



TUNAP Industry

Special lubricants for the food processing industry

TUNAP works.

TUNAP.com

Consultation, development and production from one source



Our certificates

ISO 9001 Quality Management ISO 14001 Environmental Management and ISO 21469 Hygiene Requirements for H1 Lubricants

The ISO 21469 certification demonstrates that TUNAP fulfils the most extensive hygiene requirements pertaining to the manufacture of H1 lubricants. The international certification constitutes the most comprehensive proof of a company's safety, reliability, and product responsibility. The standard calls for a holistic assessment of the life cycle of an NSF H1 product. Maximum quality is guaranteed through strict regulation of formulations, ingredients, production, handling, packaging, storage, and use.

H1

H1 lubricants are used in areas where incidental or technically unavoidable contact with food may occur, such as during transfer, processing, and packaging. Our products are registered with the NSF for use in the food processing industry. TUNAP lubricants and cleaners are:

Halal term used to describe products that are halal (permissible, allowed) according to Muslim law

Kosher term used to describe products classified as kosher (fit, pure) according to Jewish dietary laws







TUNAP stands for passion and expertise. We help you select the right products for your needs and assist you in using them on site.

As experts in the field of lubricants with our own development and production facilities, we offer a sophisticated range of products suitable for the food processing, pharmaceutical, and animal feed industries.

Our development and application technology experts also create solutions specially tailored to our customers' requirements. Our extremely well-equipped chemical analysis laboratory and numerous model and component test beds ensure that our products meet high performance standards while also enabling us to safeguard our expertise.

The requirements for lubricants in the food processing industry are extremely diverse. Production conditions here involve extremely high temperatures of over 200°C, as well as extremely low temperatures (as low as -40°C). To protect metal and plastic surfaces, the lubricants used often need to be not only temperature resistant, but also adhesive, resistant to acids and alkalis, and resistant to water and surfactants. Along with technical requirements, reliability, hygiene, and certification are also key.





