

LUBRAL & ELKALUB

High Performance Lubricants



***H1 Lubricants for printing- and
paper processing industry***

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Chemie-Technik and ELKALUB

Matchless high-performance lubricants, oil – and fuel additives hallmarked the beginning of “Chemie Technik GmbH” in 1956.

Since the focus on high-performance lubricants for industry and craftsmanship in the early 70s our products are sold under the brand ELKALUB.

Products

For many physically demanding applications we offer a wide range of **greases** and **oils**. Where restricted access to lubricating points occurs we recommend that our greases and oils are used as **aerosol sprays**.

Applications

Noted for the answer to complicated lubricating tasks ELKALUB high-performance lubricants are the most popular choice. We develop and produce for numerous national and international companies in the following branches of industry: printing, food processing, pharmaceutical, machinery manufacture, automotive and tool making.

Service & Advise

Mechanical systems present always a complex matrix of parameters with various influences. The selection of the proper lubricant requires extensive technical know- how with long-term working experience. Contact us or our partner in your country with your individual requirements for lubrication.

Consultating service for lubricants: +45 39 62 19 40 | www.Lubral.dk



MACHINE GREASE IN FRITS OIL?

You and your customers are on the safe side with our H1 lubricants for the packaging of foodstuffs, pharmaceutical products and cosmetics.



What are H1 Lubricants?

H1 lubricants are products certified by the NSF with respect to the recipe, labelling and approval of the user manual that allow occasional contact with food, drinks or pharmaceutical products.

The products possessing approved H1 registration bear the NSF sign, a field with the category code H1 and a registration number on the product label.

Example:



The H1 approval only applies to the specific approved product. If mixed with other products, including another H1 product, the H1 approval will be invalidated.

Who must use H1 Lubricants?

H1 Lubricants are to be used not only where food, drinks or products of the pharmaceuticals industry are processed and manufactured, but also in the production of their packaging and descriptions. While packaging possibly impacts directly on the products, descriptions can transfer substances due to being handled.

A machine should be furnished with H1 lubricants in time for its delivery. A switch to an H1 lubrication products is possible after thorough washing procedures. With slide bearings, a change to a new H1 grease can be implemented relatively quickly. In contrast, with roller bearings disassembly is generally required.

EP-high-performance lubricating oils with H1 approval

Semi-Synthetic hydrocarbons (CLP-oils with FE 9-special test at + 40°C; extented service intervals possible)

Designation	ISO VG	Type	Remarks
LFC 34068	68	circulation-, chain-, and gear oil	Application and machines from Bobst, Heidelberger, KBA Planeta, manroland, Komori, Shinochara.
LFC 34100	100		
LFC 34150	150		
LFC 34220	220		Müller-Martini Food chain oil (DK) + Bobst Food chain oil (DK)
LFC 34320	320		
LFC 34460	460		Komori Food chain oil (DK)

Semi-Synthetic hydrocarbons (CLP-oils; application with normal service intervals)

Designation	ISO VG	Type	Remarks
LFC 3022	22	rinse oil circulation- and gear oil	LFC 3022 application as rinse oil by manroland. Rinse approx. 20 min without printing work load
LFC 3032	32		
LFC 3046	46		Application as circulation- and gear oil according to machine manufacturer.
LFC 3068	68		
LFC 3100	100		
LFC 3150	150		
LFC 3220	220	circulation-, and gear oil	for example Heidelberg Cylinder (DK)
LFC 3320	320	circulation-, chain-, and gear oil	for example Polar Gearboxes (DK)
LFC 3460	460	circulation-, chain-, and gear oil	
LFC 3680	680	circulation-, chain-, and gear oil	for example Müller-Martini large gearboxes (DK)

Synthetic Gearoils (HVI and CLP)

Designation	ISO VG	Type	Remarks
LFC 9032	32	PAO as circulation-, chain-, and gear oil	Application as HVI-oils (Hydraulic oils with high viscosity index) as well as circulation-, chain-, and gear oil for Bobst-Machines
LFC 9046	46		
LFC 9068	68		
LFC 9100	100		
LFC 9150	150		
LFC 9220	220		
LFC 9320	320		
LFC 9460	460		
LFC 8150	150	Polyglycol circulation-, and gear oil	Application as gearoils for Bobst-Machines
LFC 8220	220		
LFC 8320	320		
LFC 8460	460		

Lubricating Greases with H1-approval

Lubricating greases for gripper shafts.

