



Product Data

Molub-Alloy® Open Gear Grease Aerosol (ODC-Free)

Environmentally Responsible Aerosol Lubricants

Description

Molub-Alloy Open Gear Grease Aerosol (Ozone Depleting Chemicals Free) is a new generation of environmentally responsible aerosol lubricants. It was developed to provide the extra protection required by open gears in heavy duty service where extreme pressures result from heavy or surge loading, and particularly where higher than usual ambient temperatures exist. Such conditions are common to overhead cranes and open gears in heavy industry and near drying or hot metal working processes.

Molub-Alloy Open Gear Grease is free of Ozone Depleting Chemicals (ODC) also referred to as Ozone Depleting Substances (ODS). More specifically, this aerosol product does not contain chlorinated solvents such as 1,1,1 trichloroethane (a.k.a. methyl chloroform).



Open Gears on Printing Press

A select petroleum oil of high viscosity, modified with other petroleum derivatives forms an exceptionally tough film in service, which, even at elevated temperatures, resists the thinning and hardening associated with the more conventional asphaltic type gear compounds.

Molub-Alloy solid lubricants, in a proprietary formulation, constitute a major part of **Molub-Alloy Open Gear Grease** and function synergistically with additional extreme pressure components to provide the necessary protection in severe service. Even the unique thickening system in this grease is a contributing solid lubricant.

Product Description

Components are selected for the manufacture of Molub-Alloy Open Gear Grease on the basis of quality, compatibility, environmental acceptability and particularly for their intended use. The Molub-Alloy solid lubricants are of a proven combination and size distribution for use on open gears and heavy sliding mechanisms.

Extreme pressure properties are maximised by the use of the most effective, non-corrosive EP agents available. They complement the anti-wear, anti-seize performance of Molub-Alloy solid lubricants in protecting against severe load conditions and in higher than normal ambient temperatures.

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PLD 1477/00

Bulk Item Code – 114033

Components, including the thickening system, were selected to constitute a product which will not drip or fling-off even at very high temperatures over 200°F).

Features

- Environmentally responsible lubricant with no Ozone Depleting Chemicals (ODC-Free).
- The lubricating film will not retain abrasive particles from the environment as readily as heavier asphaltic compounds.
- Non-melt, non-drip characteristics.
- Resistance to the washing action of hot or cold water is excellent

Benefits

- Overall savings are achieved and result from less labour and downtime, smoother, more efficient operation with longer parts life, and extended lubrication cycles.
- Wear protection beyond that of conventional open gear lubricants is provided by Molub-Alloy solid lubricants together with chemical extreme pressure additives. There is evidence of worn and even newly machined metal surfaces having improved in service under boundary lubricating conditions.
- Minimises application and housekeeping costs.

Applications

- Typical applications for Molub-Alloy Open Gear Grease have been on open gears wherever high torque and slow surging loads necessitate the extra protection of extreme pressure (EP) characteristics.
- It is especially suitable where ambient temperatures are higher than usual.

Typical Properties

| | |
|--|-------------------|
| NLGI Grade | 1½ |
| Worked Penetration - ASTM D 217, mm/10 | 290-320 |
| Thickener Type | Ashless Inorganic |
| Dropping Point - ASTM D 566, °F/°C | 500+/260+ |
| Base Fluid Properties | |
| Viscosity D 445, D 2161: | |
| @40°C, cSt | 285 |
| @100°C, cSt | 16 |
| @100°F, cSt/SUS | 335/1550 |
| @210°F, cSt/SUS | 16.8/85 |
| Flash Point - ASTM D 92, °C/°F | 232/450 |
| Oxidation Stability - ASTM D 942 | |
| Pressure drop @ 100 hrs., psi/kPa | 2/14 |
| Pressure drop @ 300 hrs., psi/kPa | 10/69 |
| Water Washout - ASTM D 1264 | |
| @ 175°F/79°C, % loss | <5 |
| Rust Prevention Properties - ASTM D 1743, rating | Pass |
| Worked Penetration - ASTM D 217, 100M strokes | |
| % change from 60 strokes | 4 |
| Oil Separation - ASTM D 1742, percent | 2.7 |
| Four Ball EP Test - ASTM D 2596: | |
| Load Wear Index, kg | 70 |
| Weld Load, kg | 500 |
| Molub-Alloy Solids, Grade Classification | Open Gear |

This technical data is based on average test results. Minor deviations may occur from case to case.

Health, Safety and Environment

For further information, please contact the Technical Advice Line on 1300 557 998.

Spillage: Slippery when spilt. Avoid accidents, clean up immediately. Avoid breathing dust or vapours and contact with skin and eyes. Isolate leaking containers and stop leak if safe to do so. Wear adequate protection and eliminate all sources of ignition. Ventilate the area and dike the spill to prevent entry into sewer or watercourses. Use absorbent (soil or sand, sawdust, inert material, vermiculite).

Disposal: Sweep up. Collect and seal in properly labelled drums for disposal.
DO NOT puncture empty cans.
DO NOT incinerate empty cans.
DO NOT compress.
DO NOT expose to high temperature or direct flame.

Storage and Handling

Combustible C1 liquid for storage and handling purposes.

Store in a cool, dry, well-ventilated area out of direct sunlight. Avoid sparks, flames and other ignition sources. Store away from incompatible materials such as oxidizing materials. Reference should be made to Australian Standard AS1940 – The storage and handling of flammable and combustible liquids. Airborne mists of this product may ignite in the presence of an ignition source.

All reasonable care has been taken to ensure that the information contained in this publication is accurate as of the date of printing. However, such information may, nevertheless, be affected by changes in the blend formulation occurring subsequent to the date of printing. Material Safety Data Sheets are available for all Castrol Industrial Australia Inc. products. The MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product.

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