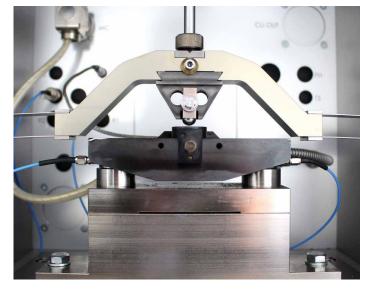


Lowei

costs

Energy

savings





Container overview

CATEGORY	PRODUCT NAME	ITEM NUMBER	CONTAINER SIZE			
Lubricating greases	TUNGREASE DAB	1106120	400 G	Cartridge		
		11ACF13055G0010	1 KG	Can		
		11ACF13055E0250	25 KG	Bucket		
	TUNGREASE H1-EP-1-150	1103356	25 KG	Bucket		
	TUNGREASE H1-EP-2	11ACF13075G0004	400 G	Cartridge		
		11ACF13075G0010	1 KG	Can		
		11ACF13075E0250	25 KG	Bucket		
	TUNGREASE H1-EP-1	11ACF13074G0004	400 G	Cartridge		
		11ACF13074G0010	1 KG	Can		
		11ACF13074E0250	25 KG	Bucket		
	TUNGREASE H1-EP-00	11ACF13077E0250	25 KG	Bucket		
	TUNGREASE H1-EP-000	1100566	25 KG	Bucket		
	TUNGREASE CP-2/25	1105932	1 KG	Can		
		1105933	25 KG	Bucket		
	TUNGREASE CP-1/50	1104127	25 KG	Bucket		
	TUNGREASE CP-2/50	1103743	400 G	Cartridge		
		1103744	1 KG	Can		
		1103745	25 KG	Bucket		
		1106046	400 ML	Aerosol		
	TUNGREASE CP-2/200	1103747	400 ML	Cartridge		
		1103748	1 KG	Can		
		1103803	25 KG	Bucket		
	TUNGREASE CP-2/460	1106118	180 KG	Barrel		
	TUNGREASE ST-3	1103803	100 G			
		11ACF13087G0010	1 KG	Dispenser Can		
		11ACF13087E0250	25 KG	Bucket		
	TUNGREASE 300-000	11ACF13087E0250	1 KG	Can		
	TUNGREASE 300-000	1100195	800 G			
	TUNGREASE 300-1			Cartridge		
		11ACF13114G0100	10 KG	Bucket		
	TUNGREASE 300	11ACF13014G0008	800 G	Cartridge		
		11ACF13014G0010	1 KG	Can		
		11ACF13014G0100	10 KG	Bucket		
	TUNGREASE 300-2	11ACF13215G0010	1 KG	Can		
		11ACF13214G0100	10 KG	Bucket		
	TUNGREASE BA	1100507	1 KG	Can		
		11ACF13204G0300	30 KG	Bucket		
Lubricating and assembly paste	TUNPAS H1	1101868	100 G	Tube		
		1101869	1 KG	Can		
		1102853	25 KG	Bucket		
Lubricating oils	TUNFLUID DAB	11ACI14001A0500	400 ML	Aerosol		
		11ACI14001L0200	20 L	Canister		
	TUNFLUID LG RANGE	VARIOUS	20 l	Canister		
	TUNAIR PAO	VARIOUS	20 l	Canister		
	TUNGEAR H1	VARIOUS	20 l	Canister		
	TUNFLUID HTFG 100	1101234	20 l	Canister		
	TUNFLUID HTFG 260	1100278	20 l	Canister		
	TUNSIL M 350	1101196	5 l	Canister		
	TUNERT FL 460	11ACI18013L0010	11	Bottle		
	TUNCUT STF	11ACL15039L2000	200 l	Barrel		
Maintenance product	ts TUNFLUID TAC 2000	11ACI14224A0500	500 ml	Aerosol		
	TUNGARD FD	11ACH20301A0400	400 ml	Aerosol		
	TUNGARD H1	11ACI14031A0400	400 ml	Aerosol		
	TUNSIL FB	11ACF13214A0400	400 ml	Aerosol		
	MICROLOGIC PREMIUM 903	1101545	400 ml	Aerosol		
Cleaners	TUNSOLVE 915	1103680	500 ml	Aerosol		
		1103118	201	Canister		
		1103762	60 l	Barrel		
	TUNCLEAN FDB	11ACH21794A0500	500 ml	Aerosol		
	TUNCLEAN 700	11ACH21700L0600	60 l	Barrel		

Product selection



		/	Gears	Rollingand	Linear pui	Chains and eways	Hydraulic	Compressed	Vacuum Durs	E: metic c	rittings systems	Corrosion -	Maintenac Prevention	Cleaning Col	Seals "
CATEGORY	PRODUCT NAME		/	/		/				/	/	/	/		\square
CALCONI															
Lubricating greases	TUNGREASE DAB		X									X			
	TUNGREASE H1/EP-1 150	X	X	X											
	TUNGREASE H1/EP-2*	X	X	X											
	TUNGREASE CP-2/25	X	X	X											
	TUNGREASE CP-2/50*	X	X	X	X						x			х	
	TUNGREASE CP-2/200		X	X											
	TUNGREASE CP-2/460		X												
	TUNGREASE ST-3									x				х	
	TUNGREASE 300*		X	X						x				х	
	TUNGREASE BA		X	X											х
ubricating and assembly paste	TUNPAS H1											х			х
Lubricating oils	TUNFLUID DAB				Х	1			x			х		х	
	TUNFLUID LG**					x		x	x						
	TUNAIR PAO**	X				x	x	x	x					х	
	TUNGEAR H1**	X	X			1								х	
	TUNFLUID HTFG**				x										
	TUNSIL M 350											x		х	
	TUNERT FL 460									Í					x
	TUNCUT STF														x
Maintenance products	TUNFLUID TAC 2000				x						x	x			
	TUNGARD FD										x	x			
	TUNGARD H1				x							x			
	TUNSIL FB											x		x	
	MICROLOGIC PREMIUM 903	1	İ			1						x			
Cleaners	TUNSOLVE 915					1							x		
	TUNCLEAN FDB					1							x		
	TUNCLEAN 700	İ	1			1							x		

