OKS®

Speciality lubricants for
food processing technology

www.oks-germany.com

BECAUSE OF YOUR RESPONSIBILITY TO PEOPLE.

NSF®

Issue
2013/2014

Speciality Lubricants
Maintenance Products

35 YEARS OF TRIBOLOGICAL COMPETENCE AVAILABLE WORLDWIDE

OKS – your professional partner for chemotechnical special products

The OKS brand stands for high-performance products for reducing friction, wear and corrosion. Our products are used in all the areas of production and maintenance technology in which the performance limits of classic lubricants are exceeded.

Quality – Made in Germany
The continued success of OKS for 35 years is decisively characterised by the high quality and reliability of our products, as well as the fast implementation of customer requirements through innovative solutions.

The products developed by OKS engineers and chemists are produced under strict quality requirements in Maisach, Germany, our company's headquarters. From here sales are carried out just-in-time worldwide, supported by an integrated modern logistics centre.

The high OKS quality standard is confirmed by the certifications of the TÜV SÜD Management Service GmbH in the fields of quality (ISO 9001: 2008), environment (ISO 14001: 2004) and work safety (OHSAS 18001: 2007).

A company of the Freudenberg Group
Since 2003 OKS Spezialschmierstoffe GmbH has been part of the international Freudenberg Group, with headquarters in Weinheim, Germany. We utilize the comprehensive know-how and the innovative power of the Freudenberg Chemical Specialities (FCS) division for the further development of new products and markets to ensure the continued dynamic growth of our company in the future.

OKS – Partner to Trade
Our speciality lubricants and chemotechnical maintenance products are sold exclusively via the technical and mineral oil trades. The consistent strategy of "Sales only via trade", the smooth processing of orders and our comprehensive technical service make us one of the preferred partners for demanding customers the worldwide. Use our specialist's know-how. Put us to the test.

NSF CERTIFIED SPECIALITY LUBRICANTS FOR YOUR SAFETY

Intelligent lubricant technology from OKS. For all industries related to food processing.

OKS I ubricants for food processing technology can be used in all areas in which human beings could come into contact with lubricants. This goes far beyond the food processing and beverage industry. Typical users include:

- Manufacturers of food packaging
- Machine and system builders for the food processing industry
- Operators of logistics centres for foodstuffs
- Producers of household appliances like baking ovens, refrigerators etc.
- Toy industry
- Pharmaceuticals industry

With OKS speciality lubricants you're on the safe side.
There is currently no binding European or international legislation for lubricants approved for use in the food processing industry. As a result, in food processing technology and related areas, it is primarily the US regulations, which are the world's strictest, that are utilised.

Positive list of the FDA (Food and Drug Administration). This list recognised around the world contains all ingredients permissible in lubricants approved for use in food processing.

All lubricants tested by the NSF (National Sanitation Foundation) are published in the white book of the NSF based on this list.
You can find the list of these lubricants at www.nsf.org in the chapter entitled "Nonfood Compounds Listings Directory", arranged by company name.

The classification NSF H1 stands for lubricants which may be used when contact with food cannot be technically excluded.

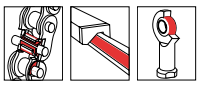
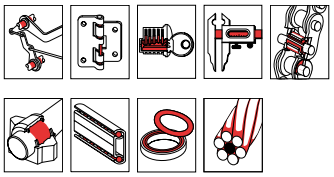
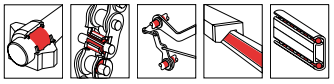
The lubricants that may be used when contact with food is technically excluded are summarised **under NSF H2**.

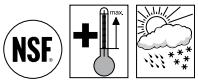
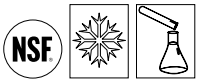
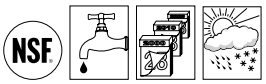
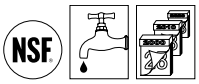
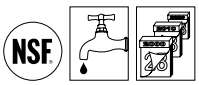
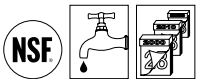
EC Directive 93/43/EEC (of 14/6/93).
This directive requires food processing plants to use the HACCP (Hazard Analysis Critical Control Point) method. This preventative system ensures that every contamination-relevant step in the manufacturing process of a foodstuff can be identified and monitored. Even if this directive contains no regulations with regard to the ingredients of lubricants approved for use in food processing, the HACCP method covers the handling of lubricants in food processing technology.

By using OKS speciality lubricants for food processing technology, you ensure compliance with national and international regulations – because of your responsibility to people.

