBRILOG LY F ...

FLUORINATED OILS

The **LUBRILOG LY F** oils range is made from colourless, odourless and non-toxic Perfluorinated Polymers. These polymers are chemically neutral and show very good thermal stability along with excellent tribological performances. They are offered in a wide range of viscosities and offer superior quality and performance compared to other synthetic oils no matter the substrate or the environment. They are non-miscible with other lubricants.

Products	Viscosity	Viscosity	Mass volume		erature je °C	% Evaporation	Advantages		
	40° C mm²/s	index	(20° C)	Mini	Maxi	(after 22h)			
LUBRILOG LY F 15	15	60	1,87	-60	120	10 (į́120°C)			
LUBRILOG LY F 35	35	80	1,88	-45	150	15 (150°C)			
LUBRILOG LY F 90	90	125	1,90	-40	200	5 (200°C)	Chemically inert Totally non-flammable		
LUBRILOG LY F 160	160	130	1,91	-40	220	3 (200°C)	Excellent coefficient of friction Excellent anti-seizing properties Low vapor tension		
LUBRILOG LY F 220	220	130	1,91	-30	250	1 (200°C)	 Total compatibility with plastics and elastomers Very long life time of the lubricant's film 		
LUBRILOG LY F 270 HT	270	130	1,91	-35	260	< 0,6 (200°C)			
LUBRILOG LY F 510 HT	510	136	1,92	-20	300	< 0,12 (200°C)			



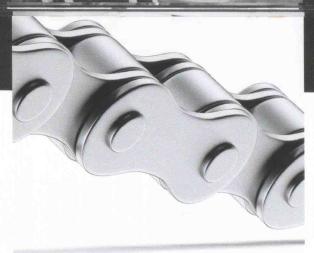
FLUOSTAR CHAIN

SPECIFIC FLUORINATED OILS

The FLUOSTAR® CHAIN oils range are made from perfluorinated polymers that show very good thermal stability. These oils evaporate very slowly and leave no residue even at very high temperatures. They are mainly used for chain lubrication of ovens when cleanliness is critical. These oils provide efficient protection against corrosion.

Products Viscosity				Temperature range °C		% Evaporation	Advantages	
11000010	40° C mm²/s	index	(20° C)	Mini	Maxi	(after 22H)		
FLUOSTAR CHAIN HD*	32		1,88	-55	300	< 0,5 % (200°C)	Very low evaporation Totally non-flammable	
FLUOSTAR CHAIN 320	320	135	1,92	-25	300	< 0,5 % (200°C)	 Excellent friction coefficient Excellent anti-seizing properties Improve the lifetime of the chains. 	
FLUOCOR S*	280	-	1,75	-40	250	< 1 % (200°C)	Leave no residue Very low consumption	

^{*} Contains a vector solvent + UV tracer



ESTAR®

SYNTHETIC OILS FOR HIGH TEMPERATURE CHAINS

The oils from the range ESTAR® are made from synthetic (special ester) base oils. These oils are very resistant to heat and evaporation even in presence of steam. ESTAR® oils incorporate special blend of additives which generate no residue at high temperature up to 250°C.

Products	Viscosity	Viscosity	Mass volume		erature ge °C	Flash point	% Volatility	Advantages
	40° C mm²/s	index	(20° C)	Mini	Maxi	°C	(204°C/6,5h)	Advantages
ESTAR 50 SUPER	50	125	0,97	-40	290	301	1,7	
ESTAR 125 HT	125	120	0,97	-40	280	>285	2,1	
ESTAR 125 SUPER PLUS	125	120	0,96	-40	290	>290	0,4	
ESTAR 250 SUPER	250	135	0,94	-40	280	>285	1,7	Excellent protection against corrosionHigh thermal stability
ESTAR 250 SUPER PLUS	255	125	0,95	-40	290	>290	0,5	 Very low residue content Resistance to washing Very high flash point
CHAIN HT 220	200	135	0,94	-40	280	>275	2,0	
ESTAR CHAIN OIL 120	120	125	0,96	-30	280	285	1,9	
ESTAR BAND OIL	260	260	0,95	-35	280	>285	1,6	· · · · · · · · · · · · · · · · · · ·