* available in various NLGI categories

** available in various viscosities

We're here to help you select the right product from the TUNAP range



Lubricating greases

•	TUNGREASE	TUNGREASE	TUNGREASE	TUNGREASE				
> 180 °C	300 BA	300 BA						
up to 180 °C	CP-2/200 CP-2/460	CP-2/200 CP-2/460						
up to 140 °C	CP-2/200 CP-2/460	H1/EP-2 CP-5/50 CP-2/50	H1/EP-2 CP-2/50 CP-2/200	CP-2/50				
up to 100 °C	CP-2/200 CP-2/460	DAB H1/EP-1 150	DAB H1/EP-1 150	CP-2/25 CP-2/50				
• L	Load							
				Speed				

Selection of lubricating greases on the basis of temperature, load, and speed

TUNGREASE DAB

Transparent H1 multi-purpose grease

Multi-purpose lubricating grease made from medicinal white oil and inorganic thickeners. Suitable for lubricating moving parts such as joints, rolling and plain bearings, and guideways. Can also be used to protect seals.

Transparent and therefore inconspicuous with excellent lubricity and high protection against wear and corrosion

Compatible with TUNFLUID DAB

TUNGREASE H1/EP-1 150

Fully synthetic H1 multi-purpose grease with EP properties and medium base oil viscosity

Dynamically light multi-purpose grease made from synthetic base oils and an aluminium complex soap thickener with high-performance EP protection. Suitable for the all-round lubrication of e.g. rolling and plain bearings, lifting cylinders, joints, and linear guideways.

- Multi-purpose, high-performance lubricating grease with excellent pumpability in centralised lubrication systems and helps reduce the number of different lubricating greases needed for operations
- Reliable protection against wear and corrosion in machines and equipment that operate around the clock





TUNGREASE H1/EP-000 | TUNGREASE H1/EP-00 | TUNGREASE H1/EP-1 | TUNGREASE H1/EP-2

Fully synthetic H1 multi-purpose grease with EP properties and high base oil viscosity

Adhesive multi-purpose grease made from synthetic base oils and an aluminium complex soap thickener with highperformance EP protection. Suitable for the all-round lubrication of e.g. rolling and plain bearings, lifting cylinders, joints, and linear guideways.

- ✓ Multi-purpose, high-performance lubricating greases in various NLGI categories
- Reliable protection against wear and corrosion in machines and equipment that operate around the clock

TUNGREASE CP-2/25

Fully synthetic H1 high-performance grease for high speeds

Dynamically light high-performance lubricating grease made from synthetic base oils and a calcium sulfonate complex soap thickener. Suitable for lubricating plain and rolling bearings as well as guideways subject to high speeds.

- Reliable long-term lubrication with optimal protection against wear and corrosion combined with excellent media resistance
- Increases the service life of components and machines

TUNGREASE CP-1/50 | TUNGREASE CP-2/50

Fully synthetic H1 high-performance grease for components subject to dynamic loads

High-performance lubricating grease made from synthetic base oils and a calcium sulfonate complex soap thickener. Suitable for the long-term lubrication of plain and rolling bearings as well as guideways subject to high loads.

- Excellent pressure absorption capacity and optimal wear and corrosion protection translate into a longer service life for components and machines
- Even when exposed to moisture and water-based media, the grease offers optimal protection thanks to its especially good resistance
- ✓ For easy application, TUNGREASE CP-2/50 is also available as an aerosol.

TUNGREASE CP-2/200

Fully synthetic H1 high-performance grease suitable for a wide range of temperatures and areas of application

High-performance lubricating grease made from synthetic base oils and a calcium sulfonate complex soap thickener. Suitable for the long-term lubrication of plain and rolling bearings as well as guideways subject to high loads and high temperatures.

- Excellent pressure absorption capacity and optimal wear and corrosion protection translate into a longer service life for components and machines across a wide range of temperatures
- Even when exposed to moisture and water-based media, the grease offers optimal protection thanks to its especially good resistance

Lubricating greases

TUNGREASE CP-2/460

Fully synthetic H1 high-performance grease for low speeds and extreme loads

High-performance lubricating grease made from synthetic base oils and a calcium sulfonate complex soap thickener. Suitable for the long-term lubrication of plain and rolling bearings as well as guideways subject to low speeds and extreme loads.

