LOCTITE. BONDERITE. TECHNOMELT. TEROSON.

Product Selector

Industrial Adhesive, Sealant and Functional Coating Solutions





Lubrication Lubrication and Protection



Why Use a LOCTITE lubricant?

LOCTITE lubricants offer superior protection for industrial plants and equipment. The range includes organic, mineral and synthetic based products meeting the requirements of industrial applications.

What is the function of a lubricant?

The typical function of a lubricant is to protect against friction and wear. Lubricants are also used to protect against corrosion by displacing moisture and leaving a continuous coating on the part.

What considerations are important when choosing a lubricant?

When choosing a lubricant, it is important to consider the intended application as well as the environmental conditions to which the assembly will be exposed. Environmental conditions are critical to the successful selection of the right lubricant product. Factors including high temperature, harsh chemicals and contaminants may have an adverse effect on the expected lubricant performance.

LOCTITE anti-seize products

LOCTITE anti-seize products provide protection in harsh environments and operating conditions, e.g. extreme temperatures and corrosive attack. They prevent fretting and galvanic corrosion. They can also be used as a running in lubricant for new equipment.



LOCTITE greases

LOCTITE lubricating greases have been designed to offer the following performance benefits:

- Protect against friction
- Reduce wear and corrosion
- Prevent overheating

To match specific requirements, LOCTITE greases are made of mineral or synthetic base oils combined with a thickening agent, e.g. lithium soap or inorganic material such as silica gel.





Application areas of oils, greases and anti-seizes

A lubricant needs to be chosen based on the speed, temperature and boundary friction encountered in the application concerned.

	Oils and Greases	Anti-Seizes
Speed of movement	Medium to high	Low to zero
Temperature	Up to 250°C	Up to 1,300°C
Load	Low to medium	High





- Oil (fluid friction)
- A Starting friction
- B Translation speed to fluid friction



LOCTITE oils

LOCTITE lubricating oils have been designed for moving parts in equipment ranging from major plants to mini machines. Flowability and surface adhesion ensure good lubrication at both high and low speeds within the specified temperature range.



LOCTITE dry film lubricants

MoS₂ and PTFE based LOCTITE dry film lubricants reduce friction, prevent seizing, ensure protection against corrosion and enhance the performance of oils and greases.





Lubricating

High performance		Spec	iality
Water resistant	High load	High purity	Incidental food contact
LOCTITE LB 8023	LOCTITE LB 8012	LOCTITE LB 8013	LOCTITE LB 8014
Black	Black	Dark grey	White
Graphite, calcium, boron nitride & rust inhibitors	MoS ₂ & rust inhibitors	Graphite & calcium oxide	White oil and extreme pressure (EP) additives
1	2	-	0
-30°C to +1,315°C	-30°C to +400°C	-30°C to +1,315°C	-30°C to +400°C
454g brush top	454g brush top	454g brush top	907g can
 LOCTITE LB 8023 brush top Metal-free Formulated to protect assemblies exposed directly or indirectly to fresh water and salt water, this anti-seize product works especially well in high humidity conditions It has excellent lubricity, superior water wash-out spray resistance and prevents galvanic corrosion 	 LOCTITE LB 8012 brush top Metal-free Formulated to protect assemblies during running-in period Resists high static loads and MoS₂ paste ensures maximum lubricity 	 LOCTITE LB 8013 brush top Metal-free High purity formula with excellent chemical resistance For stainless steel Ideal for use in the nuclear industry PMUC approved 	 LOCTITE LB 8014 Metal-free Prevents seizure, galling and friction in stainless steel and other metal parts up to 400°C H1 NSF Reg. No.: 123004

ABS approved

		General purpose	
	Ne	utral appearance	Corrosion protection
Solution		LOCTITE LB 8105	LOCTITE LB 8106
		LB 8105	LB 8106
Appearance		Colourless	Light brown
Base oil and additives		Mineral	Mineral
Thickener		Inorganic gel	Lithium soap
Drop point		None	> +230°C
NLGI class		2	2
Service temperature range		-20°C to +150°C	-30°C to +160°C
Load test 4 ball N (weld load)		1,300	2,400
Pack sizes	No	t available in the U.K.	Not available in the U.K.
		E LB 8105 ral grease	LOCTITE LB 8106 • Multi-purpose grease