VISCOL®

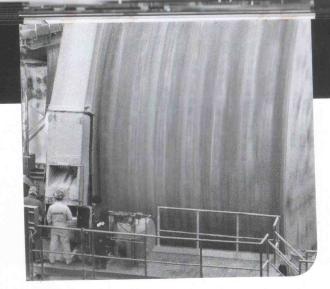
ADHESIVE AND HYDROPHOBIC OILS

The oils from the VISCOL® range are made from selected mineral base oils.

They present exceptional adhesive properties thanks to their additives' stringiness.

These oils protect efficiently against corrosion even in saline environment or in presence of steam up to 150°C. They also show excellent antiwear extreme pressure properties for all types of chains.

		Viscosity	Density	Temperature range °C		Advantages
1100000	40° C mm ² /s	index	(20° C)	Mini	Maxi	
VISCOL 68 WR	68	103	0,88	-25	150	
VISCOL 150 WR	150	95	0,90	-10	150	Excellent protection against wear and corrosion.
VISCOL 460 WR	460	125	0,89	-5	150	 Water repellent Highly adhesive. Resistance to washing out. Non-toxic. N17
VISCOL 4200	4200	180	0,89	-5	160	Paint compatible.
VISCOL 4200/75 S	4200	180	0,89	-5	160	



GEAR FLUID®

GEAR FLUID® is a range of high viscosity oils for the lubrication of heavy duty open gear drives used in the industries such as cement, ore, steel, thermal stations (coal lines), mineral processing, fertilizets, chemical (lateral furnace transmissions, grinders, dryers, coolers, mixers, rotary kilns and ball mills in general.

	Viscosity		Density	Temperature range °C		Wear test	Advantages		
Products	40° C mm ² /s		(20° C)	Mini	Maxi	(4 balls)			
GEAR FLUID 180	4600	135	0,92	-5	100	> 980			
GEAR FLUID 550	17000	180	0,92	0	120	> 980			
GEAR FLUID 1000	25000	230	0,92	0	120	> 980	Exceptional resistance to seizing Excellent extreme pressure resistance and antiwear properties		
GEAR FLUID 550 D	17000	180	0,92	-10	120	> 980	 Ideal for heavy pay loads and slow speeds Contains no heavy metals or bitume 		
GEAR FLUID 1000 D	25000	230	0,92	0	120	> 980			
GEAR FLUID R	520	100	0,92	-15	100	> 980			





SYNTHETIC OILS FOR OPEN GEAR DRIVES AND HIGH EFFICIENCY BEARINGS

Eloborated from polyglycol, these oils are essential for the lubrication of torque open gear drives, worm gears or other mechanisms where friction is a critical parameter. They can be used with some elastomers. These oils are not compatible with mineral oils and single-component paints.

	Viscosity	Viscosity	Density		erature je °C	Wear	Bearing	Advantages
	40° C mm²/s	index	(20° C)	Mini	Maxi	ASTM	FZG	
LUBRILOG PG OIL 100	100	220	1,05	-40	160	0,30	12	
LUBRILOG PG OIL 150	150	220	1,05	-34	170	0,30	12	
LUBRILOG PG OIL 220	220	230	1,05	-35	170	0,35	12+	Absorbs humidityVery high viscosity index
LUBRILOG PG OIL 320	320	240	1,05	-33	170	0,35	12+	 Excellent coefficient of friction Excellent anti-seizing properties Absence of residues at high temperatures
LUBRILOG PG OIL 460	460	250	1,05	-30	180	0,35	12+	 Improved efficiency of open gear drives Long service life
LUBRILOG PG OIL 680	680	260	1,05	-30	180	0,35	13	
LUBRILOG PG OIL 1000	1000	280	1,05	-30	180	0,35	13	



LUBRILOG LY PAO ... AW

HIGH PERFORMANCE SYNTHETIC OILS

Oils from our LUBRILOG LY PAO ... AW range offer a high resistance to both high as well as low temperatures, resistance to heavy loads, offer antiwear and anticorrosion properties. Besides, they remain perfectly compatible with mineral oil based lubricants. These oils offer a very long lifetime for the lubrication of heavy duty gears and bearings.