OILS FOR FOOD PROCESSING TECHNOLOGY

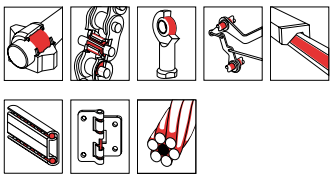
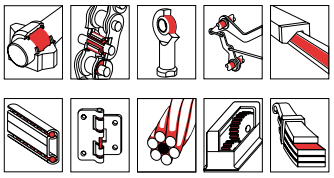
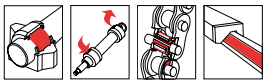
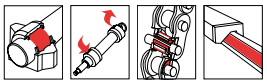
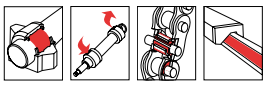
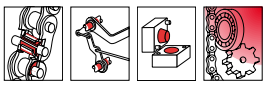
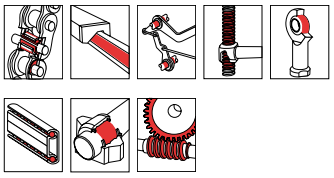
Oils

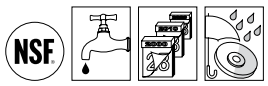
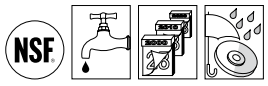
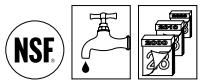
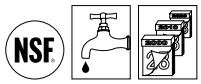
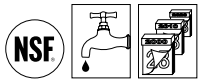
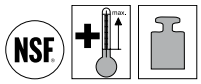
Product	Designation	Fields of application	Purpose
OKS 3570 New	**High-Temperature Chain Oil for Food Processing Technology** ISO VG 320 class DIN 51 502: CLP E 320		For lubrication of chains, hinges, joints, clamping and drying frames, and slideways at higher temperatures. For conveying systems in painting, stoving and drying systems of the packaging and food processing industry.
OKS 370 **OKS 371***	**Multipurpose Oil for Food Processing Technology** ISO VG 15 class DIN 51 502: CL 15		High-performance oil for precision machine elements. Tasteless and odourless. Extremely high creep capacity. Displaces water. Dissolves dirt and rust. Washed out of textiles. For use in textile and packaging industry.
OKS 3710	**Low-Temperature Oil for Food Processing Technology** ISO VG 10 class DIN 51 502: CL HC 10		Fully synthetic oil for permanently low temperatures. Physiologically harmless. For use in cold storage houses, shock freezers, etc. Excellent low-temperature behaviour. Optimal additives against oxidation and ageing. Long economic operating times.
OKS 3720 ChronoLube System	**Gear Oil for Food Processing Technology** ISO VG 220 class DIN 51 502: CLP HC 220		Fully synthetic. Also for the lubrication of rolling, friction bearings, chains and other lubricating points. Long operating times due to high temperature and oxidation stability. Good wear protection. Resistant to steam, alkali and acid disinfectants and cleaning agents.
OKS 3725	**Gear Oil for Food Processing Technology** ISO VG 320 class DIN 51 502: CLP HC 320		Fully synthetic. Also for the lubrication of rolling, friction bearings, chains and other lubricating points. Long operating times due to high temperature and oxidation stability. Good wear protection. Resistant to steam, alkali and acid disinfectants and cleaning agents.
OKS 3730	**Gear Oil for Food Processing Technology** ISO VG 460 class DIN 51 502: CLP HC 460		Fully synthetic. Also for the lubrication of rolling, friction bearings, chains and other lubricating points. Long operating times due to high temperature and oxidation stability. Good wear protection. Resistant to steam, alkali and acid disinfectants and cleaning agents.
OKS 3740	**Gear Oil for Food Processing Technology** ISO VG 680 class DIN 51 502: CLP HC 680		Fully synthetic. Also for the lubrication of rolling, friction bearings, chains and other lubricating points. Long operating times due to high temperature and oxidation stability. Good wear protection. Resistant to steam, alkali and acid disinfectants and cleaning agents.

Properties / Approvals	Main Components	Technical Data	Packaging
 NSF H1 Reg. No. 145347	yellowish-red ester	Operating temperature: -10°C → +250°C Density (20°C): 0.87 g/ml Viscosity (40°C): 300 mm²/s	5 l canister 25 l canister 200 l drum
 OKS 370: NSF H1 Reg. No. 124382 OKS 371: NSF H1 Reg. No. 124384 In accordance with DAB 10	colourless white oil	Operating temperature: -10°C → +180°C Density (20°C): 0.87 g/ml Viscosity (40°C): 14 mm²/s	5 l canister 25 l canister 200 l drum 500 ml aerosol*
 NSF H1 Reg. No. 142477	colourless polyalphaolefin (PAO)	Operating temperature: -60°C → +135°C Density (20°C): 0.80 g/ml Viscosity (40°C): 9 mm²/s	5 l canister 25 l canister 200 l drum
 NSF H1 Reg. No. 135752	colourless-yellowish synthetic oil mixture	Operating temperature: -30°C → +120°C Density (20°C): 0.85 g/ml Viscosity (40°C): 220 mm²/s FZG damage level: Power level >12	120 cm³ CL-cartridge 5 l canister 25 l canister 200 l drum
 NSF H1 Reg. No. 143596	colourless synthetic oil mixture	Operating temperature: -30°C → +120°C Density (20°C): 0.85 g/ml Viscosity (40°C): 320 mm²/s FZG gear-test rig: Scuff load > 12	5 l canister 25 l canister 200 l drum
 NSF H1 Reg. No. 135753	colourless-light yellow synthetic oil mixture	Operating temperature: -30°C → +120°C Density (20°C): 0.86 g/ml Viscosity (40°C): 460 mm²/s FZG damage level: Power level >12	5 l canister 25 l canister 200 l drum
 NSF H1 Reg. No. 135754	colourless synthetic oil mixture	Operating temperature: -25°C → +120°C Density (20°C): 0.86 g/ml Viscosity (40°C): 680 mm²/s FZG damage level: Power level >12	5 l canister 25 l canister

