





# PLAZO SUPREME PD RANGE HIGH PERFORMANCE BEARING GREASES

# **Product Description**

PLAZO SUPREME PD Range is a range of lithium-Complex based greases containing mineral oils, enhanced with the Micro Flux Trans (MFT) surface improvement additive system.

Under severe load, PD properties (Plastic Deformation) are derived from organic reaction of components of this grease while in operation, that form a tribopolymer system of long-chained compounds with excellent lubricity and adhesion, helping it achieve a non-sacrificial micro-smoothing of the friction surfaces.

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.

PLAZO SUPREME PD Range can be used for long term lubrication under operating conditions such as extreme pressure, vibrations, shock loads and a wide temperature range (-35°C to 140°C / -31°F to 284°F) in highly loaded rolling and sliding bearings.

# **Applications**

- The grease can be used in the applications which include bearings of spinning and grinding spindles, gear motors exposed to shock loads, screening and wood shaping machines and 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 such as spreader rolls, roll neck bearings in steel mills, and bearings with changing rotational directions or slewing movements.
- They are also used in curved teeth couplings and centralized lubricating systems.
- PLAZO SUPREME PD 0, 00 and 000 can be used as semi-fluid grease lubricants in gears such as flange, drum-type and worm gears. These two products are also suitable for use in gears without oil-tight enclosures, gear wheels and rolling bearings with a grease reservoir.

# **Benefits**

- Resistant to hot and cold water.
- Easily pumpable in centralized lubricating systems.
- High load bearing capacity.
- MFT additive system can reduce failures, leading to less downtime and repair work providing Superior lubrication and surface smoothing effects.
- Establishment of a protective layer of MFT.
- PD technology can prolong the life of damaged components.
- Extremely low coefficients of friction generating energy savings and reduced noise levels.

PETRELPLUS INC.





# **Typical Properties**

PROPERTIES	TEST METHOD	000	00	0	1	2
Appearance	Visual	Brown	Brown	Brown	Brown	Brown
Thickener		Lithium Complex	Lithium Complex	Lithium Complex	Lithium Complex	Lithium Complex
Base Oil		Mineral	Mineral	Mineral	Mineral	Mineral
NLGI	ASTM D217	000	00	0	1	2
Worked Penetration (60 strokes @ 25 °C/77 °F)	ASTM D217	465	400 - 430	355 - 385	310 - 340	265 - 295
Worked Penetration (100,000 strokes @ 25 °C) - change from 60 strokes	ASTM D217	-	-	-	<20	<20
Density @ 20 °C/68 °F	Inhouse method	910	910	890	890	890
Base Oil Viscosity @ 40 °C	ASTM D445	150	150	150	100	100
Dropping point, <sup>o</sup> C	ASTM D566	-	-	-	190	200
Water Wash Out, % Loss @ 80 °C max		-	-	-	<8	<5
Four Ball Weld Load, Kg	IP 239	250	250	250	250	250
4 Ball Wear Scar Dia, mm	ASTM 2266	0.5	0.5	0.5	0.5	0.5
Copper Corrosion (24 hrs,100 °C)	ASTM D4048	1b	1b	1b	1b	1b

Available Packs: 18, 50 and 180 Kg

Shelf Life: 36 Months from manufacturing month.

Due to continual product research and development, the information contained herein is subject to change without notification. Typical Properties may vary slightly. The Material Safety Data Sheet (MSDS) are available upon request through our sales office. All related specifications are meets or exceeds.



# **Material Safety Data Sheet**

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product PLAZO SUPREME PD RANGE

Supplier PETRELPLUS INC.

One World Center, Tower One, 9th Floor, Senapati Bapat Marg, Lower Parel, Mumbai-400013, Maharashtra.

Call # +91 22 6216 7072 (Monday to Friday) Cell # +91 93522 25457 marketing@petrelplus.com www.petrelplus.com

#### 2. COMPOSITION

Composition of Mineral oil, Lithium Complex thickener and proprietary additives.

#### 3. HAZARDS INDENTIFICATION

FIRE -Flammable at high temperature.

HEALTH

Eye contact
-May cause mild irritation to the eyes upon direct contact.
Skin contact
-Prolonged contact may defat the skin or can cause dermatitis.

Inhalation -hazards.

Ingestion -Harmful if swallowed.

#### 4. FIRST-AID MEASURES

Inhalation -Remove person to fresh air. Seek medical help if discomfort persists.

Ingestion -Do not induce vomiting. Seek medical support.

Skin Contact -Immediately flush skin with plenty of water for at least 15 minutes.

Eye Contact -Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally.

#### 5. FIRE-FIGHTING METHODS

Extinguishing media -Use dry chemical powder or carbon di – oxide or foam. Special protective equipment -Positive pressure self-contained breathing apparatus.

# 6. ACCIDENTAL RELEASE MEASURE

Personal protection - Adequate ventilation, gloves, goggles, overalls and boots.

Environmental precautions - Avoid entry into water courses. Clean up method - Absorb on inert material.

### 7. STORAGE AND HANDLING

Handling - Impervious gloves & eye protection ensure good ventilation. Keep away from source of ignition.

Storage - Store in a cool & dry place.

# 8. EXPOSURE CONTROL / PERSONAL PROTECTION

Respiratory protection - Not required under normal conditions. Skin/hand protection - Impervious gloves, overalls, and boots.

Eye protection - Use Goggles

### 9. TYPICAL PROPERTIES

NLGI - 000 to 2 Color - Brown

Thickener - Lithium Complex

Copper Strip Corrosion - 1b

#### 10. STABILITY AND REACTIVITY

Stability - Stable

Conditions to avoid - Excessive temperatures Materials to avoid - Strong oxidizers

Hazardous decomposition products - Oxides of carbon and nitrogen



# 11. TOXICOLOGICAL INFORMATION

Skin contact - Possible irritation Eye contact - Possible irritation Inhalation - Not applicable

Ingestion - Irritation. May cause lung damage.

Long term effect - Not known

#### 12. ECOLOGICAL INFORMATION

Mobility - Mobile Degradation - Low Accumulation -Not expected Short- & Long-Term effect - Water pollutant

# 13. DISPOSAL CONSIDERATIONS

Dispose off according to local and national regulations.

# 14. TRANSPORT INFOMRATION

- Not applicable CPL IMO -Not applicable

### 15. REGULATORY INFORMATION

Symbol(s) -Not applicable Phrase(s) - Not applicable Phrase(s) - Not applicable

# 16. OTHER INFORMATION: PRODUCT SAFETY

For safety reasons, it is IMPERATIVE that customer: -Ensure that all those within their control who use the products are supplied with all relevant information contained within the Material Safety Data Sheet and Technical Bulletin concerning the applications for which the product is designed and any instructions or warning.



