

Technical Data Sheet





LITHEX SSEP SERIES

Product Description

LITHEX SSEP Greases are high temperature lithium complex base greases fortified with multiple molecule Nano technology which reduces friction drastically in rubbing surfaces. Nano Tech multiple molecules forms a protective layer on the metal surfaces for optimum wear protection and an extremely low coefficient of friction even under extreme of pressure, vibration, shock loads at high or low speeds of the friction surfaces. The infuse Nano particles in the grease results in equalization of surface roughness without creating abrasion. A hydrodynamic lubrication film is maintained to achieve non-sacrificial micro-smoothening of the frictional surfaces. In smoothening the working surfaces, the loads are distributed over increased surface area.

Applications

LITHEX SSEP Greases are recommended for the lubrication of both plain and anti - friction bearings in a wide variety of application such as automotive and earth moving equipment, gear couplings, electric motors, mining equipment and general industrial machinery.

Benefits

- Repairs damage friction surfaces due to Nano particles.
- High load bearing capacity.
- Forms protective layer on metal surface to reduce friction drastically on the metal surfaces.
- Extremely low coefficient of friction.
- Energy saving and reduces noise levels.
- Exceptional water resistance & coated film stays even in presence of hot & cold water.
- Extremely extended operating period even under high loads, vibration, shock loads and high temperature.

Additional Information

Remove previously applied Lubricant before the operation to avoid any potential incompatibilities.



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Typical Properties

LITHEX SSEP	TEST METHOD	0	00	000	1	2
Color	-	Creamish	Creamish	Creamish	Creamish	Creamish
Structure	-	Semifluid & smooth				
Soap Type	ASTM D 128	Lithium Complex	Lithium Complex	Lithium Complex	Lithium Complex	Lithium Complex
Base oil Type	ASTM D 128	Mineral + PAO				
NLGI Grade		0	00	000	1	2
Base oil viscosity at 40°C, cSt	ASTM D 445	150	150	150	150	150
Worked Penetration @25°C, (60 X)	ASTM D 217	370	415	455	310-340	265-295
Drop Point, ⁰ C Min	ASTM D 2265	200	190	185	>250	>250
Flow Pressure @ -35°C/- 31°F	DIN 51805	250	500	1000	<1220	<1580
Four-Ball Weld Load, Kg., Min.	ASTM D2596	350	350	350	350	350
ROHS Compliant		Yes	Yes	Yes	Yes	Yes

Available Packs: 18, 50, 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 Name: LITHEX SSEP GREASE SERIES

Company Identification - PETRELPLUS INC.

One World Center, Tower One, 9TH

Floor

SenapatiBapatMarg, Lower Parel,

Mumbai-400013
Cell # +91 93522 25457
marketing@petrelplus.com
www.petrelplus.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

No Reportable Hazardous Substance(s) or Complex Substance(s).

3. HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines.

POTENTIAL HEALTH EFFECTS

Low order of toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure injection under skin may cause serious damage.

ENVIRONMENTAL HAZARDS Harmful to aquatic organisms may cause long-term adverse effects in the aquatic environment.

NFPA Hazard ID: Health: 0 Flammability: 1 Reactivity: 0 HMIS Hazard ID: Health: 0 Flammability: 1 Reactivity: 0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

4. FIRST AID MEASURES

INHALATION Under normal conditions of intended use, this material is not expected to be an inhalation hazard. SKIN CONTACT Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

EYE CONTACT Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION First aid is normally not required. Seek medical attention if discomfort occurs.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames. Inappropriate Extinguishing Media: Straight Streams of Water FIRE FIGHTING: Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Aldehydes, Oxides of carbon, Sulfur oxides, Smoke, Fume, Incomplete combustion products FLAMMABILITY PROPERTIES

Flash Point [Method]:>200C (392F) [EST. FOR OIL, ASTM D-92 (COC)]

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D $\,$

Autoignition Temperature: N/D

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. U.S. regulations require reporting releases of this material to the environment which exceed the reportable quantity or oil spills which could reach any waterway including intermittent dry creeks.

SPILL MANAGEMENT

Land Spill: Allow spilled material to solidify and scrape up with shovels into a suitable container for recycle or disposal. Scrape up spilled material with shovels into a suitable container for recycle or disposal.

Water Spill: Stop leak if you can do it without risk. Confine the spill immediately with booms. Skim from surface. Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken. ENVIRONMENTAL PRECAUTIONS Prevent entry into waterways, sewers, basements or confined areas.

7. HANDLING AND STORAGE

HANDLING

Prevent small spills and leakage to avoid slip hazard.
Static Accumulator: This material is not a static accumulator.

STORAGE

Do not store in open or unlabeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider: No special requirements under ordinary conditions of use and with adequate ventilation.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be

in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: No protection is ordinarily required under normal conditions of use and with adequate ventilation. For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode.

Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Work conditions can greatly effect glove durability; inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: No protection is ordinarily required under normal conditions of use.

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping. ENVIRONMENTAL CONTROLS See Sections 6, 7, 12, 13.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. GENERAL INFORMATION

Physical State: Solid (Grease) Mineral + PAO Base oil: Drop Point, ⁰C: 185 to >250 NLGI: 0 to 2

10. STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions. CONDITIONS TO AVOID: Excessive heat. High energy sources of ignition.

MATERIALS TO AVOID: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not

decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

11 TOXICOLOGICAL INFORMATION

Effect of Long Term (Chronic) Exposure: Long term dermal application may produce skin irritation. Elevated temperatures or mechanical action may form vapors or fumes. Inhalation of oil mists or vapors from hot oil may cause irritation of the upper respiratory tract.

12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

Ecotoxicity

Material -- Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment Persistence and degradability

Biodegradation: Base oil component -- Expected to be inherently biodegradable

Mobility

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

BIOACCUMULATION POTENTIAL Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFOMRATION

DOT Not Regulated by any means of transportation **TDG Not Regulated** IATA-DGR Not Regulated IMO / IMDG Not Regulated

15. REGULATORY INFORMATION

Classification and labeling according to EC Directives 67/548 Not classified as hazardous. EC Risk Phrases Not classified as hazardous. Other Hazardous **EC Safety Phrases** Not classified as hazardous

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.