OILS FOR FOOD PROCESSING TECHNOLOGY

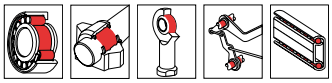
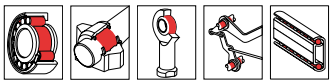
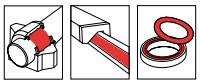
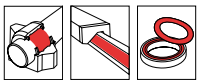
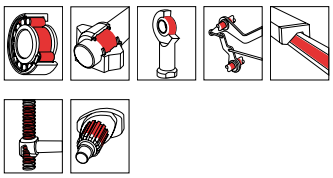
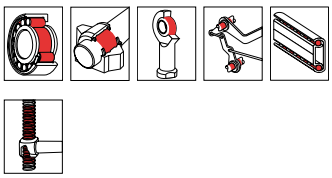
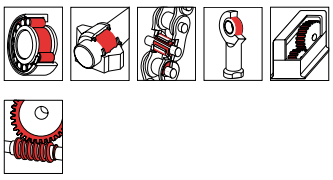
Oils

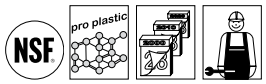
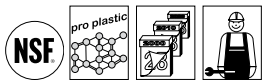
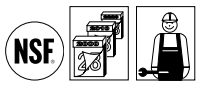
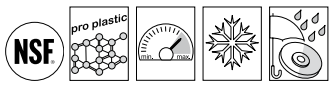
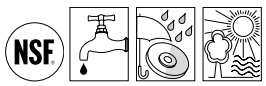
Product	Designation	Fields of application	Purpose
OKS 3750 **OKS 3751***	**Adhesive Lubricant with PTFE** ISO VG 100 class DIN 51 502: CLF HC 100		Lubricating oil with PTFE. Long operating times due to high temperature and oxidation stability. Excellent wear protection. High pressure absorption capacity. Adheres well. Resistant to steam, alkali and acid disinfectants and cleaning agents. Tasteless and odourless.
OKS 3760	**Multipurpose Oil for Food Processing Technology** ChronoLube System ISO VG 100 class DIN 51 502: CL HC 100		Fully synthetic multipurpose oil. Long operating times due to high temperature and oxidation stability. Good wear protection. Resistant to steam, alkali and acid disinfectants and cleaning agents. Tasteless and odourless.
OKS 3770	**Hydraulic Oil for Food Processing Technology** ISO VG 46 class DIN 51 502: HLP HC 46 DIN 51 502: VDL HC 46		Fully synthetic mineral-oil free hydraulic oil. High temperature and oxidation stability. Good wear protection. Compressor oil for screw and multiple vane rotary vacuum pumps in the food processing and pharmaceutical industry. Resistant to steam, alkali and acid disinfectants and cleaning agents.
OKS 3775	**Hydraulic Oil for Food Processing Technology** ISO VG 32 class DIN 51 502: HLP HC 32 DIN 51 502: VDL HC 32		Fully synthetic mineral-oil free hydraulic oil. High temperature and oxidation stability. Good wear protection. Compressor oil for screw and multiple vane rotary vacuum pumps in the food processing and pharmaceutical industry. Resistant to steam, alkali and acid disinfectants and cleaning agents.
OKS 3780	**Hydraulic Oil for Food Processing Technology** ISO VG 68 class DIN 51 502: HLP HC 68 DIN 51 502: VDL HC 68		Fully synthetic mineral-oil free hydraulic oil. High temperature and oxidation stability. Good wear protection. Compressor oil for screw and multiple vane rotary vacuum pumps in the food processing and pharmaceutical industry. Resistant to steam, alkali and acid disinfectants and cleaning agents.
OKS 3790	**Sugar-Dissolving Oil, fully synthetic**		Dissolving of sugar deposits. Cleaning of machine parts. Lubrication of precision mechanisms. Forming lubricant for packaging. Good cleaning and lubrication effect. Good wear and corrosion protection. Tasteless and colourless emulsion. Specially for the sweets industry.
OKS 387	**High-Temperature Chain Lubricant for Food Processing Technology** ISO VG 220 class		Synthetic lubricant with graphite for strongly loaded lubrication points at extreme temperatures. Reduces wear, excellent lubricating and emergency running properties. Base oil that evaporates odourlessly and residue-free above +200°C, dry lubrication up to +600°C.