- Mineral grease • Lubricates moving parts
- Colourless
- Odourless
- Ideal for bearings, cams, valves and conveyors

H1 NSF Reg. No.: 122979

- Multi-purpose grease
- Lubricates moving parts
- Provides corrosion protection
- For rolling/plain bearings and slideways

Lubricating

High performance			Special purpose	
High temperature resistance	Heavy load applications	Plastic part applications	Chains, gears	
LOCTITE	LOCTITE	LOCTITE	LOCTITE	
LB 8102	LB 8103	LB 8104	LB 8101	
LB 8102		Real Providence of the second se		
Light brown	Black	Colourless	Amber	
Mineral, EP	Mineral oil, MoS ₂	Silicone	Mineral oil, EP	
Lithium soap complex	Lithium soap	Silica gel	Lithium soap	
>+250°C	>+250°C	-	>+250°C	
2	2	2/3	2	
-30°C to +200°C	-30°C to +160°C	-50°C to +200°C	-30°C to +170°C	
3,300	3,600	-	3,900	
Not available in the U.K.	Not available in the U.K.	75ml tube, 1 ltr can	Not available in the U.K.	
LOCTITE LB 8102 • High-temperature grease • Prevents wear and corrosion • Suitable in humid	 LOCTITE LB 8103 MoS₂ grease For moving parts at all speeds Withstands vibration and basis vibration and basis vibration 	LOCTITE LB 8104Silicone greaseValve and packing greaseWide temperature range	 LOCTITE LB 8101 Chain lubricant Adhesive grease for open mechanical systems with anti-fling properties 	
environmental conditionsWithstands heavy loads at	 heavy loads For highly stressed joints, plain 	 Lubricates most plastic and elastomeric components 	 Protects against water ingress 	

- Withstands heavy loads at medium and high speeds
- Lubricates rolling/plain bearings, open gears and slideways
- For highly stressed joints, plain and roller bearings, socket joints and slideways
- elastomeric components

H1 NSF Reg. No.: 122981

- Protects against water ingress
- Excellent wear and high pressure resistance
- Lubricates chains, open gears and worm screws

Dry Films and Oils Product Table

	Dry film lubricant			
	General purpose	Non-metal surface	Penetrating oil	Chain lubricant
Solution	LOCTITE LB 8191	LOCTITE LB 8192	LOCTITE LB 8001	LOCTITE LB 8011
Appearance	Black	White	Colourless	Yellow
Base	MoS ₂	PTFE	Mineral oil	Synthetic oil
Viscosity	11 s (Cup 4)	11 s (Cup 4)	4 cSt	11.5 cSt
Service temperature range	-40°C to +340°C	-180°C to +260°C	-20°C to +120°C	-20°C to +250°C
Load test 4 ball N (weld load)	-	-	1,200	2,450
Pack sizes	400ml aerosol	Not available in the U.K.	Not available in the U.K.	Not available in the U.K.
	 LOCTITE LB 8191 MoS₂ anti-friction coating – aerosol Quick drying Surface protection against corrosion Enhances the performance of oils and greases 	 LOCTITE LB 8192 PTFE coating For non-metal and metal surfaces Creates sliding surface for free movement Prevents dust/dirt accumulation Protection against corrosion For conveyor belts, slideways and cams H2 NSF Reg. No.: 122980 	 LOCTITE LB 8001 Penetrating mineral oil spray Multi-purpose penetrating oil for micro-mechanisms Penetrates inaccessible mechanisms Lubricates valve seats, collars, chains, hinges and cutting blades H1 NSF Reg. No.: 122999 	 LOCTITE LB 8011 High-temperature chain oil spray Oxidation resistance prolongs lubricant service life Lubricates open mechanisms, conveyors and chains at elevated temperatures up to 250°C H2 NSF Reg. No.: 122978

Lubricating