- Excellent pressure absorption capacity and optimal wear and corrosion protection translate into a longer service life for components and machines
- Even when exposed to moisture and water-based media, the grease offers optimal protection thanks to its especially good resistance

TUNGREASE ST-3

Fully synthetic H1 silicone grease

High-performance lubricating grease made from high-quality silicone oils and PTFE; suitable for the long-term lubrication of plastic components, metal and ceramic fittings as well as elastomer seals made from e.g. NBR, EPDM and FKM.

- Excellent adhesive properties, resistance to water and steam as well as excellent plastic and elastomer compatibility
- ✓ Approvals for drinking water system components: KTW, WRAS, and compliant with NSF 61

TUNGREASE 300-000 | TUNGREASE 300-1 | TUNGREASE 300 | TUNGREASE 300-2

Chemically inert H1 special grease for lubrication at high temperatures and high loads

High-performance lubricating grease made from high-quality special oils and PTFE; for the long-term lubrication of e.g. rolling and plain bearings, gears, and linear guides.

- Particularly good ageing properties and high thermal stability translate into longer intervals between lubrication
- Excellent resistance in vacuum applications and against aggressive media, such as oxygen, n-hexane and acids
- ✔ BAM (German Federal Institute for Materials Research and Testing) approval for contact with gaseous oxygen
- ✓ Versatile application possibilities in various NLGI categories

TUNGREASE BA

Chemically inert H1 special grease for lubrication at extremely high temperatures

High-performance lubricating grease made from high-quality special oils and a special thickener; for the reliable lubrication of e.g. rolling and plain bearings, gears, and linear guides.

- Extremely high thermal stability for grease lubrication at temperatures of up to 300 °C
- Excellent resistance in vacuum applications and against aggressive media, such as oxygen, n-hexane and acids

8



Lubricating and assembly paste



TUNPAS H1

White H1 high-performance paste

High-performance paste made from synthetic base oils, a special complex soap and high-quality solid lubricants. Suitable for lubricating components subject to high static and highly dynamic loads, such as screw connections, fittings, sliding guides and screw drives. Facilitates maintenance work during assembly and disassembly.

- Reliable protection for static and dynamic separating lubrication against wear, fretting corrosion and seizing
- Particularly high water resistance and excellent corrosion protection



Lubricating oils

TUNFLUID DAB

H1 universal oil with multiple areas of application

Lubricating and maintenance oil made from medicinal white oil with specially balanced additive combination. Suitable for lubricating plain bearings, chains, linear guides, and joints subject to moderate loads and moderate temperatures. Ideal for the protection and maintenance of metal surfaces and seals.

- Good protection for metal surfaces against wear and corrosion
- TUNFLUID DAB is also available as an aerosol
- Compatible with TUNGREASE DAB

TUNFLUID LG

H1 multi-range oils for lubrication and power transmission

Multi-range oils made from medicinal white oils with high-performance additives. Suitable for use at moderate temperatures in hydraulic and pneumatic systems as well as vacuum pumps.

- ✓ Good protection for metal surfaces against wear and corrosion
- Multi-purpose use in various ISO VG viscosity classes

TUNAIR PAO

Fully synthetic H1 multi-range oils for lubrication and power transmission

High-performance oils made from high-quality synthetic base oils with high-performance additives. Suitable for long-term lubrication even at high temperatures in compressors and vacuum pumps as well as in hydraulic and pneumatic systems.

- ✓ Good ageing properties and high thermal stability translate into longer maintenance intervals
- Excellent protection for metal surfaces against wear and corrosion and high compatibility e.g. with NBR and FKM elastomer seals
- Multi-purpose use in various ISO VG viscosity classes

TUNGEAR H1

Fully synthetic H1 high-performance gear oils

High-performance oils made from high-quality synthetic base oils with specially tailored additives. Suitable for lubricating spur, bevel and worm gears as well as rolling and plain bearings subject to high loads and high temperatures.

- ✔ Good ageing properties and high thermal stability translate into longer maintenance intervals
- Excellent protection for surfaces against wear and corrosion and high compatibility e.g. with NBR and FKM elastomer seals
- Multi-purpose use in various ISO VG viscosity classes

Lubricating oils



TUNFLUID HTFG

Fully synthetic H1 high-temperature chain oils based on state-of-the-art technology

High-performance oils made from ester oils for the effective lubrication of chains exposed to very high temperatures.