Properties / Approvals	Main Components	Technical Data	Packaging
 OKS 3750: NSF H1 Reg. No. 124383 OKS 3751: NSF H1 Reg. No. 124801	whitish PTFE polyalphaolefin (PAO)	Operating temperature: -35°C → +135°C Density (20°C): 0.87 g/ml Viscosity (40°C): 110 mm²/s Four-ball test rig (welding load): 2,600 N	5 l canister 500 ml aerosol*
 NSF H1 Reg. No. 129964	colourless polyalphaolefin (PAO)	Operating temperature: -35°C → +135°C Density (20°C): 0.84 g/ml Viscosity (40°C): 100 mm²/s	120 cm³ CL-cartridge 5 l canister 25 l canister 200 l drum
 NSF H1 Reg. No. 129962	colourless polyalphaolefin (PAO)	Operating temperature: -40°C → +135°C Density (20°C): 0.84 g/ml Viscosity (40°C): 50 mm²/s	5 l canister 25 l canister 200 l drum
 NSF H1 Reg. No. 143597	colourless polyalphaolefin (PAO)	Operating temperature: -45°C → +135°C Density (20°C): 0.83 g/ml Viscosity (40°C): 32 mm²/s	5 l canister 25 l canister 200 l drum
 NSF H1 Reg. No. 136036	colourless polyalphaolefin (PAO)	Operating temperature: -40°C → +135°C Density (20°C): 0.83 g/ml Viscosity (40°C): 66 mm²/s	5 l canister 25 l canister 200 l drum
 NSF H1 Reg. No. 128470	colourless water polyglycol	Operating temperature: -5°C → +80°C Density (20°C): 1.06 g/ml Viscosity (40°C): 20 - 24 mm²/s	5 l canister 25 l canister
 NSF H1 Reg. No. 126583	black graphite polyglycol	Operating temperature: max. +600°C Density (20°C): 1.04 g/ml Viscosity (40°C): 190 mm²/s Four-ball test rig (welding load): 2,800 N	5 l canister 25 l canister

GREASES FOR FOOD PROCESSING TECHNOLOGY

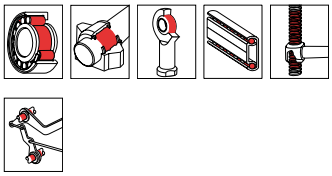
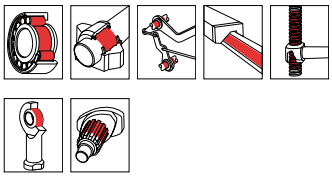
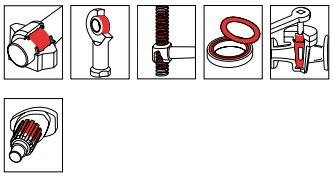
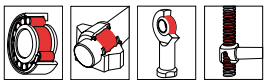
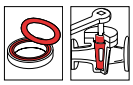
Greases

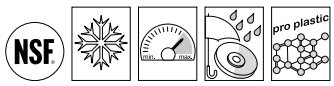
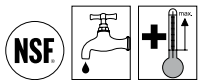
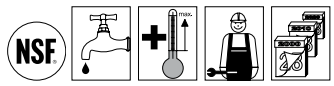
Product	Designation	Fields of application	Purpose
OKS 4220	**Extreme-Temperature Bearing Grease** DIN 51 502: KFFK2U-20		Long-term lubrication of rolling and friction bearings. Excellent temperature resistance. Excellent media resistance. Excellent plastic and elastomer compatibility. Excellent water and steam resistance. Excellent wear protection.
OKS 4230	**Extreme Pressure Oxygen Fitting Grease** DIN 51 502: MFFK2U-60		Lubricant for fittings with contact to oxygen, at high pressures and temperatures. Lubricant for chemical plants and apparatuses. Excellent media resistance. Excellent plastic and elastomer compatibility. Excellent wear protection.
OKS 468	**Plastic and Elastomer Grease**		Lubricating and sealing grease for plastic/plastic and plastic/metal combinations. Good elastomer and plastic compatibility, EPDM-compatible. Silicone-free. Highly adhesive. Does not affect the quality properties of beer foam. Tasteless and odourless.
OKS 469	**Plastic and Elastomer Grease**		Lubricating and sealing grease for plastic/plastic and plastic/metal combinations. Good compatibility with elastomers and plastics. Silicone-free. Highly adhesive. Does not affect the quality properties of beer foam. Tasteless and odourless.
OKS 470	**White Universal High-Performance Grease (also for Food Processing Technology)** DIN 51 502: KF2K-30		For heavily loaded rolling and friction bearings, spindles and slideways when dark-coloured lubricants cannot be used. Good pressure properties. Reduces wear. Resistant to ageing and oxidation. Waterproof. Hygienically harmless.
OKS 472	**Low-Temperature Grease for Food Processing Technology** DIN 51 502: KHC1K-40		Lubrication of rolling and friction bearings with minimal bearing play and high speeds, at low temperatures as well as low coasting torques. Functionality of the lubricating film up to -70°C. Reduces wear. Good resistance to ageing and oxidation. For bearings in cold storage houses, ice factories, etc.
OKS 473	**Fluid Grease for Food Processing Technology** DIN 51 502: KPHC00K-40		For closed gear units, rolling and friction bearings or for joints or chains when grease lubrication is specified. Also suitable for higher speed, low bearing play or low gear unit spaces. Reduces wear. Can be conveyed well using central lubricating systems. Waterproof. Excellent corrosion protection due to special additives.

