OKS®

Speciality lubricants for
food processing technology

www.oks-germany.com

BECAUSE OF YOUR RESPONSIBILITY TO PEOPLE.

NSF®

Speciality Lubricants
Maintenance Products

40 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 40 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 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 lubricants 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
- Pharmaceutical 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.

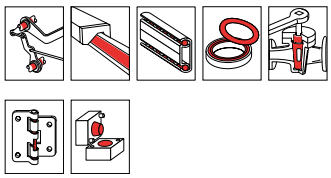
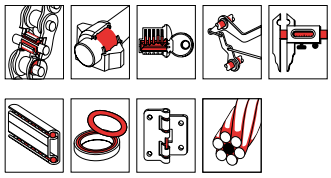
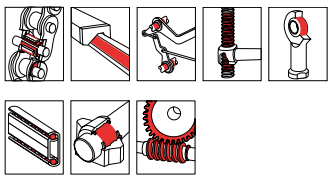
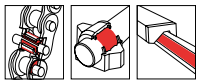
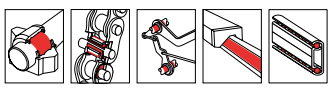
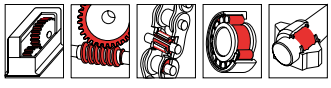
The lubricants that may be used when contact with food is technically excluded are summarised **under NSF H2**.

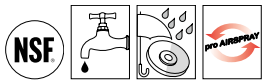
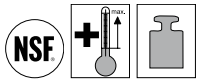
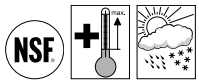
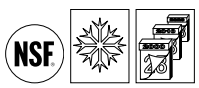
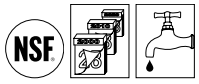
EC Directive 93/43/EEC (of 14/6/93)
This directive requires food processing plants to use the HACCP (Hazard Analysis Critical Control Point) method. This preventative system ensures that every contamination-relevant step in the manufacturing process of a foodstuff can be identified and monitored. Even 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

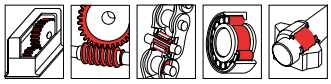
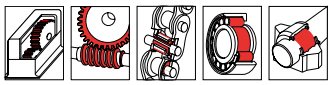
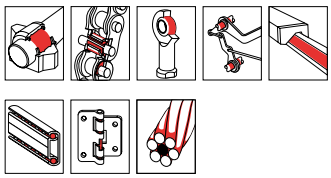
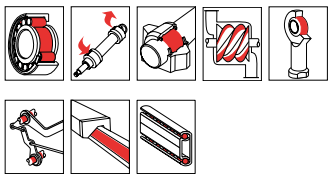
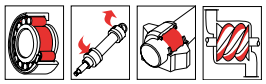
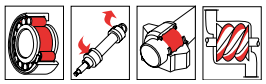
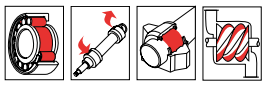
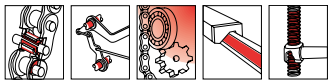
Oils

