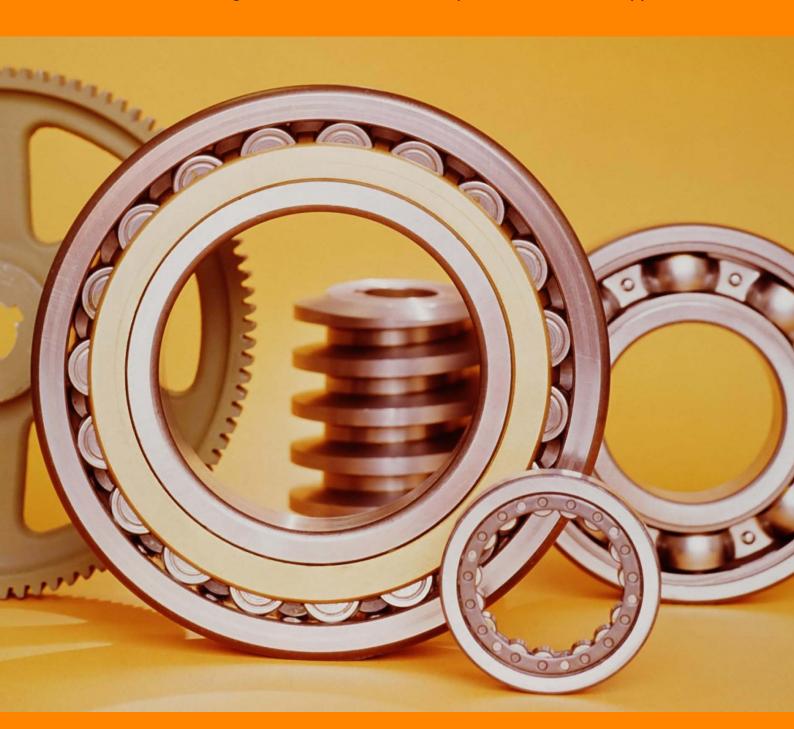




Your global lubrication partner

The special lubricants for machine elements

A selection of specialty lubricants for bearings, linear guides, gears, chains, screws, compressors and Nano applications





Index

The right lubricants for machine components	3
Rolling bearings	4
Sliding bearings	6
Linear guides	8
Gears	12
Chains	14
Screws and compressor	16
Nano Applications	18

Our global partners





































The right lubricants for machine components

This catalogue was made for overviewing and introducing Lubchem's lubricants which are applicable to lubrication points of machine components

In modern machinery, due to the complexity of machine elements in the view of tribological theory, the products introduced in this brochure could not solve all lubricating problems. In that case, feel free to contact our sales department or R & D center. We will develop lubricants that satisfy your requirements.

This catalogue mainly introduces lubricants that can be most generally applied to each machine component, and you can use of it for reference to replace what you have been using so far.

The products introduced in this brochure are only a small part of total goods. If you need more specific instruction for application and products, feel free to contact our company.

Today, lubricants are the vital and design factor in machine and equipment.

Only when suitable lubricant factor is considered to designing a machine, preservation cost of facility operation can be cut down, and production losses from mechanical failures can be reduced as well.

Lubchem has been striving to develop special lubricants over the past few decades and has strong points in manufacturing synthetic grease and oils.

Our company has lots of experience and know-hows in developing OEM lubricants, therefore, if you have troubles in product development and machine operation, we will help you immediately.

If you need more detailed information on our products, please visit our website http://www.lubchem.co.kr

Special lubricants for rolling bearings

Applications	Service te	emperature C)	Speed factor n·dm [min ⁻¹ ·mm]	Base oil viscosity DIN 51562 [mm²/s]		
	High	Low	[min · ·mm]	40°C	100°C	
High-temperature	260	-40	300,000	420	40	
	200	-40	1,000,000	130	20	
	180	-40	1,000,000	68	9	
Low-temperature	110	-60	1,000,000	12	3	
	110	-50	1,000,000	18	4	
Low-noise	180	-45	1,000,000	72	9.5	
	150	-50	1,000,000	25	5	
High-speed spindle	120	-40	2,100,000	22	5	
	120	-50	2,100,000	21	5	
High-load and heavy-duty industry	150	-40	1,000,000	136	14	
	160	-25	500,000	500	25	
	150	-10	500,000	250	19	
Electric conductivity	150	-40	1,000,000	150	19	



Base oil	Thickener	Products	Features
P.F.P.E	P.T.F.E	LUBCHEM PF 8092	 Tried-and-tested long-term grease for rolling bearings subject to high temperatures Very good long-term stability Very good corrosion protection Approved and recommended by many manufacturers
ester	P.T.F.E	LUBCHEM BH 3022 F	 Patented hybrid grease concept for long-term lubrication Also for wet and corrosive environments and vibrations
ester	Polyurea	LUBCHEM TP 3022	 Excellent corrosion protection Long bearing life due to special wear protection additives preventing premature material fatigue caused by vibration or high speeds For motor vehicle applications, e.g. pulleys, generators, clutch release bearings, fan bearings, wiper motors
ester	Li soap	LUBCHEM LP 6012 E	- Heavy-duty grease for low friction moments
P.A.O	Li soap	LUBCHEM KL 6012	- Excellent low temperature - Low friction
ester	Polyurea	LUBCHEM TP 3612	 For lifetime and long-term lubrication at high and low temperatures For double-sealed and shielded rolling bearings For applications in e.g. in electric motors, fans, air conditioning systems and hard disc drives
ester	Li soap	LUBCHEM BL 6512	 For low temperatures and low friction moments For the lifetime lubrication of double-sealed ball bearings such as miniature and instrument bearings
P.A.O	Polyurea	LUBCHEM HL 3013 U	 Especially for spindle bearings with inclined or vertical mounting position, but also for horizontal shafts in machine tools
P.A.O+ester	Ba-comp	LUBCHEM PH 4012	- Especially for spindle bearings with inclined or vertical mounting position, but also for horizontal shafts in machine tools
mineral	Li soap	LUBCHEM BE 2112	For rolling and plain bearings subject to high loadsFor vibrations and oscillationsFor applications such as main bearings in wind turbines
mineral	Al-comp.	LUBCHEM BE 2102	For low to medium speedsHigh-temperature and high-load application
mineral	special calcium soap	LUBCHEM BM 1052	- For ball bearings subject to high loads in wet processing zones - For medium rotating speeds
P.A.O	Li soap solid lubricants	LUBCHEM EK 6032 C	- For the long-term lubrication of rolling bearings subject to static electricity, e.g. in electric motors, paper making machines, copying machines, film stretchers, guides in belt conveyors and fans

Special lubricants for sliding bearings

Applications	Operating condition	Sliding speed [m/s]	Max surface pressure [N/mm²]	Service tem	perature(°C)	Base oil viscosity DIN 51562 [mm²/s]		
				High	Low	40°C	100°C	
Plant and machine building, appliance industry	Oscillating/ rotating	<1	approx. 100	260	-40	430	40	
				180	-30	430	38	
				160	-20	430	25	
				150	-40	450	25	
				140	-20	537	32	
	Rotating ≥1	10	160	-45	150	16		
			130	-55	18	3.5		

Lubricating oils for hydrodynamic plain bearings

Application/Requirements		Products	
	Standard	LUBCHEM G oil ISO VG 100, 150, 220, 320, 460	
	Long-term and high performance	LUBCHEM GM S series ISO VG 32, 46, 68, 100	
	High-temp. and and long-term	LUBCHEM GH series ISO VG 32, 46, 48, 1001,000	



Base oils	Base oils Thickener Products		Features
P.F.P.F	P.T.F.E	LUBCHEM PF 8091 F2	 High-temperature, long-term lubricating grease with largely neutral behavior towards lots of materials (metals, plastics), Lifetime lubrication enables a significant reduction in lubrication quantities
ester	Polyurea	LUBCHEM HL 3091	- Suitable for higher ambient temperatures, Extended relubrication intervals, also at a high temperatures owing to its long-term stability
mineral+P.A.O	Bentonite	LUBCHEM HM 7090 M	- The preferred lubricant option for plain bearings, offering long service life and relubrication intervals, Suitable for universal standard applications
P.A.O	Li soap	LUBCHEM GR 6101	- Especially for plastic plain bearings, also available in other base oil viscosities, - Good compatibility with many plastics
mineral	Polyurea	LUBCHEM RB 3110 C	 Excellent lubricating film maintaining at high load and good wear protection and water resistance and adhesiveness. Various rolling and sliding bearings for rotating low and middle speed in heavy industry
P.A.O	Ba-comp.	LUBCEHM BP 4032	- Synthetic base high performance grease with good pressure absorption - Wide service temperature
P.A.O	Li soap	LUBCHEM KL 6012	 Good low temperature grease and damping property. wide service temperature and compatibility with plastic and elastomers. Sliding bearings, sliding parts and small gears Automotive parts in seat adjustment, window lifters, small plastic gears and rolling bearings

Base oils	Features
mineral	- Tried-and-tested gear oil series compatible with conventional plain bearing metals
P.A.O	- Long-term, reasonably priced compressor oil series compatible with conventional plain bearing metals
P.A.G	- Tried-and-tested long-term gear oil series compatible with conventional plain bearing metals

Linear guides - Special oils and fluid greases

Lubricating oils

Application/requirements	Linear guide types	Base oil	
General	rolling motion guides	mineral	
General	slideways	mineral	

Fluid greases for the continuous lubrication of all linear types

Industry/requirements	NLGI grade	Base oil
General/low-speed (< 15 m / min)	00/000	mineral
General/low-speed (< 15 to 60 m / min)	000	mineral
General/middle-speed (> 60 m / min)	0/00	ester
General/high-temperature	0/00	P.A.O
General/high-load, micro-motion and vibration	0, 00/000	mineral



Products	Features
LUBCHEM G oils ISO VG 46 ~ 220	- CLP gear oil, excellent anti-corrosion and wear protection properties. Viscosity can be selected by operating speed. ISO VG 46 is suitable for particularly low temperature.
LUBCHEM GD 68, 220	 CGLP slideway oil with good demulsifying behavior towards cooling lubricants and suitable for plastic sideway. Viscosity to be selected by operating speed.

Products	특징
LUBCHEM GB 70800	- With high-pressure and anti-wear additives, without solid lubricants
LUBCHEM GLP 60800	- Good pressure absorption capacity
LUBCHEM NCA 1011	- Low base oil viscosity for low friction and smooth running
LUBCHEM NCA 1011	- Synthetic base oil with good ageing resistance
LUBCHEM GB 7080 / 70800	- With high-pressure and anti-wear additives, without solid lubricants. Select NLGI grade according to lubrication specification

Linear guides - Special greases

Operating type	ype Requirements Criteria			vice ature(°C)	Base oil Viscosity DIN 51562 [mm²/s]		
			High	Low	40°C	100°C	
Rolling motion guide	Universal	Low speed (< 15 m / min)	140	-15	220	19	
		Middle speed (15 to 60 m / min)	120	-20	100	12	
		High speed (> 60 m / min)	120	-50	23	4.7	
Small guidways	Universal		120	-50	30	5.5	
Roller screw drive	Universal		150	-50	127	14	
Trapezoidal thread drive	Plastic nuts	Low speed (< 15 m / min)	130	-40	170	60	
	Metal nuts	Medium speed(15 to 60 m / min)	150	-30	125	14	
Sliding motion guide	Universal	Medium speed (15 to 60 m / min)	150	-40	120	14	
All types	Smooth running	High accelerations and speed	130	-50	31	5.9	
	Micromovement/ vibration	Normal load	150	-40	123	14	
	High-load		160	-25	537	32	
	High-temp.	Not in high vacuum, UV light, aggressive media	140	-40	48	7.9	
	Clean room production / semi- conductor, LCD, HDD production	Friction point temperature up to 60 °C (140 °F) not in high vacuum or aggressive radiation	120	-50	32	-	
	Clean room production / semi- conductor, LCD, HDD production	High temperature range, under high vacuum, UV radiation	260	-50	190	34	



