



LITHEXPLUS EP SERIES LITHIUM COMPLEX GREASE

Product Description

LITHEXPLUS EP SERIES lithium hydroxyl stearate grease is formulated to provide extra protection against wear, rusting and water washout. They are available in NLGI grades ranging from 000 to 3, with base oil viscosities ISO VG 150.

LITHEXPLUS EP SERIES are particularly suitable for the lubrication of enclosed gears and bearings in poorly sealed gear cases they can also be used in many other industrial applications where conventional gear oils cannot be retained in gear cases, chain cases, etc. because of leakage due to worn or missing seals. The recommended operating temperature range is -15 to 150°C.

Applications

LITHEXPLUS EP SERIES are particularly suitable for the lubrication of enclosed gears and bearings in poorly sealed gear cases on most underground mining machinery with the exception of electric motor gearings. LITHEXPLUS EP series can also be used in many other industrial applications where conventional gear oils cannot be retained in equipment such as gear cases, chain cases, because of leakage due to worn or missing seals.

Benefits

- Reduced wear under heavy or shock loading and vibration for good equipment reliability and availability.
- Protection against rust and corrosion and resistance to water washout for equipment protection and good lubrication even in presence of water.
- Extended bearing life potential in wet environments for reduced bearing costs and unanticipated downtime.
- Effective leakage control

Recommended For Stone Processing and Mining Industries, Liner Polish Machines, Multi Blade Cutter Machines.

Health & Safety

These greases are unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of industrial and personal hygiene are maintained.

Typical Properties

PROPERTIES	000	00	0	1	2	3
NLGI Grade	000	00	0	1	2	3
Color, Visual	Creamish	Creamish	Creamish	Creamish	Creamish	Creamish
Thickener Type	Lithium Complex	Lithium Complex	Lithium Complex	Lithium Complex	Lithium Complex	Lithium Complex
Penetration, Worked 25 ^o C ASTM D 217	460	400-430	340-365	310-340	265-295	220-250
Viscosity of Oil, ASTM D 445 cSt @ 40 ^o C	150	150	150	150	150	150
Timken OK Load, ASTM D 2509, lbs	40	50	50	50	60	60
4-Ball Wear, ASTM D 2266, Scar, mm	0.4	0.4	0.4	0.4	0.4	0.4
4-Ball Weld Load, ASTM D 2596, Kg	250	250	250	250	250	250
Dropping Point, D 2265, ⁰ C (min)	NA	NA	120	160	180	180
Rust Protection, ASTM D 6138, Distilled Water	0-0	0,0	0,0	0,0	0,0	0,0

Available Packs: -18 and 180 Kg.

Shelf Life: 36 Months from 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. The Material Safety Data Sheet (MSDS) are available upon request through our sale office.



Material Safety Data Sheet

PRODUCT AND COMPANY IDENTIFICATION 1.

Product Supplier LITHEXPLUS EP SERIES 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

COMPOSITION 2.

Mineral oil, Lithium Complex soap, corrosion inhibitors and other additives.

HAZARDS INDENTIFICATION 3.

Not expected to be a health hazard when used under Normal conditions. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. High pressure injection under the skin may cause serious damage including local necrosis. Used grease may contain harmful impurities.

FIRST-AID MEASURES 4.

Inhalation	- At ambient temperature this product will not present any inhalation hazards.
Ingestion	 May cause nausea followed by vomiting.
Skin Contact	 Prolonged contact may defat the skin or can cause dermatitis.
Eye Contact	- May cause irritation to the eyes upon direct contact.

FIRE-FIGHTING METHODS 5.

Specific Hazards

Hazardous combustion products may include a complex mixture of air borne solid and liquid particulates and gases (smoke) carbonmonoxide. Unidentified organic & inorganic compounds.

Extinguishing media

Foam, water spray or fog. Dry chemical powder, carbon-di- oxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media

Do not use water in a jet

Protective Equipment for Firefighters

Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

ACCIDENTAL RELEASE MEASURE 6.

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Point 8 of this Material Safety Data Sheet. See Point 13 for information on disposal. Observe all relevant local and international regulations.

Protective measure

Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Clean Up Methods

Shovel into a suitable clearly marked container for Disposal or reclamation in accordance with local regulations.

STORAGE AND HANDLING 7

Handling

Avoid prolonged or repeated contact with skin. Avoid inhaling vapor or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Storage

Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers. Storage temperature: 0-50 deg C / 32-122 ° F.



Material Safety Data Sheet

8. EXPOSURE CONTROL / PERSONAL PROTECTION PERSONAL PROTECTION Respiratory Protection

No respiratory protection is ordinarily required under normal conditions of use.

Hand Protection

Where hand contact with the product may occur the use of Gloves approved to relevant standards (e.g. Europe: EN374, US:F739)made from the following materials may provide suitable chemical protection: PVC. neoprene or nitrile rubber gloves.

Eve Protection

Wear safety glasses or full- face shield if splashes are likely to occur.

Protective Clothing

Skin protection not ordinarily required beyond standard issue work clothe

9. TYPICAL PROPERTIES

NLGI Grade	000	00	0	1	2	3
Worked Penetration						
	460	400-430	340-365	310-340	265-295	220-250
Drop Point (min)						
-	NA	NA	120	160	180	180
Kinematic Viscosity						
@40°C	150	150	150	150	150	150

10. STABILITY AND REACTIVITY

Physio-chemical stability Product is stable with heat and light **Materials to avoid** Hazardous decomposition products Carbon di–oxide & carbon monoxide **Hazardous polymerization** Will not occur

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically nontoxic: LL/EL/IL50 > 100mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms' concentrations lessthan1mg/l.

Inhalation	-Not considered to be an inhalation hazard under normal conditions of use.
Dermal	-Expected to be of low toxicity: LD50 >2000 mg/kg, Rabbit
Eyes irritation (rabbit)	-Expected to be slightly irritating.
Sensitization	-Not expected to be a skin sensitizer
Mutagenicity	-Not considered a mutagenic hazard

12. ECOLOGICAL INFORMATION

Ecological data have not been determined specifically for this Product. Information given is based on a knowledge of the Components and the ecotoxicology of similar products.

13. DISPOSAL CONSIDERATIONS

Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment in drains or in water courses.

Container Disposal Local Legislation: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

14. TRANSPORT INFOMRATION

General information:	Not regulated.
UN No:	Not regulated.
ADR/RID:	Not regulated.
IMO-IMDG code:	Not regulated.
ICAO/IATA:	Not regulated.



Material Safety Data Sheet

15. REGULATORY INFORMATION

Symbol(s)	Not applicable
R Phrase(s)	Not applicable
S 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.