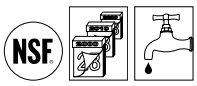
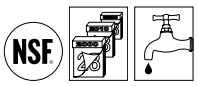
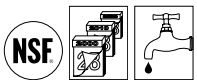
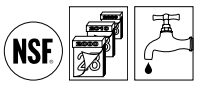
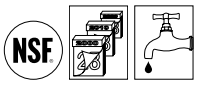
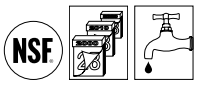
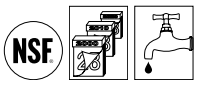
Product	Designation	Fields of application	Purpose
OKS 1010/2 **OKS 1035/1***	**Silicone Oil for Food Processing Technology**		• Lubricant and parting agents for plastics and elastomers • Also as damping oil • Neutral with respect to plastics, elastomers or paints • Broad temperature application range • Excellent surface wetting, resin and acid-free
OKS 360 New Formulation!	**High-Performance Corrosion Protection Oil for Food Processing Technology**		• Excellent corrosion protection of bare machine parts, storage and lubrication under corrosive conditions, good creep properties • Contains non-ferrous metal deactivator • Shipping protection of metal surfaces, packed and unpacked machines under extreme climatic conditions, industrial atmosphere or at outdoor weathering under roof
OKS 3601 New	**High-Performance Corrosion Protection Oil for Food Processing Technology**		• Excellent corrosion protection of bare machine parts,storage and lubrication under corrosive conditions, good creep properties • Contains non-ferrous metal deactivator • Shipping protection of metal surfaces, packed and unpacked machines under extreme climatic conditions, industrial atmosphere or at outdoor weathering under roof
OKS 370 **OKS 371***	**Multipurpose Oil for Food Processing Technology** ISO VG 15 DIN 51502: 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 387	**High-Temperature Chain Lubricant for Food Processing Technology** ISO VG 220		• Synthetic lubricant with graphite for strongly loaded lubrication points at extreme temp. • 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
OKS 3570 **OKS 3571***	**High-Temperature Chain Oil for Food Processing Technology** ChronoLube System ISO VG 320 DIN 51 502: CLP E 320		• Lubrication of chains, hinges, joints, clamping and drying frames, and slideways at higher temperatures up to 250 °C • Good adhesion on metal surfaces • Excellent water resistance • Excellent oxidation properties • For conveying systems in painting, stoving and drying systems of the packaging and food processing industry
OKS 3710	**Low-Temperature Oil for Food Processing Technology** ISO VG 10 DIN 51 502: CL HC 10		• Fully synthetic oil for permanently low temp. • Excellent low-temperature behaviour • Optimal additives against oxidation and ageing • Long economic operating times • Cold storage houses, shock freezers, etc.
OKS 3720	**Gear Oil for Food Processing Technology** ChronoLube System ISO VG 220 DIN 51 502: CLP HC 220		• Fully synthetic, also for the lubrication of roller and friction bearings, chains and other lub. 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
 OKS 1010/2: NSF H1 Reg. No. 135921 OKS 1035/1: NSF H1 Reg. No. 154506	colourless silicone oil	Operating temperature: -55 °C → +200 °C Density (20 °C): 0.96 – 0.97 g/ml Four-ball test rig (welding load): n.a. OKS 1010/2: Viscosity (25 °C): 1000 mm²/s OKS 1035/1: Viscosity (25 °C): 350 mm²/s	1 l tin 5 l canister 25 l canister 200 l drum*
 NSF H1 Reg. No. 153877	yellowish brown Polyalphaolefin (PAO)	Operating temperature: -40 °C → +80 °C Density (20 °C): 0.81 g/ml Viscosity (40 °C): >21.5 mm²/s Salt spray test: > 100 h	5 l canister 25 l canister
 NSF H1 Reg. No. 154933	yellowish brown Polyalphaolefin (PAO)	Operating temperature: -40 °C → +80 °C Density (20 °C): 0.81 g/ml Viscosity (40 °C): >21.5 mm²/s Salt spray test: > 100 h	400 ml aerosol
 OKS 370: NSF H1 Reg. No. 124382 OKS 371: NSF H1 Reg. No. 124384	colourless white oil	Operating temperature: -10 °C → +180 °C Density (20 °C): 0.88 g/ml Viscosity (40 °C): 14 mm²/s	5 l canister 25 l canister 200 l drum 400 ml aerosol*
 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
 OKS 3570: NSF H1 Reg. No. 145347 OKS 3571: NSF H1 Reg. No. 147769	yellowish-red synthetic oil	Operating temperature: -10 °C → +250 °C Density (20 °C): 0.87 g/ml Viscosity (40 °C): 300 mm²/s	120 cm³ CL-cartridge 5 l canister 25 l canister 200 l drum 400 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): 7.25 mm²/s	5 l canister 25 l canister 200 l drum
 OKS 3720: NSF H1 Reg. No. 135752	colourless synthetic oil mixture	Operating temperature: -30 °C→ +120 °C Density (20 °C): 0.86 g/ml FZG damage level: power level >12 Viscosity (40 °C): 220 mm²/s	120 cm³ CL-cartridge 5 l canister 25 l canister 200 l drum

OILS FOR FOOD PROCESSING TECHNOLOGY

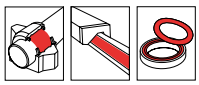
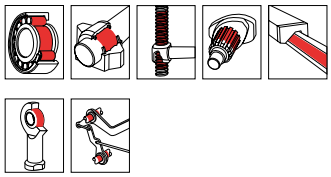
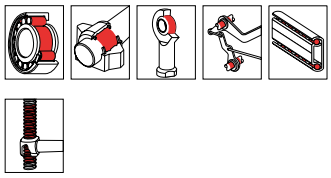
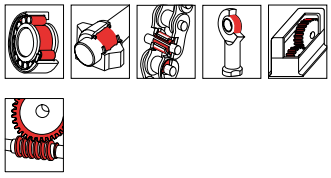
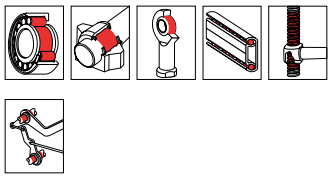
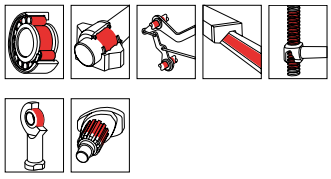
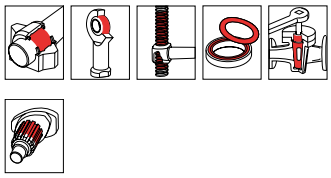
Oils

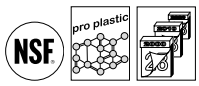
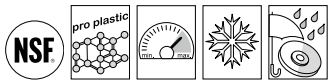
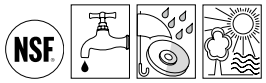
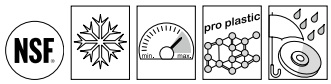
Product	Designation	Fields of application	Purpose
OKS 3725	**Gear Oil for Food Processing Technology** ISO VG 320 DIN 51 502: CLP HC 320		see OKS 3720
OKS 3730	**Gear Oil for Food Processing Technology** ISO VG 460 DIN 51 502: CLP HC 460		see OKS 3720
OKS 3740	**Gear Oil for Food Processing Technology** ISO VG 680 DIN 51 502: CLP HC 680		see OKS 3720
OKS 3750 **OKS 3751***	**Adhesive Lubricant with PTFE** ISO VG 100 DIN 51 502: CLF HC 100		• Lubricating oil with PTFE • Long operating times due to high temperature and oxidation stability • Excellent wear protection , adheres well • High pressure absorption capacity • Resistant to steam, alkali and acid disinfectants and cleaning agents, tasteless and odourless
OKS 3760 ChronoLube System	**Multipurpose Oil for Food Processing Technology** ISO VG 100 DIN 51 502: HLP HC 100 DIN 51 502: VDL HC 100		• Fully synthetic multipurpose oil • Also suitable as compressor- or hydraulic 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 DIN 51 502: HLP HC 46 DIN 51 502: VDL HC 46		• Fully synthetic oil for hydraulic systems, as well as other machine elements • For screws and multiple vane rotary vacuum pumps • Long operating times due to high temperature and oxidation stability, good wear protection • Resistant to steam, alkali and acid disinfectants and cleaning agents
OKS 3775	**Hydraulic Oil for Food Processing Technology** ISO VG 32 DIN 51 502: HLP HC 32 DIN 51 502: VDL HC 32		see OKS 3770
OKS 3780	**Hydraulic Oil for Food Processing Technology** ISO VG 68 DIN 51 502: HLP HC 68 DIN 51 502: VDL HC 68		see OKS 3770
OKS 3790	**Sugar-Dissolving Oil, fully synthetic**		• Specially for use in the sweets industry, for dissolving sugar deposits and cleaning machine parts • Lubrication of precision mechanisms • Forming lubricant for packaging • Good wear and corrosion protection • Tasteless and odourless emulsion

Properties / Approvals	Main components	Technical data	Packaging
 NSF H1 Reg. No. 143596	colourless synthetic oil mixture	Operating temperature: -30 °C → +120 °C Density (20 °C): 0.85 g/ml FZG damage level: power level >12 Viscosity (40 °C): 320 mm²/s	5 l canister 25 l canister
 NSF H1 Reg. No. 135753	colourless-light yellow synthetic oil mixture	Operating temperature: -30 °C → +120 °C Density (20 °C): 0.86 g/ml FZG damage level: power level >12 Viscosity (40 °C): 460 mm²/s	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
 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): 0.85 g/ml Viscosity (40 °C): 110 mm²/s Four-ball test rig (welding load): 2,600 N	5 l canister 400 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): 0.83 g/ml Viscosity (40 °C): 46 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	1 l tin 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

GREASES FOR FOOD PROCESSING TECHNOLOGY

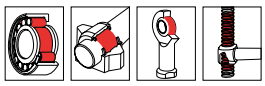
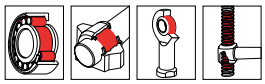
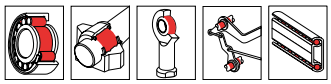
Greases

Product	Designation	Fields of application	Purpose
OKS 469	**Plastic and Elastomer Grease**		• Lubricating and sealing grease for plastic/plastic and plastic/metal combinations • Good elastomer and plastic compatibility • Silicone-free • Highly adhesive • Does not affect the quality properties of beer foam • Tasteless and odourless
OKS 470	**White Universal High-Performance Grease** 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
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 gears, rolling and friction bearings, joints or chains if grease lubrication is provided for • Also suitable for higher speed, minimal bearing play or slight gear clearance • Reduces wear, waterproof • Can be conveyed well using central lubricating systems
OKS 475	**High-Performance Grease** 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 • Lubrication of components made of glass fibre reinforced plastic • For fast-running bearings in the textile industry, in filling and packaging machines
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 disinfectants and cleaning agents • Resistance 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 • Can also be used as sealing grease

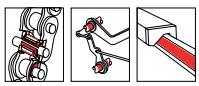
Properties / Approvals	Main components	Technical data	Packaging
 NSF H1 Reg. No. 131380 Tested for beer foam compatibility	colourless-transparent Polyalphaolefin (PAO) inorganic thickener	Operating temperature: -25 °C → +150 °C NLGI grade: 2 DN factor (dm x n): n.a. Base oil viscosity (40 °C): 400 mm²/s Four-ball test rig (welding load): n.a.	1 kg tin
 NSF H2 Reg. No. 137707	white 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): ca. 110 mm²/s Four-ball test rig (welding load): 3,600 N	80 ml 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): n.a.	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
 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): ca. 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 Tested for beer foam compatibility	beige Polyalphaolefin (PAO) silicate	Operating temperature: -10 °C → +140 °C NLGI grade: 3 DN factor (dm x n): n.a. Base oil viscosity (40 °C): 1,600 mm²/s Four-ball test rig (welding load): n.a.	80 ml tube 1 kg tin 5 kg Hobbock

GREASES AND DRY LUBRICANTS FOR FOOD PROCESSING TECHNOLOGY

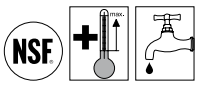
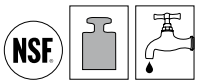
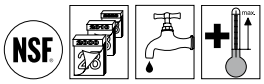
Greases

Product	Designation	Fields of application	Purpose
OKS 479 ChronoLube System	**High-Temperature Grease for Food Processing Technology** DIN 51 502: KPHC1K-30		• Lubrication of rolling and friction bearings at increased operating temperatures • Good adhesive strength on metal surfaces • Resistant to hot and cold water, water vapour, watery-alkaline and acidic disinfectants and cleaning agents • Good resistance to oxidation and ageing • For all sections of the food processing, beverage and pharmaceutical industries
OKS 480 **OKS 481*** ChronoLube System	**Waterproof High-Pressure Grease for Food Processing Technology** DIN 51 502: KPHC2P-30		• For heavily loaded rolling and friction bearings in food processing technology • Excellent resistance to hot and cold water as well as disinfectants and cleaning agents • Excellent corrosion protection • High shear, temperature and oxidation stability
OKS 1110	**Multi-Silicone Grease** DIN 51 502: MSI3S-40		• For fittings, seals and plastic parts • Resistant to media • Excellent compatibility to plastic • No drying out or bleeding • Highly adhesive, tasteless and odourless • Silicone grease for a broad range of applications
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, steam resistance • Excellent wear protection

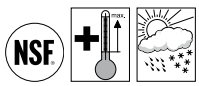
Dry Lubricants

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 diluted with water in ratio of up to 1:5