Base oil	Thickener	Products	Features
mineral	Ca-comp.	LUBCHEM BE 1052	- Lubricating grease, good adhesion and sealing effect
mineral	Ca-comp.	LUBCEHM BE 1022	- Lubricating grease, good adhesion and sealing effect
ester+P.A.O	Ca-comp.	LUBCHEM NCA 1011	- Lubricating grease, good adhesion and sealing effect
P.A.O	Al-comp.	LUBCHEM AK 1010	- Fluid grease. NLGI 0 for easy application
P.A.O	Li-comp.	LUBCHEM GL 6031	- Good lubricating capacities in linear contact
mineral+P.A.O	Li-comp.	LUBCHEM GL 6151	- Good compatibility with plastics. Lubricants for higher speeds on request
mineral	Li-comp.	LUBCHEM BH 6052 CR	- Good wear protection for long relubrication intervals. Lubricants for high / low speeds on request
mineral	Li-comp.	LUBCHEM BH 6052 CR	- Good wear protection for long relubrication intervals. Lubricants for high / low speeds on request
P.A.O	Ba-comp.	LUBCHEM BP 4012	- Ageing-resistant lubricating grease for long-term lubrication
mineral	Ca-comp.	LUBCHEM BM 1102 B	- Tried-and-tested grease against tribo-corrosion
mineral	Polyurea	LUBCHEM RB 3110 C	- Good wear protection, applicable through central lubricating systems
P.A.O	Li soap	LUBCHEM SM 6021	Very wide temperature range. Compatible with plastics. Low-cost alternative to PFPE oils. Tried-and-tested for automotive applications (steering system)
P.A.O	Ca-comp.	LUBCHEM HE 1022	 A special high pressure, synthetic, smooth-running grease for use across a wide service temperature range. Its excellent ageing stability allows extended relubrication intervals or lifetime lubrication to be accomplished.
P.F.P.E	P.T.F.E	LUBCHEM KM 8132	- Improved component performance, due to low starting torques even at low temperatures, resistance to high speeds and friction values being largely independent of temperature

Special lubricants for gears

Oils

Gea			Service t	emp. (°C)		
Spur, Bevel, Hypoid gear			Low	High	Energy saving	Oil life
*** *		LUBCHEM G	-15	100	*	*
***	**	LUBCHEM GM Sseries	-45	140	**	**
**	**		-45	160	***	***
***	**	LUBCHEM GE series	-25	110	**	**

 $[\]star\star\star$: Best performance $\star\star$: Better performance \star : Standard performance

Greases for gears

Operating condition	Service t	temp.(°C)	Consistency DIN 51 818	Base	Base oil viscosity DIN 51562 [mm²/s]		
	High	Low		40°C	100°C		
Room temp./gear fluid based on mineral	150	-10	00/000	700	35		
	140	-10	0/00	680	35		
Wide temp./gear fluid based on synthetic oils	130	-30	00	120	20		
	140	-50	1	30	6		
	150	-30	0	130	15.5		
	130	-60	2	17.5	3.8		
	150	-50	2	30	5.5		
	180	-40	2/3	70	9.4		



Performance pa	arameters		Oil standards	Base oil	Viscosity grade (ISO VG)	
Scuffing, load carrying					(130 Vu)	
***	***		CLP, EP	Mineral	46 ~ 680	
***	***	***	***	CLP HC, EP	P.A.O	32 ~ 680
***	***	***	*	CLP PG, EP	P.A.G	32 ~ 1,000
***	***	***	**	CLP, EP	ester	220 ~ 320