Designation	Remarks
GLS 367/N2	Lubrication grease for application in machines from KBA-Planeta with no UV-influence. Also as general lubrication grease.
GLS 964/N2 (KP2K-20)	Thixotropic polyurea type grease for roller- and slide bearings. Under normal lubrication the thixotropic characteristics will minimize spin-off of the grease. GLS 964/N2 is particularly recommended for lubrication of gripper shafts.
VP 886 (with high UV-influence)	The grease has been developed especially for the lubrication of gripper shafts under UV-influence. The grease has varnish dissolving properties.

Caution: When lubricating the gripper shaft bearings, it is essential to observe the relubrication quantity. Normally, this is approx. 0.6 to 0.7 grams per bearing lubrication point. More grease means oversize-lubrication and the consequence of this will lead to grease splashes because of rotation/centrifugation.

General H1-lubrication greases for printing industry. (Further H1-lubrication greases on request)

Designation	Remarks
GLS 361/N1	H1 grease against tribocorrosion. Open gears, as assembly grease and toothed segments in the turn parts of the printing machines. Highly adhesive H1 grease for rolling bearings, plain bearings and open lubrication points
GLS 363/N3 (KP3K-20)	Grease for general lubrication of machines and open lubricating points. This grease is also suitable as sealing grease for ink ducts.
GLS 364	H1-sealing grease Komori, manroland. (DK)
GLS 367/N.00	H1-semi-liquid grease Komori. Plus Bosch Rexroth.
GLS 367/N.000	Consistency NLGI-000
GLS 794/N2	Highly medium-resistant silicone grease for the sealing of ink ducts on KBA-Planeta printing presses.
GLS 964/N2 (KP2K-20)	Thixotropic polyurea type grease for roller- and slide bearings. Under normal lubrication the thixotropic characteristics will minimize spin-off of the grease. GLS 964/N2 is particularly recommended for lubrication of gripper shafts.
GLS 967/N1-2	High-load and adhesive grease for anti-friction bearings, plain bearings, and open lubricating points. The grease has a medium UV-resistance and with an elevated base oil viscosity it is suitable for badly sealed bearings, such as curved roller bearings.
VP 873	High-load and adhesive grease for anti-friction bearings, plain bearings, and open lubricating points. Appropriate for lubricating toothed segments.
VP 889	ELKALUB VP 889 is a rolling and sliding bearing grease based on a synthetic- and an ester oil. Due to the relatively firm consistency and the high base oil viscosity the grease is also suitable for the lubrication of heavily loaded bearings under higher temperatures. In practice in Denmark it has replaced BERU FH28KN grease for printing machines.
VP 890 H1-semi-liquid grease under UV-influence	This grease specially matches the requirements for Heidelberg printing machines. (for example central lubrication of SM52, SM74, CD74, XL145, ...). (Denmark: Application for KBA Rapida possible.)

Chain lubricants / Chain cleaning agents with H1-approval

Designation	Remarks
LA 8 H1	Synthetic, viscous and adhesive special lubricant for service of chains running under high load, curve discs, cams and open cog wheels. LA 8 H1 is the ideal lubricant for delivery chains of sheet fed presses. LA 8 H1 is designed to cope with solidification due to influence of printing spray powder. Caution: Due to the light color of the lubricant, it may be necessary to replace the reservoir detection sensor.
FLC 8 H1 (Spray)	Extreme adhesion and high resistance to centrifugation, highly loadable with good creeping abilities and anti-corrosion properties: FLC 8 H1 is a special lubricant to operate chains under maximum load.
FLC 4010 (Spray)	FLC 4010 has been developed especially for the lubrication of gripper shafts under high UV-influence. FLC 4010 has varnish dissolving properties, and is a synthetic high-temperature spray employed in UV-lacquering environment. Best results where good anti-corrosion and anti-wear properties are mandatory.
FLC 9010 (Spray)	Synthetic oil spray forming a slightly thicker film than FLC 3010, with the temperature range of - 35°C bis + 160°C. The product is suitable to be used under small to medium UV-radiation influence.
LFC 34068, LFC 34100, LFC 34150, LFC 34220	Because of the very good antiwear properties are these oils very suitable as chain lubricants for BOBST machines. LFC 34220 H1 BOBST chainoil and MÜLLER-MARTINI (DK)
LFC 34460	High viscous synthetic oil. Komori and KBA FOOD chain oil
LFC 3460	High viscous semi-synthetic oil. KBA FOOD chain oil
LFC 9220	BOBST High temperature chain oil. (DK)
LFC 9460	Synthetic oil for delivery chains on KBA-PLANETA machines with high UV-influence.
FLC 675 R+S (Spray and container)	A cleaning agent containing non-chlorinated solvents for cleaning extremely fouled chains and machine parts. Leaves a thin adhesive, pressure and corrosion resistant film of lubricant to give protection until re-greasing.