Greases

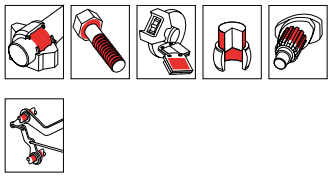
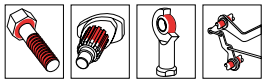
Properties / Approvals	Main components	Technical data	Packaging
 NSF H1 Reg. No. 135675	beige Polyalphaolefin (PAO) aluminium-complex soap	Operating temperature: -35 °C → +120 °C/+160 °C NLGI grade: 1 DN factor (dm x n): 500,000 mm/min Base oil viscosity (40 °C): 360 mm²/s	120 cm³ CL-cartridge 400 ml cartridge 1 kg tin 5 kg Hobbock 25 kg Hobbock
 OKS 480: NSF H1 Reg. No. 148971 OKS 481: NSF H1 Reg. No. 153878	cream-coloured Polyalphaolefin (PAO) calcium sulphonate complex soap	Operating temperature: -30 °C → +160 °C NLGI grade: 2 DN factor (dm x n): 400,000 mm/min Base oil viscosity (40 °C): 100 mm²/s	120 cm³ CL-cartridge 400 ml cartridge 1 kg tin 5 kg Hobbock 25 kg Hobbock 400 ml aerosol*
 NSF H1 Reg. No. 124381 KTW TZW: KA 0432/15 ACS: 17 CLP NY 015	transparent silicone oil inorganic thickener	Operating temperature: -40 °C → +200 °C NLGI grade: 3 DN factor (dm x n): n. a. Base oil viscosity (40 °C): 9,500 mm²/s Four-ball test rig (welding load): n. a.	4 g tube 10 ml tube 80 ml tube 400 ml cartridge 500 g tin 1 kg tin 5 kg/25 kg Hobbock 180 kg drum
 NSF H1 Reg. No. 124380	white PTFE Perfluoropolyether (PFPE)	Operating temperature: -30 °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	40 ml tube 800 g cartridge 500 g tin 1 kg tin 5 kg Hobbock 25 kg Hobbock

Dry Lubricants

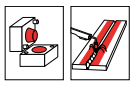
Properties / Approvals	Main components	Technical data	Packaging
 NSF H2 Reg. No. 130416	black graphite organic binder water	Operating temperature: -35 °C → +600 °C Press-Fit-Test: μ = 0.12, no chatter Thread friction: not applicable	5 kg canister 25 kg canister

PASTES AND MAINTENANCE PRODUCTS FOR FOOD PROCESSING TECHNOLOGY

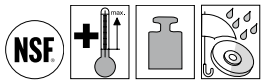
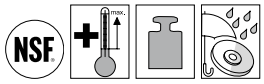
Pastes

Product	Designation	Fields of application	Purpose
OKS 250	**White Allround Paste, metal-free**		• For screws, bolts and sliding surfaces subjected to high pressures and temperatures • Metal-free • Optimum ratio of tightening torque to achievable pre-tension • Excellent corrosion protection • Also suitable for stainless-steel connections • Use as universal high-temperature paste
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

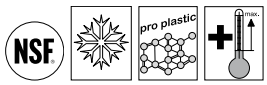
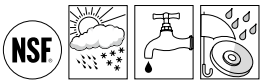
Maintenance Products

Product	Designation	Fields of application	Purpose
OKS 1361	**Silicone Release Agent**		• Parting agent and lubricant for use in processing plastics • Chemically neutral • Solvent-free • 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 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
OKS 2670 **OKS 2671***	**Intensive Cleaner for the Food Processing Industry**		• For removing aged and gummy oil and grease residues • For dissolving silicone and adhesive residues • Evaporates quickly and residue-free • High cleaning action • Good compatibility to common plastics • For use in the food processing, livestock feed and pharmaceutical industries

Pastes

Properties / Approvals	Main components	Technical data	Packaging
 NSF H2 Reg. No. 131379	white 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	8 ml tube 80 ml 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

Maintenance Products

Properties / Approvals	Main components	Technical data	Packaging
 NSF H1 Reg. No. 129481	colourless silicone oil	For optimum effect, apply or spray on an even, thin layer of the product and avoid excessive lubrication. Operating temperature: -50 °C → +200 °C	400 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 with 50 µm layer thickness Optimal layer thickness: 50 µm	5 l canister 25 l canister 200 l drum
 NSF A1 Reg. No. 129003	red non-ionic surfactants silicates	Depending on the degree of soiling, can be diluted with water to a maximum of 1:10. pH value: 11.0 (concentrate)	500 ml pump sprayer 5 l canister 25 l canister 200 l drum
 OKS 2670: NSF K1/K3 Reg. No. 149997 OKS 2671: NSF K1/K3 Reg. No. 149998	colourless solvent mixture	Generously wet the surfaces to be cleaned and, if necessary, support the cleaning process through rubbing down. Subsequently allow to dry completely at room temperature. Do not use at surfaces made of EPDM elastomers and silicones. In case of sensitive materials check the suitability before use. Caution: Observe the specifications of the NSF when used in the food processing industry.	5 l canister 25 l canister 200 l drum 400 ml aerosol*

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 (e.g. OKS 2670/2671 with NSF K1/K3 registration). 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 channelled off. In addition, it must be ensured that the new lubricant is compatible with the old one.