Base oil	Thickener	Products	Features
mineral	Silicate	LUBCHEM GB 70800	 Fluid grease with the lubrication of splash for spur and bevel gears, subject to high-load condition, good wear protection and anti-corrosion properties.
mineral	Al-comp.	LUBCHEM GE 2130	Open girth gear lubrication and adhesive lubricants for reducing noise Good for splash lubrication. Steel to Steel wheel lubrication, normal service temperature. excellent load carrying capacity
P.A.G	Li	LUBCHEM GE 60300	 Peripheral 8m/s gear speed, bevel, spur and worm gear Fluid grease for splash lubricatiion under high-load Not suitable for synthetic material or aluminum alloy metal Suitable for small gear
P.A.O	Ca-comp.	LUBCHEM NCA 1011	Noise dampening grease, splashing lubrication of gear Particularly suitable for plastic parts
P.A.O+mineral	Ca-comp.	LUBCHEM G 1010	Special grease for small gear, especially in power electric tools and various electric home appliances Peripheral 5m/s speed, wide service temperature, plastic to plastic, plastic to steel gear combination
P.A.O	Li soap	LUBCHEM KL 6012	 Good low-temperature grease for plastic to plastic and steel to plastic gear pairing At a low-temperature, good lubrication grease and plastic to plastic and plastic and steel gear pairing Very smooth operation at a low temperature Suitable for gear actuator in automobile parts
P.A.O	Ca-comp.	LUBCHEM G 1012	 At a increasing load, life-time lubrication for small gear and wide service temperature With low base oil viscosity, at a low temperature, offering low starting torque Suitable for plastic to plastic and plastic to steel small gear
ester	Polyurea	LUBCHEM GL 3023	- Wide service temperature gear grease and at a low temperature, offering low starting torque

Special lubricants for chains

Applications		perature(°C)	Base oils	Viscosity A	STM D-445	
	Low	High		40 °C	100 °C	
Rotary kilns in the base material industry (chemical industry) between the inner surfaces of the tyres and the kiln shell's slide elements and for the lubrication of pouring ladles used in the steel industry	-25	1,000	mineral+P.A.O	150	-	
For the lubrication of transport chains used in the food processing industry, on drive and control chains in melting furnaces used in the metal industry	-30	250	polyglycol	100	20	
For drive, control and transport chains subject to high temperatures and loads. It is particularly suitable for use in the insulating materials industry	0	250	ester	100	12	
Dryer conveyor chain oils in wood industry	0	250	ester+P.A.O	270	30	
Roller chains, chain joints, slide chains and rails in film stretching machine, stenters in textile industry	0	250	P.A.O	320	28	
Particularly suitable for chains in film stretching industry	0	280	ester	280	24	
Dryer chain oil for drying process after dying in textile industry	0	250	ester	260	30	
Used for driving, control and conveyor chains in wet and humid areas, high resistance to rain and water	-5	120	mineral	4,750	1	
Dryer and oven conveyor chain circulating at a high temperature	-40	220	P.A.O+ester	100	11.5	
High adhesive oil and driving chain and conveyor chain, good water resistance properties	0	250	P.A.O+ester	280	24	
Driving, control and transport chains subject to high temperatures, conveyor, heat relief materials industry, driers	0	250	ester	95	13	
For lubrication points subject to high thermal loads as are common in chains, slideways, gears, wire ropes, guideways or cams.	0	250	P.A.O+ester	2,000	126	



Flash point(°C) DIN EN ISO 2592	Products	Features
≥ 370	LUBCHEM HM 9059 GM	 A viscous high-temperature release agent and lubricating compound The base fluid starts to evaporate at approx.200°C, leaving a solid lubricant film, which separates frictional surfaces (dry lubrication)
-	LUBCHEM YF 100 PG	 Suitable for temperatures up to 500 °C, with dry lubrication being gradually reached above 200 °C Good wetting properties, an excellent penetration behavior and high stability
≥ 270	LUBCHEM CH 100 E	 - Lubricates up to 250 °C, good wear protection, high pressure resistance - Low evaporation loss at high temperatures, compatible with paints
260	LUBCHEM SUPER 270 PE	- Usable up to 250 °C high temperature, good wear protection and low evaporation at a high temperature
≥ 220	LUBCHEM PLUS 320 P	- Efficient lubrication even at high operating temperatures, good regeneration effect on used oil, good adhesion, no throwing off and resistance to wear and pressure - Little residue owing to fully synthetic constituents
≥ 250	LUBCHEM CH 280 E	- For service temperatures up to approx. 250°C, good wear protection - Low evaporation loss at high temperatures
≥ 220	LUBCHEM CH 260 E	Very low oil consumption and good stability of oxidationEven at a high chain speed, good performance and low residues
-	LUBCHEM GE 5500 MF	- Good wear and corrosion protection, and inherently adhesiveness and noise dampening - Containing MoS₂ for improved emergency lubriction properties
-	LUBCHEM CM 100 M	- Usable temperature up to 220 °C and at a high temperature, periodical lubricating - Silicone free so very suitable for automotive paint shop conveyor chain oil
≥ 250	LUBCHEM PFS 280 PE	- Applicable up to 250 °C and good wear protection and low evaporation at a high temperature
270	LUBCHEM OY 95 E	 Low evaporation losses at high temperatures and high thermal stability reduce oil consumption and smoke development, for use at temperatures up to approx. 250 °C Low residue formation and free of solid matter, hence less maintenance and unobstructed lubricating systems and lines
≥ 230	LUBCHEM HP 2000 PE	 Thermally stable, for use up to approx. 250 °C and good adhesion to friction points, long-term lubricating effect and low consumption Good creeping and penetration, hence lower consumption and easy application

