

ULTRAPLUS-100 SYNTHETIC LITHIUM COMPLEX GREASE

Product Description

ULTRAPLUS-100 greases are composed of 100% synthetic base oil which provides the lubrication. Under extreme service conditions (very low temperatures of the order of -40°C or very high $> 300^{\circ}\text{C}$), the use of synthetic base oils is necessary to reach performance levels that traditional greases based on mineral oils cannot attain. The synthetic base oils used are in particular.

ULTRAPLUS-100 greases are superior performance products designed for a wide variety of applications at extremes of temperature. They combine the unique features of synthetic base fluids with those of a high-quality lithium complex thickener. The wax-free nature of synthetic fluids and the low coefficient of traction (compared with mineral oils), provide excellent low temperature pump ability and very low starting and running torque. These products offer the potential for energy savings and can reduce operating temperatures in the load zone of spherical roller and ball bearings. The lithium complex thickener contributes excellent adhesion, structural stability and resistance to water.

PAO (Poly Alpha Olefin) these base oils are very resistant to oxidation and are notably used for lifetime greasing at standard temperatures. Synthetic greases represent a good number of specialty greases and are very often chosen for alternative maintenance solutions. In order to minimize potential incompatibilities when converting to new grease, all previous lubricant should be removed as much as possible prior to operation. During initial operation, lubrication intervals should be monitored closely to ensure all previous lubricant is purged.

ULTRAPLUS-100 is semi solid grease is all purpose, extreme pressure grease is recommended for heavy duty machinery applications, and it can be used where centralized lubrication is required.

Benefits

- Very low pour point for operation at low temperature.
- Exceptional resistance to oxidation for a very long lifetime.
- Very high thermal stability avoiding decomposition at high temperatures.
- High viscosity index (VI) to maintain suitable viscosity whatever the temperature.
- Good lubricating performance with or without additives.
- Because of their technical qualities, synthetic greases are the obvious choice for certain applications. They can also be an alternative for optimizing and spacing out your maintenance operations.
- Reduction in maintenance costs.
- Extended service life with longer intervals between relubrication and improved bearing life.
- Reduced grease consumption less processing of packaging, water reduction in overall lubricant costs and preservation of the environment.

Applications

- Bearings for electric motors.
- Micro-mechanisms, robots.
- Micro-electronic parts, connectors.
- Protection of gluing tables.
- Grooves and lips of sealing gaskets.
- Slides, rails.
- Cylindrical, conical roller bearings.
- Furnace rollers.
- Motor vehicle interiors.

Typical Properties

| ULTRAPLUS | 100 |
|---|---------------------------|
| Thickener Type | Lithium Complex |
| Base oil / viscosity | Synthetic base (PAO) |
| Color | White |
| NLGI Grade | 2 |
| Dropping Point, °C | 270 ⁰ C |
| Viscosity Index, ASTM D 2270 | 180-200 |
| Oil Separation, 0.25 psi, 24h@ 25 C, | .5%max |
| 4 Ball EP Test weld Load, KGF, ASTM D2596 | 250 |
| Four Ball Wear Test, Scar Diameter, mm, ASTM D2266 | 0.5 |
| Service Temperature | -40 to 300 ⁰ C |
| Penetration, 60X.01 mm, ASTMD217 | 280 |
| Base Oil Viscosity at 40 °C mm ² /s ASTM D445 | 100 |
| Base Oil Viscosity at 100°C mm ² /s ASTM D445 | 16.2 |
| SKF EMCOR Rust Test, 10% Synthetic Sea Water, ASTM D6138 | 0,1 |
| SKF EMCOR Rust Test, Acidic Water, ASTM D6138 | 0,1 |
| SKF EMCOR Rust Test, Distilled Water, ASTM D6138 | 0,0 |
| Copper Strip Corrosion Test ASTM D4048 | 1B |
| Water Washout Loss @ 79 C, wt.%, ASTM D1264 | 6 |

Available Packs: 18 and 180 Kg
Shelf Life – 36 Months from the Manufacturing month

* All related specifications are meets or exceeds.

Due to continual product research and development, the information contained herein is subject to change without notification. Typical Properties may vary slightly.

1. PRODUCT AND COMPANY IDENTIFICATION

Product **ULTRAPLUS-100**
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

No harmful substances. Composition of Synthetic base oil, Lithium Complex thickener and proprietary additives.

3. HAZARDS IDENTIFICATION

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

Soap - Lithium Complex
 Color - White
 Operating temperature range - (-40°C to +300°C)
 Drop point, °C - 270

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 INFORMATION

| | |
|-----|------------------|
| CPL | - Not applicable |
| 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.