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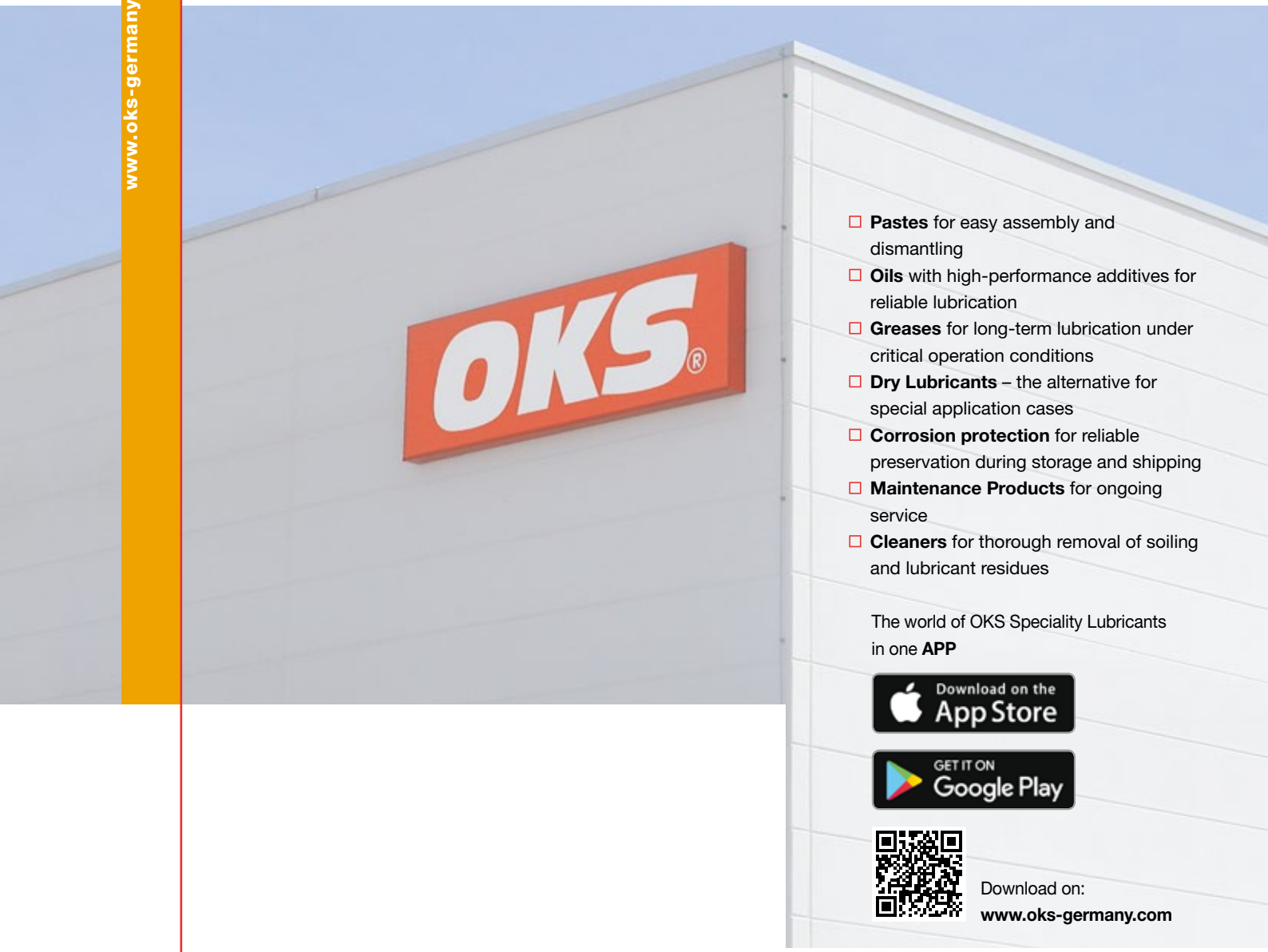

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- **Greases** for long-term lubrication under critical operation conditions
- **Dry Lubricants** – the alternative for special application cases
- **Corrosion protection** for reliable preservation during storage and shipping
- **Maintenance Products** for ongoing service
- **Cleaners** for thorough removal of soiling and lubricant residues

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