Special lubricants for screws and compressors

Screws

Service temperature(°C)	Applications	Materials
-40 ~ 1,000	over 200°C, dry lubricants	polyglycol+ester, Li soap, solid lubricants
-40 ~ 140	middle grade surface pressure and easy assemble and dissemble at applying temperature	mineral+P.A.O, Li-comp., solid lubricants
-15 ~ 150	Multi-purpose assembly paste	mineral, Ba-comp,, solid lubricants

Compressor

Service life	Pour point (°C)	Flash point (°C)	Viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, mm²/s		Base oil
			40 °C	100 °C	
Depending on operating environment and compressor performance, oil change	≤ -51 °C	≥ 230 °C	32	5.8	P.A.O
intervals up to min. 6,000 ~ Max. 10,000h	≤ -36 °C	≥ 240 °C	46	7.3	P.A.O
	≤ -36 °C	≥ 240 °C	68	9.8	P.A.O
	≤ -33 °C	≥ 240 °C	100	13.1	P.A.O





Lubricants Name	Features
LUBCHEM PT 6080 PE	 For high-alloy metal black screw pastes, contained inorganic solid lubricants, good anti-corrosion and wear protection properties. Over 200°C, most base oil is evaporated and solid lubricants remain as dry lubricants Assembly paste for vehicle exhaust fumes emission system, turbo-charger and compressor
LUBCHEM PT 6032 MP	- For interference fit and clamping connection and protection from tribo-corrosion - Low speed bearings, guide, joints, bushes, eccentric units, seals, bolts and hinge assembling lubricants
LUBCHEM PT 4012 M	 Especially suitable as an assembly lubricant in frictional connections and for thin-film lubrication of all friction points subject to very high pressure loads, low sliding speed, high wear, stick-slip and tribocorrosion Clamping chuck lubrication, scroll, cam and spiral chuck. Prevention of stick-slip and tribo-corrosion

Lubricants Name	Features
LUBCHEM SH 32	- Synthetic P.A.O base compressor oil, miscible with mineral oil. For the rotary compressor under high load operating condition
LUBCHEM SH 46	- LUBCHEM SH 100 is particularly suitable for reciprocating piston compressor and also SH 32 is suitable for
LUBCHEM SH 68	centrifugal compressor - With excellent oxidant stability, oil life time is extended. With law because it expressions all expressions is reduced and compressions outlet air keeps along
LUBCHEM SH 100	- With low base oil evaporation, oil consumption is reduced and compressing outlet air keeps clean

