

Technical Data Sheet







WHEELSTUD GREASE

Product Description

WHEELSTUD GREASE is a premium low friction, this copper grease based on micro size amorphous copper, graphite and other proprietary solid lubricants with non- melting high temperature apart from new generation oxidation and H2S inhibitors. It is a lead and zinc free compound formulated to provide excellent performance under excessive vibration, load and elevated temperatures. The only thing that stops your wheel nuts coming loose when the studs heat, cool and stretch is friction, grease reduces friction.

A unique combination of solid lubricants and EP additives impart extremely high weld load to the compound thereby offering superior protection against seizing and galling of threaded connections normally encountered under severe drilling conditions. It also makes the compound suitable for lubrication of open gear assemblies subjected to very high load.

Applications

Wheel Stud Grease is free from lead, graphite and aluminum and does not carbonize at high temperature up to 1100°C. It is recommended for stainless steel application above 360°C it performs well on similar and dissimilar metals. It provides rust, Corrosion protection while preventing seizing, galling, pitting, galvanic action and thread distortion. It is impervious to water, electrically conductive and offers protection from steam acids, caustic and harsh chemicals. It is supplied ready to use to apply by brush, swab, or hand or grease gun.

Benefits

- Ensures consistent friction between threads.
- Protects against galling and seizure.
- Protects against rust and corrosion.
- Eases assembly of tight-tolerance components.
- Non-Friction Compound.

PETRELPLUS INC.



One World Center, Tower One, 9^{th} Floor, Senapati Bapat Marg, Lower Parel, Mumbai-400013









Typical Properties

| WHEELSTUD GREASE | |
|--|-------------------------|
| Appearance | Smooth Grease |
| Color | Dark Copper |
| Specific Gravity | 1.2 ± 0.1 |
| Kinematic Viscosity @40°C | 1000 |
| Operating Temperature | > 1100°C |
| Drop Point | None |
| NLGI | 2 |
| Worked Penetration | 265-295 |
| Copper Strip Corrosion | ASTM D130 = 1a |
| 4 Ball Weld Load ASTM D2509 | > 800 Kg |
| Brush ability | Up to -12°C |
| Four ball Wear solids | 0.4mm |
| Oil Separation | < 2.5 % |
| Friction Factor | 1.1 (as per API RP 7A1) |
| Wear scar under 800N load | 1.08 |
| Coefficient of friction Press-Fit test m | 0.10, |
| SKF EMCOR method Degree of corrosion | 0 |

Available Packs: 18 and 180 Kg.

Shelf Life - 36 Months from the 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.

Technical Data Sheet





 $[\]ensuremath{^*}\xspace$ All related specifications are meets or exceeds.



Material Safety Data Sheet

PRODUCT AND COMPANY IDENTIFICATION

Product WHEELSTUD GREASE 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

COMPOSITION

Composition of high-performance base oil, thickener and Proprietary additives.

HAZARDS INDENTIFICATION

Not classified as Hazardous.

FIRST-AID MEASURES

RESPIRATORY SYSTEM: Remove to fresh air and get medical attention.

INGESTION: Do not induce vomiting. Wash mouth out with water and obtain medical attention. **EYES:** Rinse immediately with plenty of water for at least 10 minutes. Get Medical Attention.

SKIN: Remove contaminated clothing. Wash affected area with soap and water, get medical attention.

FIRE-FIGHTING METHODS

Foam, carbon dioxide or dry powder.

ACCIDENTAL RELEASE MEASURE

Contain and absorb in sand or earth. Ensure no material enters drains or water courses. Dispose of as solid waste in accordance with the relevant waste disposal regulations.

STORAGE AND HANDLING

- At ambient temperatures wear gloves overalls and eye protection. The work area should be Handling

adequately ventilated. No eating drinking or smoking in the work area.

- Store in delivery packs in a cool & dry place. Storage

EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Standard:

The substance with exposure limit is: Notation 1: Exposure Standard: 2nd substance with exposure limit is: Notation 2:

PERSONAL PROTECTION

Respiratory Protection:

Type of Cartridge (if Applicable): Eye Protection: Safety Spectacles

Hand Protection: Gloves butyl or nitrile rubber

Industrial Hygiene: No eating drinking or smoking in the work area Ventilation: At room temperature handle in a well-ventilated area. Use exhaust ventilation if exposure to flume or aerosol can occur.

PROTECTION AGAINST FIRE AND EXPLOSION

Combustible but not readily ignited. No explosion hazard.

EC SAFETY PHRASES: Not classified as hazardous.

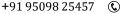
TYPICAL PROPERTIES

Color - Dark Copper Drop Point °C - None - (> 1100°C) Temperature range °C

NLGI

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10. STABILITY AND REACTIVITY

HAZARDOUS REACTIONS

Comments

HAZARDOUS DECOMPOSITION PRODUCTS Thermal decomposition produces noxious fumes.

11. TOXICOLOGICAL INFORMATION

LD50 Acute Oral Toxicity: > 5000:mg/Kg:Rat

LC50 Acute Inhalation: :mg/1 Eye Irritation: No: Rabbit Skin Irritation: No.: Rabbit

Sensation: No Further Information:

12. ECOLOGICAL INFORMATION

LC50 (96 Hour): mg/1 EC50 (24 Hour): mg/1

Biodegradability (Coupled units):

13. DISPOSAL CONSIDERATIONS

Solid material should be incinerated. Material absorbed on sand should be disposed of as solid waste.

14. TRANSPORT INFOMRATION

IMDG No.: Not classified

Packing Groups: IATA-DGR Class No.: Not classified

TREMCARD: Not classified RID/ADR Class No.: Not classified

Other Information

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.

DISCLAIMER/USER'S RESPONSIBILITY: PETRELPLUS INC. Provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriate use.