Products	Viscosity	Viscosity	Density		erature je °C	Wear	Bearing	Advantages
Floducis	40° C mm ² /s	index	(20° C)	Mini	Maxi	ASTM	FZG	
LUBRILOG LY PAO 68 AW	68	145	0,84	-55	150	0,3	12	
LUBRILOG LY PAO 100 AW	100	145	0,87	-50	150	0,3	12	
LUBRILOG LY PAO 150 AW	150	150	0,86	-45	150	0,3	12	No heavy metalsHigh viscosity index
LUBRILOG LY PAO 220 AW	220	150	0,86	-45	150	0,3	12+	Low friction coefficient Excellent anti-seizing properties
LUBRILOG LY PAO 320 AW	320	155	0,86	-45	150	0,3	12+	Suitable for low and high temperatures
LUBRILOG LY PAO 460 AW	460	155	0,87	-40	150	0,3	12+	 High compatibility with plastics and some elastomers
LUBRILOG LY PAO 680 AW	680	160	0,87	-40	160	0,35	12+	
LUBRILOG LY PAO 1000 AW	1000	160	0,87	-40	160	0,35	13	

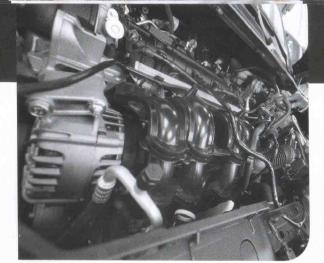


LUBRILOG LCC ... M

GENERAL PURPOSE HYDRAULIC TRANSMISSION OIL

The extreme pressure oils from the range LUBRILOG LCC ... M, are incorporated with molybdinum bisulphide (MoS_2) additive. This range of lubricants offer an excellent resistance to shear force and antiwear. They offer a long lasting lubrication for several applications: bearings submitted to heavy loads, chains, open gear drives under the casting, high viscosities, heavy duty open gear drives (lateral command with rotating tube) and low speed bearings.

Products	Viscosity	Viscosity	Mass volume	Temperature range °C		Advantages
Troducts	40° C mm²/s	index	(20° C)	Mini	Maxi	Advantages
LUBRILOG L CC 68 M	68	97	0,90	-24	120	
LUBRILOG L CC 100 M	100	97	0,90	-24	120	
LUBRILOG L CC 150 M	150	97	0,90	-24	120	train habitan managangan a dan a tita a salah sa salah s
LUBRILOG L CC 220 M	220	94	0,90	-21	120	High viscosity index
LUBRILOG L CC 320 M	320	98	0,90	-15	120	Contain Molybdinum bisulphide additive Exceptional resistance to seizing.
LUBRILOG L CC 460 M	460	98	0,90	-12	120	Excellent extreme pressure resistance and antiwear properties
LUBRILOG L CC 680 M	680	98	0,90	-8	120	 Resistance to high temperatures High performance under heavy loads and low speeds
LUBRILOG L CC 1000 M	1000	110	0,90	-3	120	Contains no bitume
LUBRILOG L CC 2200 M	2200	99	0,90	0	120	
LUBRILOG L CC 3200 M	3200	107	0,90	+3	120	
LUBRILOG L CC 680 R	680	98	0,93	-8	120	

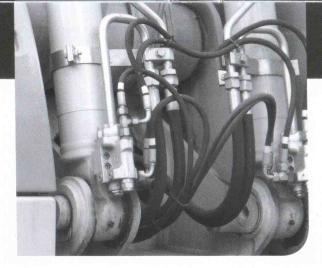


LUBRILOG L HM ...