- ✓ Outstanding oxidation and UV resistance translate into longer lubrication intervals and lower lubricant consumption
- ✓ Low residue formation increases cleanliness and results in a longer chain service life
- ✓ Available in viscosities of 100 and 260 mm²/s

TUNSIL M 350

Fully synthetic H1 silicone oil

High-performance oil made from high-quality silicone oils for the long-term lubrication and maintenance of plastics and elastomers such as NBR, EPDM and FKM.

- Excellent sliding and preservation properties
- Excellent plastic and elastomer compatibility



Maintenance products

TUNFLUID TAC 2000

Fully synthetic H1 special adhesive oil

High-performance oil made from highly viscous synthetic base oils with specially tailored additives. Suitable for the all-round lubrication of chains, guideways, and joints exposed to high centrifugal forces and high loads.

- Excellent adhesive properties mean less contamination and dirt; ideal for overhead applications
- High wear and corrosion protection and good water resistance

TUNGARD H1

Fully synthetic H1 multi-functional oil with medium base oil viscosity

Multi-functional oil made from synthetic base oils and high-performance additives. Suitable for lubricating rolling and plain bearings, chains, seals and other moving parts.

- Excellent lubrication properties coupled with high protection against wear and corrosion
- ✔ Good creep properties directly after application ensures good coverage, even in small gaps

TUNGARD FD

Fully synthetic H1 multi-functional oil with low base oil viscosity

Colourless multi-functional oil made from synthetic base oils and multi-functional additives. Facilitates the disassembly of parts that have rusted over, or have become heat-solidified or stuck. Also suitable for lubricating bolts, plug connections and other moving parts.

- Excellent creep behaviour, especially directly after application
- Excellent lubrication properties coupled with high protection against wear and corrosion
- Suitable for cleaning and maintaining stainless steel surfaces

TUNSIL FB

Fully synthetic H1 silicone oil

High-performance oil made from high-quality silicone oils for the long-term lubrication and maintenance of plastics and elastomers such as NBR, EPDM and FKM.

Excellent sliding and preservation properties and excellent plastic and elastomer compatibility





Micrologic Premium 903

Fully synthetic H1 rust remover

High-performance rust remover made from synthetic base oils and high-performance additives. Facilitates the disassembly of parts that have rusted over, or have become heat-solidified or stuck and protects against corrosion and wear.

- Excellent creep behaviour
- Removes rust from oxidised screw and plug connections within seconds
- Protects against corrosion, resinification and moisture

TUNCUT STF

H1 stamping and forming fluid

High-performance fluid made from a combination of high-performance additives in fast-evaporating high-purity solvents. Suitable for aiding forming processes such as stamping, deep drawing, chamfering and moulding.

- Evaporates quickly without leaving any residue behind, eliminating the need for subsequent cleaning
- ✓ Longer tool lives and more reliable processes when working metals



Cleaners

TUNCLEAN FDB

H1 and K1 solvent cleaner

Cleaning fluid made from hydrocarbons with a medium evaporation rate. Suitable for removing and cleaning lubricant residue and dirt.

✓ Medium evaporation rate for the effective cleaning of residue during short airing times

TUNCLEAN 700

H1 and K1 solvent cleaner

Cleaning fluid made from hydrocarbons with a high evaporation rate. Suitable for removing and cleaning lubricant residue and dirt.

✓ High evaporation rate for the effective cleaning of stubborn residue during long airing times

TUNSOLVE 915

Slightly volatile K1 safety cleaner

Safety cleaner made from hydrocarbons and free from n-hexane and aromatics. Suitable for removing and cleaning lubricant residue and dirt.

- Lower hazard potential
- Externally verified fire risk / risk pertaining to the consequences of fires
- Recommended product pursuant to the German Ordinance on Hazardous Substances (protection level: "Measures to protect workers")









TUNAP works.



The TUNAP Group is an international producer of aerosols and active ingredients for industrial and technical applications.

Research, development, production and sales from one source: TUNAP systems combine innovative chemicals with high levels of sustainability to ensure care and protection.



Interested in finding out more? We look forward to hearing from you



TUNAP GMBH & CO. KG Phone +49 8171 / 16 00-0 Fax +49 8171 / 16 00 72 industry@tunap.com www.tunap.com Handed over by: