# **ELKALUB**High Performance Lubricants





Lubricants for printing- and paper processing industry

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Chemie-Technik Matchless high-performance lubricants, oil- and fuel additives hallmarked the and ELKALUB 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 highperformance 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.

# Advise

**Service &** 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.

Consulting service for lubricants: +49(0)7454/9652-0



#### **Lubricating concentrates (Additives)**

Designation	ISO VG	Remarks
LA 1 for circulation oils manroland No. 80.94S40-0117	68	- concentrate to significantly increase working performance of commercially available mineral oils (to use as CLP gear oils, please consult us)
LA 7 for gear oils manroland No. 80.94540-0128	320	- reduction of wear and temperatures - regular dosage 20 % - extreme dosage: pure when heavy duty operation is demanded

#### **EP-high-performance oils**

#### Mineral oils

Designation	ISO VG	Туре	Remarks
LFC 1005	5	rinse oil	- high protection against wear and corrosion
LFC 1022	22	rinse oil	- best characteristics for work under high load - long service times
LFC 1046	46	circulation oil	- stays extremely clean
LFC 1068 <sup>1) 2)</sup>	68	circulation oil	
LFC 1100 <sup>1)3)</sup>	100	circulation and gear oil	
LFC 1150 <sup>1)</sup>	150	circulation and gear oil	
LFC 1220	220	gear oil	

#### Paraffin based oils (with H1-approval)

Designation	ISO VG	Туре	Remarks
LFC 34068 <sup>1)</sup>	68	circulation and gear oil	- good anti-wear and anti-corrosion properties
LFC 34100 <sup>1)</sup>	100	circulation and gear oil	- oil change according to service manual
LFC 34150	150	circulation and gear oil	
LFC 34220	220	gear oil	

<sup>1)</sup> with FE 8 special test at 40°C

# **Chain lubricants/Chain cleaning agents**

Designation	Remarks
LA 8 manroland No. 80.94540-0119 Heidelberg No. 00.580.3275	Synthetic, viscous special lubricant for service of chains running under high load, curve discs, cams and open cog wheels. LA 8 is the ideal lubricant for delivery chains of sheet fed presses.
LA 8P Heidelberg No. 00.580.5591 KBA Planeta No. L 082 0888	LA 8P based on LA 8 works in higher temperature areas and maintains a flat temperature diagram.
LA 8 H1 (with H1-approval) KBA Planeta No. L 082 0880	Basic properties comparable with LA8/LA 8P. It is slightly more liquid to cope with solidification due to influence of printing spray powder.
FLC 8 (spray) FLC 8 H1 (H1-spray)	Extreme adhesion and high resistance to centrifugation, highly loadable with good creeping abilities and anti-corrosion properties: FLC 8 is a special lubricant to operate chains under maximum load.
FLC 1010 (spray) manroland No. 80.94S40-0133	Built up on our lubricating concentrate LA 1. Shows paramount creeping abilities and high loadability in joints and gaps. The utmost thin lubricating film significantly prevents the take up of dust and dirt.
FLC 1014 (oil-teflon spray)	This spray has LA 1 as a base. The additive of PTFE reduces the friction resistance enormously.
FLC 1070 (spray)	Base of this spray is the highly loadable lubricating concentrate LA 7. It forms a stronger lubricating film than those of FLC 1010 or FLC 1012.
FLC 9010 (H1-oil spray)	Synthetic oil spray for temperatures from -35°C up to +160°C. Suitable for minor to average UV-influence.
LFC 1460H (adhesive oil) KBA Planeta No. L 082 0971	Mineral oil based, adhesive lubricant to grease delivery chains. H-oils (adhesive) are also available in different viscosity classes.
FLC 675 R+S available in a liquid performance or as spray with H1-approval	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.

<sup>&</sup>lt;sup>1)</sup> with FE 8 anti-wear test approval <sup>2)</sup> long-life service oil manroland <sup>3)</sup> long-life service oil KBA Planeta (indent-No. L 082 0639)

#### **Pneumatic oils**

Designation	ISO VG	Remarks
LFC 1010	10	Pneumatic oils with high pressure resistance and load carrying abilities to reduce wear.
LFC 1015	15	Special anti-aging additives ensure long operating times and safety of operation.

### **Hydraulic oils**

Designation	ISO VG	Remarks
LFC 1032	32	Hydraulic oils with high protection against wear and corrosion.
LFC 1046	46	Special anti-aging additives ensure long operating times and paramount safety of operation.
LFC 1068	68	

### Oil for cylinder bearers

Designation	Remarks
VP 785 KBA Planeta No. L 082 0728	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.
LA 151	Advanced and optimized oil for cylinder bearers for very high loads.

