



***Special Lubricants for the
Food Processing
and Pharmaceutical
Industry***



BECHEM food grade lubricants for the lubrication, power transmission or corrosion protection of machines used for the production and processing of food, food related commodities, cosmetics, pharmaceutical products, tobacco products and animal feed.

When used according to regulations **BECHEM** food grade lubricants comply with the following requirements:

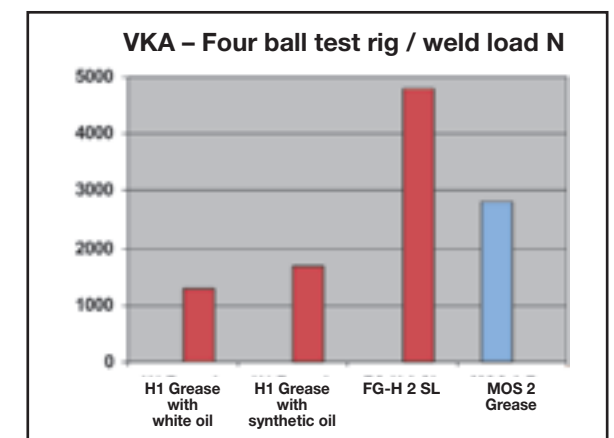
- The ingredients meet with the international approved lists.
- They are harmless with regard to health, smell and taste.
- They do not have any negative influence in case of incidental food contact.
- They withstand the seasonal, chemical, thermal and mechanical loads of the operating conditions to be expected.



Lubricating Greases for the Food Processing and Pharmaceutical Industry

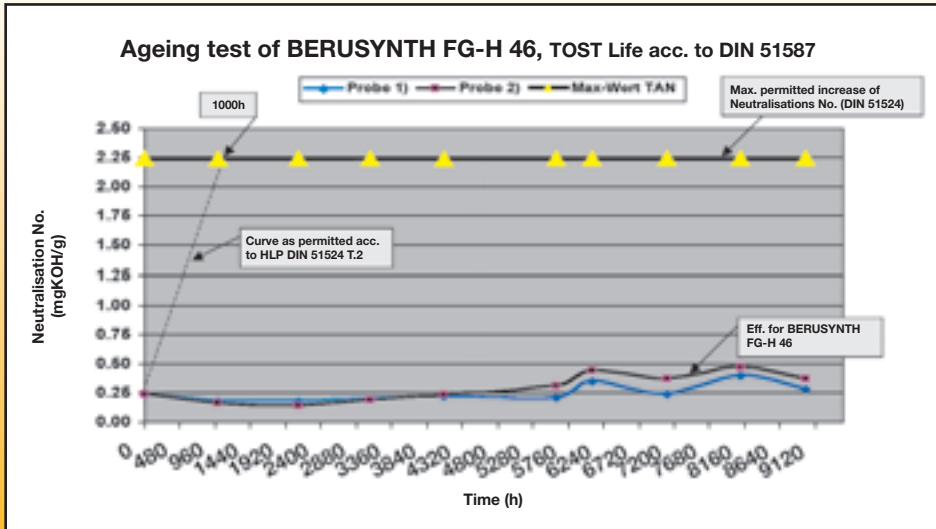
Technical Data							Application											
Product	Thickener / Base Oil	Consistency	Base oil viscosity (mm ² /s) at 40°C	Service temperature °C	Approval / conformity	Solid substances	Roller bearings	Slide bearings, joints	Slideways, slide bars	Pulleys, cam disks	Gear racks	Threaded spindles	Pneumatic	Central lubrication	Seals	Fittings	Small gears	Elastomers, plastics
BECHEM-RHUS FA 37	Al-Complex/ White Oil	2	67	-20 bis +120	NSF-H1	-	●	●						●				
BECHEM-RHUS FA 46	Al-Complex/ White Oil	2	67	-20 bis +120	NSF-H1	special	●	●	●					●		●		
BERULUB FG-H 2 SL	Spec. Ca-Complex/ Synth.- Oil	2	70	-40 bis +160 short term to 200	NSF-H1	special	●	●	●	●	●	●	●	●		●	●	
BERULUB FB 34	Al-Complex/ Synth.- Oil	1	400	-25 bis +160	NSF-H1	special	●	●	●	●	●	●	●	●		●		●
BERULUB FB 34 - 0/00	Al-Complex/ Synth.- Oil	000	400	-25 bis +160	NSF-H1	special	●							●			●	
BERUTEMP 500 T2	PTFE/ Synthetic Oil	2	500	-20 bis +260	NSF-H1	PTFE	●	●	●	●	●	●		●	●	●		●
BERULUB SIHAF 2	PTFE/ Silicone Oil	3	1000	-40 bis +160	NSF-H1	PTFE							●		●	●		●
BECHEM-RHUS LONGLIFE LF	Lithium/ Mineral Oil	2	108	-30 bis +120	NSF-H2	special	●	●	●	●	●	●					●	
BERUSOFT 20	org. Polymer/ Synthetic Oil	0 - 1	1400	-35 bis +150	NSF-H2	special			●	●	●	●			●		●	●
BERULUB TOP-PRESS	Lithium/ Mineral Oil	3	108	-20 bis +120	LMBG*	special	●	●	●	●	●	●						