GENERAL PURPOSE OILS FOR HYDRAULIC TRANSMISSIONS

LUBRILOG L HM is a range of fluids adapted for all hydraulic systems operating under high temperatures and pressures.

Products	Viscosity	Viscosity	Density	Temperature range °C			Advantages	
	40° C mm ² /s		(20° C)	Mini	Maxi			
LUBRILOG L HM 22	22	107	0,86	-27	120			
LUBRILOG L HM 32	32	105	0,87	-24	120	Reinforced antiwear protection Good thermal stability		
LUBRILOG L HM 46	46	104	0,88	-30	120	 Good resistance to oxidation 		
LUBRILOG L HM 68	68	103	0,88	-27	120	Reduction of residueGood filtration properties		
LUBRILOG L HM 100	100	103	0,89	-24	120			



LUBRILOG L HV ...

OILS FOR HYDRAULIC TRANSMISSIONS AND EXTREME TEMPERATURES

LUBRILOG L HV is a range of fluids with high viscosity index for the hydraulic systems operating at low temperatures.

Products	Viscosity 40° C mm²/s	Viscosity index	Density (20° C)	Temperature range °C		Advantages
				Mini	Maxi	
LUBRILOG L HV 15	15	150	0,86	-45	120	 Reinforced antiwear protection and good thermal stability Good resistance to oxidation and prolonged intervals of oil change Reduction of residues Good filtration properties
LUBRILOG L HV 22	22	155	0,87	-43	120	
LUBRILOG L HV 32	32	155	0,87	-42	120	
LUBRILOG L HV 46	46	155	0,87	-42	120	
LUBRILOG L HV 68	68	160	0,88	-36	120	
LUBRILOG L HV 100	100	160	0,89	-33	120	



LUBRILOG LY S ...

SILICONE BASED OILS

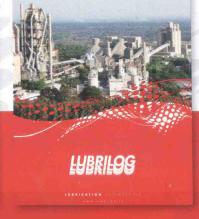
LUBRILOG LY S is a range of dimethylpolysiloxane type of non-toxic oils. They are characterised by remarkable thermal stability and compatibility with plastics and elastomers.

Products	Viscosity 40° C mm²/s	Viscosity index	Mass volume (20° C)	Temperature range °C		Advantages
				Mini	Maxi	
LUBRILOG LY S 20	20	290	0,95	-60	180	
LUBRILOG LY S 50	50	290	0,96	-55	180	
LUBRILOG LY S 100	100	300	0,96	-55	180	
LUBRILOG LY S 150	150	320	0,96	-50	180	
LUBRILOG LY S 250	250	320	0,96	-50	180	
LUBRILOG LY S 350	350	350	0,96	-50	180	
LUBRILOG LY S 500	500	370	0,97	-50	180	
LUBRILOG LY S 1000	1000	400	0,97	-50	180	
LUBRILOG LY S 5000	5000	420	0,97	-49	180	

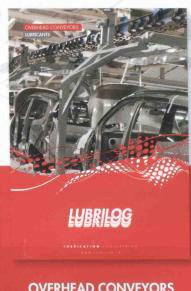
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AUTOMOTIVE INDUSTRY







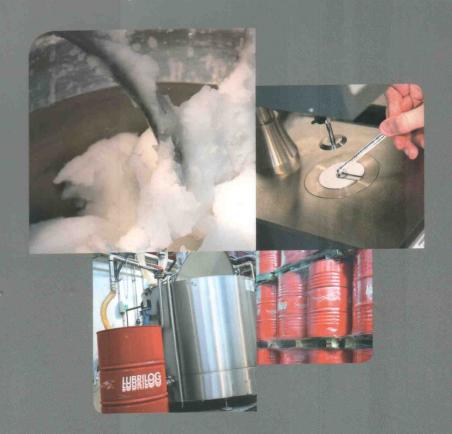


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Z.I. des Chasses - 18 rue Nicolas Appert - BP 60261 - F. 26106 Romans Cedex T : +33 (0)4 75 45 26 00 - F : +33 (0)4 75 45 18 65 - e-mail : contact@lubrilog.fr