Properties / Approvals	Main Components	Technical Data	Packaging
 NSF H1 Reg. No. 124380	white PTFE perfluoropolyether (PFPE)	Operating temperature: -20°C → +280°C NLGI grade: 2 DN factor (dm x n): 300,000 mm/min Base oil viscosity (40°C): 510 mm²/s Four-ball test rig (welding load): >10,000 N	100 g tube 500 g tin 800 g cartridge 1 kg tin 5 kg hobbock
 NSF H1 Reg. No. 135755 DIN EN 1797:2002-02; Test report BAM, Diary No. 6123/97 II-5259 I	white PTFE perfluoropolyether (PFPE)	Operating temperature: -60°C → +260°C NLGI grade: 2 DN factor (dm x n): not applicable Base oil viscosity (40°C): 300 mm²/s Four-ball test rig (welding load): 4,000 N	250 g dispenser 1 kg tin
 NSF H1 Reg. No. 135591 Beer foam compatibility tested	light-coloured polyalphaolefin (PAO) inorganic thickener	Operating temperature: -25°C → +150°C NLGI grade: not applicable DN factor (dm x n): not applicable Base oil viscosity (40°C): 1,500 mm²/s Four-ball test rig (welding load): not applicable	1 kg tin 5 kg hobbock
 NSF H1 Reg. No. 131380 Beer foam compatibility tested	colourless-transparent polyalphaolefin (PAO) inorganic thickener	Operating temperature: -40°C → +150°C NLGI grade: 2 DN factor (dm x n): not applicable Base oil viscosity (40°C): 400 mm²/s Four-ball test rig (welding load): not applicable	1 kg tin 5 kg hobbock
 NSF H2 Reg. No. 137707	light beige white solid lubricants, mineral oil lithium soap	Operating temperature: -30°C → +120°C NLGI grade: 2 DN factor (dm x n): 300,000 mm/min Base oil viscosity (40°C): approx. 110 mm²/s Four-ball test rig (welding load): 3,600 N	100 g tube 400 ml cartridge 1 kg tin 5 kg hobbock 25 kg hobbock 180 kg drum
 NSF H1 Reg. No. 135749	white polyalphaolefin (PAO), ester aluminium-complex soap	Operating temperature: -45°C → +120°C NLGI grade: 1 DN factor (dm x n): 800,000 mm/min Base oil viscosity (40°C): 30 mm²/s Four-ball test rig (welding load): not applicable	400 ml cartridge 1 kg tin 5 kg hobbock 25 kg hobbock
 NSF H1 Reg. No. 140485	light yellow polyalphaolefin (PAO) aluminium-complex soap	Operating temperature: -45°C → +120°C NLGI grade: 0 - 00 DN factor (dm x n): 500,000 mm/min Base oil viscosity (40°C): 160 mm²/s	1 kg tin 5 kg hobbock 25 kg hobbock

GREASES FOR FOOD PROCESSING TECHNOLOGY

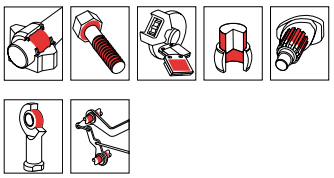
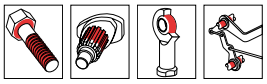
Greases

Product	Designation	Fields of application	Purpose
OKS 475	**High-Performance Grease (also for Food Processing Technology)** DIN 51 502: KFHC2K-60		For bearings with minimal bearing play and high speeds, at low and high temperatures and for bearings with low coasting torque. Good wear protection through PTFE. For fast-running bearings in the textile industry, in filling and packaging machines. Lubrication of components made of glass fibre reinforced plastic.
OKS 476	**Multipurpose Grease for Food Processing Technology** DIN 51 502: KP2K-30		For rolling and friction bearings and other machine elements. Resistant to cold and hot water, as well as to disinfectants and cleaning agents. Resistant to oxidation. Reduces wear. Multipurpose grease for universal use in food processing technology.
OKS 477	**Valve Grease for Food Processing Technology** DIN 51 502: MHC3N-10		Sealing lubrication of adapted sliding surfaces. Lubrication of plastics and elastomers. Lubrication of slow-running bearings. Highly adhesive. Seals well. Resistant to water and steam. Does not affect the quality properties of beer foam. Valve and sealing grease.
OKS 479	**High-Temperature Grease for Food Processing Technology** ChronoLube System DIN 51 502: KPFHC1P-40		Reduces wear. Excellent pressure resistance. Good resistance to oxidation and ageing. Good plastic and elastomer compatibility. Resistant to water and steam. For all sections of the food processing, beverage and pharmaceutical industries.
OKS 1110	**Multi-Silicone Grease** DIN 51 502: MSI3S-40		For fittings, seals and plastic parts. Resistant to media. Excellent compatibility to plastics. No drying out or bleeding. Tasteless and odourless. Highly adhesive. Silicone grease for a broad range of applications, including for food processing technology.