* German legislation for food processing lubricants



Lubricating Oils for the Food Processing and Pharmaceutical Industry

Technical Data								Application																									
Product	Base Oil	Viscosity (mm ² /s) at 40 °C	Viscosity Index	Pour-point (°C)	Flash Point (°C)	Approval / Conformity	Type	General Oil Lubrication Points	Circulation Lubrication	Hydraulic	Friction Roller Gear	Planetary Gear	Spur Gear	Worm Gear	Bevel Gear	Centrifuge Gear	Transport and Drive Chains	Larger Transport Chains	Gears with high thermal and mechanical load	Turbo clutches	Geared Coupling	Central Lubrication	Heat Transfer	Dough Separator	Rotary Piston Blowing Engine	Pneum. Maintenance Units	Vacuum Pumps	Plastics and Elastomers	Screw Compressors	Piston Compressors	Disk and Mesh Belt Lubrication		
BERUSYNTH FG-H 15	synthetic	15	140	-54	192	NSF-H1	HLP				●															●							
BERUSYNTH FG-H 46	synthetic	46	150	-45	246	NSF-H1	HLP, CLP, VDL			●	●									●	●					●			●				
BERUSYNTH FG-H 68	synthetic	68	150	-45	252	NSF-H1	HLP, CLP, VDL		●	●		●					●					●							●	●			
BERUSYNTH FG-H 100	synthetic	100	155	-39	250	NSF-H1	HLP, CLP, VDL	●	●	●		●				●	●						●				●			●			
BERUSYNTH FG-H 220	synthetic	220	163	-33	258	NSF-H1	CLP, VDL	●	●			●	●	●	●	●	●						●				●						
BERUSYNTH FG-H 460	synthetic	460	166	-24	260	NSF-H1	CLP, VDL	●						●	●	●	●								●								
BERUSYNTH FG-H 680	synthetic	680	162	-24	264	NSF-H1	CLP							●	●			●	●														
BERUSYNTH FG-H 1000	synthetic	1000	166	-18	275	NSF-H1	CLP											●	●														
BERUSYNTH FG-H W32	synthetic	32	130	< -54	240	NSF-H1	Q HC																●										
BERULUB FLUID W&B	med. white oil	67	106	-18	225	NSF-H1	AN	●									●																
BERUFLUID WO	med. lubricating oil	16,5	120	-15	170	NSF-H1	AN										●						●										
BEICHEM PLANTFLUID	native ester	42	225	-18	> 320	NSF-H1	E										●														●		
BERUSYNTH FG-H Spray	synthetic	100	150	-39	250	NSF-H1	HLP, CLP, VDL	●		●							●																
BERULUB W&B Spray	med. white oil	67	106	-18	225	NSF-H1	AN	●									●																
BERUSIL P 140 Spray	silicone	290	460	< -50	> 330	NSF-H1	SI																				●						



Explanation (DIN 51587):

The ageing behaviour of a vapour turbine and hydraulic oil containing effective substances acc. to this standard is measured by the increase in neutralisation number during max. 1000 h when treating the oil with oxygen in the presence of water, steel and copper at 95°C (Neutralisation - Ageing - Curve).

The above ageing test shows that a conventional hydraulic oil achieves the neutralisation number of 2,25 already after 1000 h. The ageing test with our BERUSYNTH FG-H 46 was stopped after more than 9000 h since the neutralisation number was far below the maximum allowed increase for hydraulic oils laid down in the DIN standard.

Advantages of the BERUSYNTH FG-H Oil Series:

- The viscosity grades meet with the requirements of the machine manufacturers as well as with the DIN and ISO standards
- Thus the viscosity grades are reduced to a minimum.
- Products are free from mineral oil.
- Products are free from ester.
- Neutral towards conventional seals and paints.
- Miscible and compatible with remaining quantities of conventional, mineral oil based lubricants.
- The individual viscosity grades can be mixed with each other.
- BERUSYNTH FG-H Oils offer extremely long service life.





If incidental contact with food, pharmaceutical products and animal feed cannot be excluded the **BECHEM** food grade lubricants special still offer features under different operating conditions, such as

- High water resistance
- Oxidation resistance
- Low wear rates
- Compatibility with construction material
- Good adsorption and adhesion on metal and plastics
- Steam resistance

We as manufacturer are aware of our liability and herewith explicitly confirm that the observation of the NSF H1 registration criteria is safeguarded also for the future.

Information on the subject "Food Grade Lubricant" according to NSF H1 and NSF H2:

NSF H1: Classified as Food Grade Lubricants, i.e. lubricants which can be applied where incidental food contact cannot be excluded.

NSF H2: Classified as lubricants for the general use in the food processing industry, provided food contact is excluded.





**LUBRICATION
TECHNOLOGY**

Special Lubricants Made by BECHEM



Special Lubricants

- Lubricants for high and low temperatures*
- Lubricants for lifetime lubrication*
- Lubricants for plastics*
- Lubricants for electrical contacts*
- Lubricants for the food processing industry*
- Valve lubricants*



Lubricants for the Industry

- High performance multipurpose greases*
- Special EP-greases*
- Hydraulic oils*
- Gear lubricants (Open Gear)*
- Biodegradable lubricants*



Metal Working Fluids

- Coolants*
- Cutting oils*
- Deep drilling oils*
- Anti corrosion oils*
- Cleaning fluids*



Metal Forming Fluids

- Cold forging oils*
- Release agents for semi-hot and hot forging*
- Wire drawing lubricants*
- Deep drawing oils*
- Tube drawing oils*

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