Pneumatic oils with H1-approval

Designation	ISO VG	Remarks
LFC 3022	22	The pneumatic oil has a high protection against wear and corrosion. The oil ensure high safety of operation.
LFC 3032	32	
LFC 9022	22	High temperature pneumatic oil.
LFC 9032	32	

Hydraulic oils with H1-approval

Designation	ISO VG	Remarks
LFC 34068	68	High quality hydraulic oil for application with extended life time.
LFC 3032	32	Hydraulic oils with high protection against wear and corrosion. Special anti-aging additives ensure long operating times and paramount safety of operation.
LFC 3046	46	
LFC 3068	68	
LFC 9032	32	
LFC 9046	46	High temperature Hydraulic oils with high protection against wear and corrosion. Special anti-aging additives ensure long operating times and paramount safety of operation.
LFC 9068	68	

Oil for cylinder bearers with H1-approval

Designation	Remarks
LFC 34100	This oil has been developed for the cylinder bearer lubrication. The product is made for high working pressure loads and offers good cleaning performances. It is in use with sheet fed and web presses.
LFC 34150	This oil has been developed for the cylinder bearer lubrication. The product is made for high working pressure loads and offers good cleaning performances. It is in use with sheet fed and web presses. Heidelberg FOOD

Gripper seats / gripper seats cleaning agents with H1-approval

Designation	Remarks
FLC 3010 (Spray)	This oil spray provides high class anti-wear and corrosion protection. It has superior creeping ability for joints and gaps.
FLC 4010 (Spray)	Synthetic high-temperature spray employed in UV-lacquering environment. Best results where good anti-corrosion and anti-wear properties are mandatory.
FLC 9010 (Spray)	Synthetic oil spray forming a slightly thicker film than FLC 3010. The product is suitable for use under UV-radiation.
FLC 675 R+S (Spray and container)	A cleaning agent containing non-chlorinated solvents for cleaning extremely fouled chains and machine parts. Leaves a thin adhesive, pressure and corrosion resistant film of lubricant to give protection until re-greasing.

Curves and eccentrics with H1-approval

Designation	Remarks
FLC 8 H1 (Spray)	Due to high adhesion properties and outstanding lubricating qualities it is in use with curves and eccentric devices, where no automatic greasing by means of an automatic central greasing unit is offered (vide LA 8 / LA 8 P / LA 8 H1).

Silicone-spray / -oil with H1-approval

Designation	Remarks
FLC 745 (Spray)	FLC 745 is a medium-viscosity silicone lubricant that does not leave stain. A thin spraying is usually sufficient. FLC 745 is a silicone lubricant with an H1 food-grade approval. Its consistency is between FLC 700 and FLC 710.
LFC 7260	This silicone lubricant that does not leave any stains. (The previous name for this produkt was VP-705)

Corrosion inhibitors / cleaning agents with H1-approval

Designation	Remarks
MBF 370 (Spray and container)	Conservation film easily applied with brush or rag. Prevents corrosion between printing plate and plate cylinder. MBF 370 can be removed with a carbon-dissolving agent, or FLC 900 Clean aerosol (with H1-approval).
MBF 360 (Container)	
FLC 900 Cleaner	Odourless cleaning agent for lubricant residues, resin and paint residues; leaves bare metal surfaces without residues of the cleaning agent

Vacuum-pressure pumps, blowers, compressors with H1-approval

Designation	ISO VG	Remarks
LFC 9046	46	PAO based, fully synthetic oil for temperature areas up to + 150°C, (short term up to + 180°C). These oils do not carbonize and are miscible with mineral oils. Because of the high oxidation resistance and the very good demulsibility and air release characteristics they can be very well used in piston and in screw compressors. Evaluation of oil should be done according to lubrication manuals of the individual machinery manufacturers. These oils possess an H1 food-grade approval.
LFC 9068	68	
LFC 9100	100	
LFC 9150	150	
LFC 9220	220	
LFC 9320	320	
LFC 9460	460	
LFC 9680	680	

Above mentioned indications are given as per our best knowledge. This should serve for evaluation and advise only. A commitment and warranty can't be taken over due to manifold applications and use. Please consult our technical service.

High-performance lubricating oils, high-performance lubricating greases, high-performance sprays for general industry, printing- and paper processing industry, food processing industry and pharmacy.



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