# **Gripper seats**

Designation	Remarks
FLC 1012 (spray) Heidelberg No. 00.580.5681 KBA Planeta No. L 082 0821	Spray based on our lubricating concentrate LA1 offering good penetration, even into fittings. Guarantees AW-protection, best cleaning abilities and thus ensures grippers to be always in an operating condition. FLC 1012 absorbs very little dust.
FLC 4010 (High-temperature-spray) KBA Planeta No. L 082 0860	Synthetic high-temperature spray employed in UV-lacquering environment. Best results where good anti-corrosion and anti-wear properties are mandatory.
FLC 8010 (UV-spray)	Synthetic oil spray for use under very intense UV-radiation.
FLC 3010 (spray mit H1-approval)	This oil spray provides high class anti-wear and corrosion protection. It has superior creeping ability for joints and gaps.
FLC 9010 (spray mit H1-approval)	Synthetic oil spray forming a slightly thicker film than FLC 3010. The product is suitable for use under UV-radiation.

#### **Curves and eccentrics**

Designation	Remarks
FLC 8 (spray)	Due to high adhesion properties and outstanding lubricating qualities it is in use with curves and
FLC 8 H1 (H1-spray)	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

Designation	Remarks
FLC 700	Forms an almost invisible non moistering/non dirt accepting both high adhesive slide film of silicone lubricant on paper and cardboard. The layer protects against moisture. Short evaporation after spraying is advantageous.
FLC 710	FLC 710 is similar to FLC 700, but much thinner and a less adhesive, lubricating film will remain. The advantage is the use during full production run.
FLC 745 (with H1-approval)	FLC 745 is a silicone lubricant with an <b>H1</b> food-grade approval. Its consistency is between FLC 700 and FLC 710.
VP 880 Silicone oil	Thin silicone lubricant that does not leave any stains. VP 880 is particularly recommended for the lubrication of the stitching wire.

#### **Corrosion inhibitors**

Designation	Remarks
MBF 370 (with H1-approval)	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.

# Vacuum-pressure pumps, blowers, compressors

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
LFC 9068	68	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
LFC 9100	100	and in screw compressors. Evaluation of oil should be done according to lubrication manuals of the
LFC 9150	150	individual machinery manufacturers. These oils posess an H1 food-grade approval.
LFC 9220	220	
LFC 9320	320	
GLS 962/N2 manroland No. 80.94S40-0408		Special high-temperature grease PAO-based and thickener (polyurea) to lubricate bearings of vacuum pressure pumps (dry runner) and blowers. The grease can be used up to a temperature of +170°C.

### **Lubricating greases**

Designation	Remarks
GLS 75/N2 (KP2K-20) KBA Planeta No. L 082 5440	Lithium saponified EP-multi-purpose grease for lubrication of roller and slide bearings under medium and heavy loads in temperatures of -20°C to +120°C.
GLS 135/N2 (KP2K-20) Lithium based special grease	Short fibred and very homogeneous grease with special lithium soap, for the greasing of roller and slide bearings between medium and heavy work loads. This is suitable for central lubrication systems.
GLS 163 manroland No. 8B.94S40-0390	Very thixotropic polyurea grease for roller- and slide bearings with paramount feeding in central lubrication devices. Grease containers of central greasing devices must be filled free of bubbles and be equipped with a pressurized follower piston. GLS 163 is ideal for the gripper shaft lubrication.
GLS 363/N3 (KP3K-20) (with H1-approval)	Grease for general lubrication of machines and open lubricating points. This grease is also suitable as sealing grease for ink ducts.
GLS 794/N2 (with H1-approval)	Highly medium-resistant silicone grease for the sealing of ink ducts on KBA Planeta printing presses.
GLS 964/N2 (KP2K-20) (with H1-approval) KBA Planeta No. L 082 5460	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 (with H1-approval)	This very adhesive grease with an elevated base oil viscosity is suitable for badly sealed bearings, such as curved roller bearings.
GLG 16/N00 and N000 Semi-liquid grease for gears	Lithium saponified semi-liquid grease with outstanding sliding-friction behaviour and high load carrying abilities. This semi-liquid grease is approved for central lubrication devices.
GLS 815/N1 Grease for UV-lacquering with lacquer dissolving properties	Entirely synthetic special grease for bearings, gears and chains in UV-lacquering installations. Proved and recommended by Messrs. Billhöfer, Nürnberg. The grease is not water resistant. Not to be mixed with mineral oil type greases.
GLS 37/N1 manroland No. 80.94540-0137	Strongly resistant to pressure and spin-off. A grease with peak adhesion values for use with slide bars, slide rails and curve discs. For grease application a heavy duty grease gun is necessary.
GLL 10/N2 and N1 (KPF2K-20 and KPF1K-20) MoS <sub>2</sub> -grease	Lithium saponified multi-purpose grease with best adhesion properties for heavy loads in roller- and slide bearings as well as open lubricating points. Above a temperature of +60°C the adhesion quality will be reduced.
VP 873 (with H1-approval)	High-load and adhesive grease for anti-friction bearings, plain bearings, and open lubricating points. Appropriate for lubricating toothed segments.
VP 886 (H1-grease for UV use)	The grease has been developed especially for the lubrication of gripper shafts under UV-influence. The grease has varnish dissolving properties.
VP 890 H1-fluid grease	This grease specially matches the requirements for Heidelberg printing machines.

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.

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