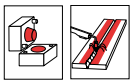
Properties / Approvals	Main Components	Technical Data	Packaging
 NSF H2 Reg. No. 137708	beige PTFE polyalphaolefin (PAO) lithium soap	Operating temperature: -60°C → +120°C NLGI grade: 2 DN factor (dm x n): 1,000,000 mm/min Base oil viscosity (40°C): approx. 30 mm²/s Four-ball test rig (welding load): 2,000 N	400 ml cartridge 1 kg tin 5 kg hobbock 25 kg hobbock 170 kg drum
 NSF H1 Reg. No. 137619	white semi-synthetic oil aluminium-complex soap	Operating temperature: -30°C → +110°C NLGI grade: 2 DN factor (dm x n): 400,000 mm/min Base oil viscosity (40°C): 240 mm²/s Four-ball test rig (welding load): 2,200 N	400 ml cartridge 1 kg tin 5 kg hobbock 25 kg hobbock 180 kg drum
 NSF H1 Reg. No. 135750 Beer foam compatibility tested	light brown polyalphaolefin (PAO) silicate	Operating temperature: -10°C → +140°C NLGI grade: 3 DN factor (dm x n): not applicable Base oil viscosity (40°C): 1,600 mm²/s Four-ball test rig (welding load): not applicable	100 g tube 1 kg tin 5 kg hobbock 25 kg hobbock
 NSF H1 Reg. No. 135675	cream-coloured EP additive polyalphaolefin (PAO) aluminium-complex soap	Operating temperature: -40°C → +160°C NLGI grade: 1 DN factor (dm x n): 400,000 mm/min Base oil viscosity (40°C): 400 mm²/s	120 cm³ CL-cartridge 400 ml cartridge 1 kg tin 5 kg hobbock 25 kg hobbock
 NSF H1 Reg. No. 124381 DVGW DIN EN 377 Reg. No. NG-5162BL0482	transparent silicone oil inorganic thickener	Operating temperature: -40°C → +200°C NLGI grade: 3 DN factor (dm x n): not applicable Base oil viscosity (40°C): 9,500 mm²/s Four-ball test rig (welding load): not applicable	10 g tube 100 g tube 400 ml cartridge 500 g tin 5 kg, 25 kg hobbock 180 kg drum

PASTES, DRY LUBRICANTS AND MAINTENANCE PRODUCTS FOR FOOD PROCESSING TECHNOLOGY

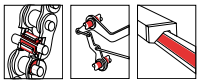
Pastes

Product	Designation	Fields of application	Purpose
OKS 250 Mo$_x$ - Active	**White Allround Paste, metal-free**		For screws, bolts and sliding surfaces subjected to high pressures and temperatures. Optimum ratio of screw tightening torque to achievable pre-tension. Metal-free. Excellent corrosion protection. Universal high-temperature paste. For stainless-steel connections.
OKS 252	**White High-Temperature Paste for Food Processing Technology**		Lubrication of screws, bolts and sliding surfaces that are subjected to high pressures, high temperatures at low speeds or oscillating movements. Prevents burning together and rusting on. Metal-free. Highly adhesive. Universal high-temperature assembly paste.

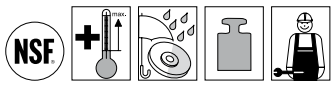
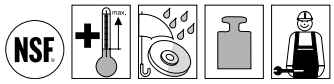
Maintenance Products

Product	Designation	Fields of application	Purpose
OKS 1361*	**Silicone Release Agent**		Parting agent and lubricant for use in processing plastics. Chemically neutral. Solvent-free. Colourless. Displaces water. Fitting aid for rubber profiles. Lubrication of cutting edges. Care and impregnation of plastic surfaces and textiles.
OKS 2100	**Protective Film for Metals**		Temporary wax-based corrosion protection film for storage and shipping of machine parts with bare metal surfaces. Suitable for all climatic zones. Non-tacky, transparent film. Easy to remove. Good compatibility with lubricants.
OKS 2650 BIOlogic	**BIOlogic Industrial Cleaner, water-based concentrate**		Aqueous cleaner for removing heavy oily, greasy and sooty soiling. Biodegradable. Good separation behaviour. Gentle to delicate surfaces. For universal use in industry, workshop and food processing technology.

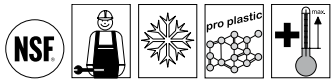
Dry Lubricants

Product	Designation	Fields of application	Purpose
OKS 536	**Graphite Bonded Coating, water-based, air-drying**		Lubrication of heavily loaded chains when oil and grease lubrication is no longer possible. Can be sprayed onto hot surfaces. Use in a broad temperature range. Dries at room temperature. Spent sliding film can be topped up. Can be mixed with water in ratio of up to 1:5.

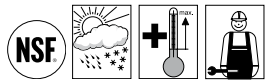
Pastes

Properties / Approvals	Main Components	Technical Data	Packaging
 NSF H2 Reg. No. 131379	yellowish white solid lubricants Mo_x-Active synthetic oil polycarbamide	Operating temperature: -40°C → +200°C/+1,400°C (lubrication/separation) Press-fit: μ = 0,10, no chatter Four-ball test rig (welding load): 3.600 N Thread friction (M10/8.8): μ = 0,12	10 g tube 100 g tube 250 g brush tin 1 kg tin 5 kg hobbock 25 kg hobbock
 NSF H1 Reg. No. 135748	light grey white solid lubricants polyglycol silicate	Operating temperature: -30°C → +160°C/+1,200°C (lubrication/separation) Press-fit: μ = 0.12, no chatter Thread friction (M10/8.8): μ = 0,15	200 g dispenser 250 g brush tin 1 kg tin 5 kg hobbock

