

RUST-X USA

Technical Datasheet

Product: Longtime PD
Grade: PD 0, 1 & 2

TDS No. 400109
Publication Date: 1st April 2016

www.rustx.net
info@rustx.net

Product Description

RustX PD range are lithium based greases containing highly refined mineral oils and fortified with the Microflux Trans (MFT) additive system.

The MFT additive technology provides optimum wear protection and an extremely low coefficient of friction even under extremes of pressure, vibration, shock loads, at high or low speeds or varying micro-smoothing of the friction surfaces.

Under severe load, components of the MFT additive combination are activated and diffuse into the surfaces initiating an improvement of their friction characteristics through plastic deformation.

The organic reaction products become a component of the tribopolymer system. Unlike the case with conventional lubricants, the tribopolymers formed by MFT are long-chained compounds with excellent lubricity and adhesion.

The load carrying area is improved, a hydrodynamic lubrication film is easier to maintain. This unique physio-chemical reaction achieves a non-sacrificial micro-smoothing of the friction surfaces.

Product & Application Images



Suitable For

Longtime PD can be used for long term or lifetime lubrication even under the most difficult operating conditions such as extreme pressure, vibrations, shock loads and a wide temperature range in highly loaded rolling and sliding bearings. They can also be used in bearings of spinning and grinding spindles, for gear motors exposed to shock loads, in screening/wood shaping machines and for bearing surfaces of printing plates.

These greases are also suitable for bearings with a rotating outer ring and undergoing high stresses due to centrifugal load, e.g. in spreader rolls, roll neck bearings in steel mills, and for bearings with changing rotational directions or slewing movements.

They are also used in curved teeth couplings and centralised lubricating systems. Longtime PD 0 and PD 00 can be used as a semi-fluid grease lubricant in gears such as flange, drum-type and worm gears. It is also suitable for use in gears without oil-tight enclosures, gear wheels and rolling bearings with a grease reservoir.

Features

- High load bearing capacity – extends the operating period under high loads leading to optimum wear protection
- Superior lubrication and surface smoothing effects due to MFT reduced failures leading to less downtime and repair work. MFT can result in prolonging the life of damaged components/bearings
- Establishment of a protective layer of MFT – this additive system can effectively increase the load bearing area, thus reducing unit pressures, operating temperatures and wear, increasing service life of both parts and lubricant.
- Improved bearing surfaces for longer service life result from the ‘running in’ effect of MFT
- Extremely low coefficients of friction – generating energy savings and reduced noise levels.
- Multi-functional – Longtime PD 0 and PD 00 are highly recommended for anti-friction bearings with grease reservoir and for leaky gearboxes
- Easily pumpable in central lubrication systems – does not channel on gears running at high speeds when using PD 0 and PD 00
- Exceptional water resistance – coating film stays on the surface even in presence of water; even when exposed to the action of hot and chemically active process water. Subject to usual manufacturing tolerances.

Properties

Name	Method	Units	PD 0	PD 1	PD 2
Appearance	Visual	-	Brown	Brown	Brown
Thickener type	-	-	Lithium	Lithium	Lithium
Base oil	-	-	Mineral oil	Mineral oil	Mineral oil
Consistency	ISO 2137 / ASTM D217	NLGI	0	1	2
Density @ 20°C	ASTM D4052 / DIN 5157D	kg/m ³	890	890	890
Worked Penetration (60 strokes @ 25°C)	ISO 2137 / ASTM D217	0.1 mm	355-385	310-340	265-295
Worked Penetration (100,00 strokes @25°C) - change from 60 strokes	ISO 2137 / ASTM D217	0.1 mm	-	<20	<20
Dropping point	ISO 2176 / ASTM D566	°C	-	190	200
Base Oil Viscosity @ 40°C	ISO 3104 / ASTM D445	mm ² /s	130	95	95
Copper Corrosion (24 hrs, 100°C)	ASTMD4048	Rating	1b	1b	1b
SRV Friction and Wear test (400N / 2hr / 50°C)	ASTMD5707	coeff. of friction/ wear scar diam (mm)	0.07/0.65	0.07/0.65	0.07/0.65
Flow pressure @ -35°C	DIN 51805	mBar	1000	1100	1200
Water Resistance	DIN 51807-1	Rating	-	1	1
DIN Classification	DIN 51502	-	KP 0 N-40	KP 1 N-30	KP 2 N-30
ISO Classification	ISO 6743/9	-	L-XDDHB- 0	L-XCDHB- 1	L-XCDHB- 2

Additional information

In order to minimise potential incompatibilities when converting to new grease, all previous lubricant should be removed as much as possible prior to operation. During initial operation, re-lubrication intervals should be monitored closely to ensure all previous lubricant is purged.

Packaging

26 Liters Can & 210 Liters Barrel

Disposal

Wastes should be disposed off in accordance with local regulations.

Recommendation: Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

Packaging that may not be cleansed must be disposed off in the same manner as the product.

Safety Information

RUST-X Rust Preventive Oils do not contain Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent Chromium (Cr6), Polybrominated biphenyls (PBB), or Polybrominated di-phenylether complying with the re-restricted substances listed in Article 4(1) of the RoHS Directive. RUST-X Rust Preventive Oils are also REACH Compliant for exports to the European Union.

Declaration

This Data sheet and information it contains is considered to be accurate at the date of printing. No representation or warranty, expressed or implied is made as to the accuracy or completeness of the data and information contained in this publication. It is the User's obligation to evaluate and use products safely and within the scope advised in the data sheet and to comply with all applicable laws and regulations

Revision No. 8 Revision Date: 1st April 2016