Nano Special lubricants and additives

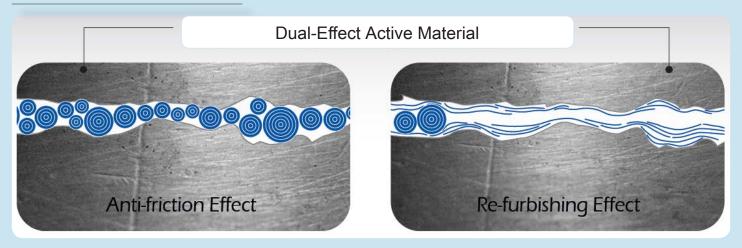
Oil additives

Products	Applications	Main materials	Viscosity (40 °C)	Package
LUBCHEM NANO RC-X EG	Automotive engine surface reconditioning and energy saving	multi-layer WS ₂ nanospheres	95 - 130 mm²/s	250ml, 20lt, 200lt
LUBCHEM NANO MP-X GR	Transmission and gear surface treatment and reducing wear and offering high efficiency	multi-layer WS ₂ nanospheres	500 - 570 mm²/s	250ml, 20lt, 200lt
LUBCHEM NANO MP-X CP	Special treatment for compressor bearing, screws and cylinder surface reconditioning	multi-layer WS ₂ nanospheres	500 - 570 mm²/s	250ml 20lt, 200lt
LUBCHEM NANO MP-X CN	Special treatment for chain surface reconditioning	multi-layer WS ₂ nanospheres	500 - 570 mm²/s	250ml 20lt, 200lt

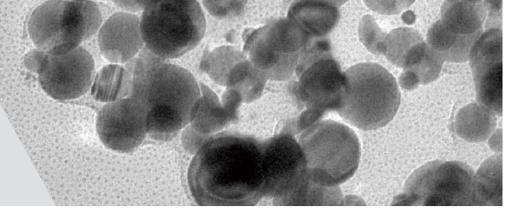
Grease additives

Products	Applications	Main material	Package
LUBCHEM NANO GH-X	Surface-reconditioning nano-lubricant grease solid additives	WS₂ multi-layered fullerene solution Thickened with lithium grease	1KG, 15KG, 200KG
LUBCHEM NANO GH-B	Surface-reconditioning nano-lubricant grease solid additives	WS₂ multi-layered fullerene solution Thickened with lithium grease	1KG, 15KG, 200KG

The features of Lubchem's nano lube



Featuring a unique "dual action" effect: multi-layer WS2 nanospheres lower friction and heat, thereby reducing mechanical wear. At the same time, friction causes nanospheres to release tribofilms that attach to surface crevices and re-smoothen them, thereby extending mechanical efficiency and apparatus life. NanoLub® GH-X is specially formulated to perform in extreme pressure condition.

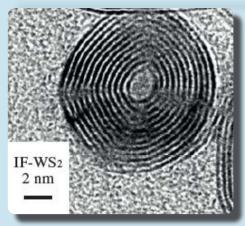




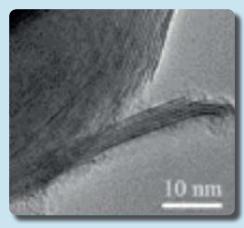
Treatment rate	Advantages	
- 1~7% in host oil	 Unique nanotechnology minimizes engine wear - special formula creates a tenacious tribofilm that remains even after oil change, protecting your engine. Especially formulated for low friction in engines in comparison to traditional lubricants. 	
- 3~5% in host oil	 No need for two separate additives; simpler and less expensive to use with added benefits. 	
- 3~5% in host oil		
- 3~5% in host oil		

Treatment rate	Advantages	
- 2~5% in production quantity	- Controls heat build-up beyond the capacity of conventional greases - Continuous surface-reconditioning ("Wear Repair") mechanism - Continuous surface protection with tribofilm coating	
- 3~5% in production quantity		

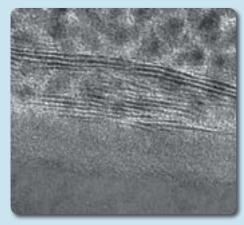
Mow Nanolube "Double action" works



Multi-layered nanosphere particles reduce friction



Under stress, nanoparticles exfoliate tribofilm lamellas



Tribofilm lamellas fill and re-smoothen damaged surfaces



Lubchem Lubrication – your lubrication solution provider

Innovative tribological solutions are our mission. Through personal contact or team collaboration with you, we help you to be globally success in all industries and we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants.

www.lubchem.co.kr

LUBCHEM / Factory 1762 Songgok-ri Dasan-myeon, Goryeong-gun, Gyeongsangbuk-Do, Rep. of KOREA (717-872) TEL.: +82-54-954-8500 / FAX: +82-54-954-0131

Sales Office IBK 3F. 716-10 Hosan Dalseo Daegu City, Rep. of Korea (704-948)

TEL.: +82-53-625-4833 / FAX: +82-53-582-6723

Mail to: lubchemsales@gmail.com