Maintenance Products

Properties / Approvals	Main Components	Technical Data	Packaging
 NSF H1 Reg. No. 129481	colourless silicone oil	Operating temperature: -60°C → +200°C	500 ml aerosol*
 NSF H2 Reg. No. 142256	light-coloured synthetic wax corrosion protection additive solvent	Operating temperature: -40°C → +70°C Salt spray test: 1,000 h at 50 µm layer thickness Layer thickness: Approx. 10 µm for repeated application	5 l canister 25 l canister 200 l drum
 NSF A1 Reg. No. 129003	red non-ionic surfactants	Depending on the degree of soiling can be diluted with water up to a maximum of 1:10 pH value: 11.0 (concentrate)	500 ml pump sprayer 5 l canister 25 l canister 200 l drum

Dry Lubricants

Properties / Approvals	Main Components	Technical Data	Packaging
 NSF H2 Reg. No. 130416	black graphite organic binder water	Operating temperature: -35°C → +600°C Press-fit test: μ = 0.12, no chatter Thread friction: not applicable	5 kg canister 25 kg canister

LEADING BRANDS RELY ON OKS

1


2


3

Convince yourself based on practical experience reports on the use of OKS speciality lubricants.

Specialities from the Allgäu region (1)
Since 1909 the logo with the three button mushrooms (champignons) has stood for high-quality dairy products. Today the Hofmeister corporate group is one of the leading suppliers of milk and cheese specialities – both in Germany and internationally. Familiar brands like Cambozola, Rougette and Champignon Camembert stand for the success of the Champignon cheese dairy. A decisive factor in this success is also the orientation toward the strictest hygiene standards. The use of gear oils in production – like OKS 3720, OKS 3730 and OKS 3740 – ensures compliance with all hygiene standards.

Precision under the toughest everyday conditions (2)
Highly sensitive weighing technology and precision electronics, packaged in rugged industrial hardware – these are the weighing systems from METTLER-TOLEDO. Systems that weigh precisely and reliably, despite extreme working conditions like high moisture levels and temperature fluctuations. Due to these environmental influences, METTLER protects its products from harmful corrosion – with OKS 370. Thanks to the excellent capillary property of the oil, even poorly accessible areas are shielded from jet water and high-pressure steam. At the same time, cleaning with OKS 370 renews the protective film.

Systems and speciality machines for cheese production and care (3)
"We perfect with high-tech engineering, what nature has entrusted us with", is the motto of the Swiss company LEU Anlagenbau AG. In the process, the specialist for cheese care robots, cleaning machines, conveyor systems and special designs always has the extremely difficult external conditions of its customers in mind. Because salty air, sensitive cultures and high humidity place very special technical and hygienic demands on machines and lubricants during cheese storage and care. OKS 3751 has proven itself here for the lubrication of chains and guides for many years now.

1 Champignon cheese dairy, Hofmeister GmbH & Co. KG
2 Weighing systems from METTLER-TOLEDO
3 Speciality machines from LEU Anlagenbau AG

THE STEP TO MORE SAFETY

How to change from conventional lubricant to lubricant approved for use in food processing.

We recommend changing over during a regular service shut-down. All parts to be lubricated must be cleaned and checked for residue-free cleanliness. A cleaner approved for use with food processing technology is suitable for cleaning (e.g. OKS 2650 with NSF A1 registration) or a residue-free evaporating cleaner. The limits required for the respective system must be defined at critical inspection points in accordance with the HACCP method.

Change with oil lubrication
The oil should be at operating temperature during draining if possible. After the oil has been drained, experience shows that used oil, wear particles and oxidation products amounting to approx. 10 % of the filling capacity remain in the system. Then the system should be thoroughly cleaned. Special attention should be paid to tanks, central lubricating circuits, gearboxes etc. Then the corresponding operating oil is poured in and the system is operated at normal working temperature. To reduce contamination of the NSF-registered new lubricant, it is advisable to use a cleaning oil.

Change with grease lubrication
Following cleaning, the system is filled with the required quantity of the corresponding OKS grease. Should it not be possible to dismantle and clean the system, relubrication can also be carried out with the new grease. Then the regreasing interval must be shortened in comparison to the usual regreasing period to press out the old grease. Please make sure the bearings are not overfilled and that the used grease can be channeled off. In addition, it must be ensured that the new lubricant is compatible with the old one.

SELECTION GUIDE

Fields of Application


Valves


Brakes


Seals


Wire cables


Precision mechanics


Pivoting bearings


Enclosed gears


Threaded connections


Slideways


Friction bearings


Levers


Hydraulics


Splined shafts


Chains


Linear guide systems


Measuring devices


Open gears


Press fittings


Cleaning


Hinges


Worm gear


Spindles


Mould release


Weld release


Roller bearings


Foam cleaner

Properties

Sprayable with Airspray System


Workplace-friendly


Effect of chemicals


Heavy loading


High speeds


High temperatures


Corrosion protection

Compatible with plastics


Long-acting

NSF certified


Low temperatures


Environmentally friendly


Effects of water


Foam forming

www.oks-germany.com

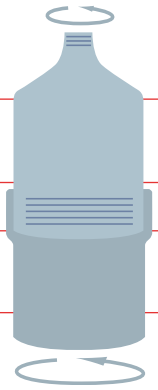
AUTOMATIC RELUBRICATION

ChronoLube is the ideal combination of OKS speciality lubricants with an electromechanical lubricator.
This enables the automatic supply of lubricating points with oil and grease. And that in the dosage you require and at the right time – without under or over-lubrication.

Simply install the ChronoLube Drive together with the suitable ChronoLube cartridge at the lubricating point and set the dispensing time (1/3/6/12 months) in accordance with your requirements.

For food processing applications, the ChronoLube System is available in combination with the OKS 3720, OKS 3760 and OKS 479.
Additional food processing lubricants in the ChronoLube System are available on request.

ChronoLube System



Simple installation at the lubricating point

ChronoLube OKS 3760

Speciality lubricants from OKS

ChronoLube Drive

Battery-powered drive

ChronoLube cartridge easily replaceable by screwing drive unit on and off

Over 150 high-performance products from one supplier

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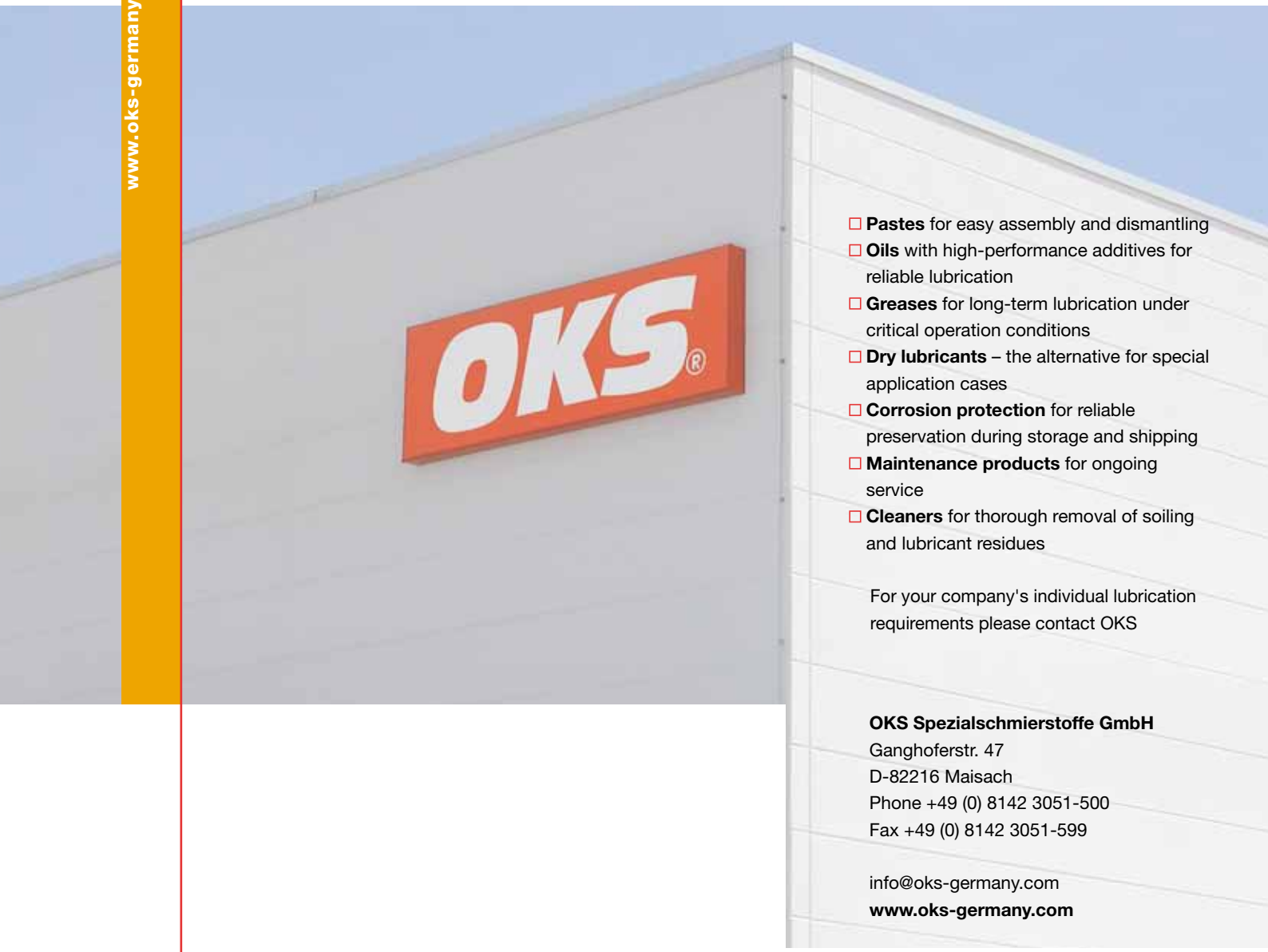

- **Pastes** for easy assembly and dismantling
- **Oils** with high-performance additives for reliable lubrication
- **Greases** for long-term lubrication under critical operation conditions
- **Dry lubricants** – the alternative for special application cases
- **Corrosion protection** for reliable preservation during storage and shipping
- **Maintenance products** for ongoing service
- **Cleaners** for thorough removal of soiling and lubricant residues

For your company's individual lubrication requirements please contact OKS

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