

PRODUCT HEALTH AND SAFETY DATA

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

PRODUCT: POLYREX EM
PRODUCT #: E-46-216
PHSD #: 45-2020000
REVISION: 20 DECEMBER 2001
SUPERSEDES: 29 JUNE 2001

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IN AN EMERGENCY PLEASE CONTACT:
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REVISION CHANGES:
Revised

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients present at or above 0.1 wt% (classified as toxic or very toxic) or 1 wt% (classified as harmful, irritant or corrosive).

HAZARDOUS INGREDIENT -----	APPROXIMATE CONCENTRATION -----
Xi Phosphate ester amine	1.3 wt%
R 36 Irritating to eyes	
R 38 Irritating to skin	

3. HAZARD IDENTIFICATION

This product consists of highly refined base oils with additives.

It is of low oral and dermal toxicity and under normal conditions of use should present no significant health hazards. However, in common with most mineral oils, prolonged and repeated skin contact may cause dermatitis.

Handling precautions should be strictly observed.

4. FIRST AID

INHALATION:

At ambient/normal handling temperatures, inhalation of vapors or fumes is not a problem. If overexposed to vapors or fumes generated at very high temperatures, remove from further exposure. Administer artificial respiration if breathing is irregular or has stopped. Get prompt medical attention.

SKIN CONTACT:

If irritation should occur, wash with soap and water. Consult a physician immediately if the material is injected under the skin from the misuse of high pressure greasing equipment.

EYE CONTACT:

Rinse immediately with plenty of water until irritation subsides.
If irritation persists, obtain medical advice.

INGESTION:

If swallowed, keep at rest and call a physician. Do not induce vomiting unless directed to do so by a medical professional.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA:

Foam, dry chemical powder, carbon dioxide.

FIRE AND EXPLOSION HAZARDS:

Combustible material, low hazard. The product can form flammable mixtures or can burn only on heating above the flash point. However, minor contamination by hydrocarbons of higher volatility may increase the hazard.

SPECIAL FIRE-FIGHTING PROCEDURES:

Water fog or spray, to cool fire-exposed surfaces (e.g. containers) and to protect personnel, should only be used by personnel trained in fire fighting.

Respiratory and eye protection required for fire fighting personnel exposed to fumes or smoke.

HAZARDOUS COMBUSTION PRODUCTS:

Smoke, sulphur oxides, and carbon monoxide in the event of incomplete combustion.

Smoke, oxides of sulphur and nitrogen, and carbon monoxide in the event of incomplete combustion.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: See Section 8.

LAND SPILL:

Recover residual material; add absorbent to the spill area and remove mechanically into containers.

If necessary, dispose of adsorbed residues as directed in Section 13.

Advise the relevant authorities if material has entered a water course or sewer, or has contaminated soil / vegetation. Take measures to minimise the effects on ground water.

WATER SPILL:

Prevent additional discharge of material, if possible to do so without

hazard. Attempt to contain floating material.

7. HANDLING AND STORAGE

Store the product in cool, well ventilated surroundings, well away from sources of ignition.
Provide suitable mechanical equipment for the safe handling of drums and heavy packages.
Electrical equipment and fittings must comply with local regulations regarding fire prevention with this class of product.

LOAD/UNLOAD TEMPERATURE deg. C: ambient
STORAGE TEMPERATURE deg. C: Ambient to 40

SPECIAL PRECAUTIONS:

Keep containers closed when not in use.

Prevent small spills and leakages to avoid slip hazard.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMIT:

5 mg/m³ for oil mists (TWA, 8h - workday) recommended based upon the ACGIH TLV (Analysis according to US NIOSH Method 5026, NIOSH Manual of Analytical Methods, 3rd Ed.).

PERSONAL PROTECTION:

In open systems where contact is likely, wear safety goggles, chemical-resistant overalls, and chemically impervious gloves.

Where only incidental contact is likely, wear safety glasses with side shields. No other special precautions are necessary provided skin/eye contact is avoided.

When concentrations in air may exceed the occupational exposure limit, and where engineering, work practices, or other means of exposure reduction are not adequate, approved respirators may be required.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE / ODOUR:

Blue grease, mild petroleum odour.

DENSITY, g/ml: 0.88 at 15 deg. C

BOILING RANGE: Data not available.

VISCOSITY, mm²/S: 113 at 40 deg. C (Baseoil)

VAPOUR PRESSURE, kPa: at 20 deg. C Non volatile

VAPOUR DENSITY AT 1 BAR (Air=1): Heavier than air

EVAPORATION RATE (n-butyl acetate=1): Non volatile

SOLUBILITY IN WATER: 20 deg. C Negilible

pH: Not Applicable.

FLASH POINT: > 200 deg. C METHOD: COC ASTM D92

AUTOIGNITION TEMPERATURE: Data not available.

PARTITION COEFFICIENT n-octanol/water: Data not available.

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC): Stable

CONDITIONS TO AVOID:

Keep away from heat sources, open flames and other sources of ignition.

INCOMPATIBLE MATERIALS:

Avoid contact with strong oxidants such as liquid chlorine and concentrated oxygen.

HAZARDOUS DECOMPOSITION PRODUCTS:

Product does not decompose at ambient temperature.

11. TOXICOLOGICAL INFORMATION

EFFECTS OF OVER EXPOSURE:

INHALATION:

Negligible hazard at ambient/normal handling temperatures.

Elevated temperatures or mechanical action may form vapours, mists, or fumes which may be irritating to the eyes, nose, throat, and lungs.

Avoid breathing vapours, mists, or fumes.

SKIN CONTACT:

Low order of acute toxicity.

Prolonged or repeated contact may lead to mild skin irritation.

High pressure grease gun injection injury, where grease is injected through the skin on any part of the body, can cause serious delayed soft tissue damage and should be treated immediately as a surgical emergency.

EYE CONTACT:

Slightly irritating, but does not injure eye tissue.

INGESTION:

Low order of acute/systemic toxicity.

CHRONIC:

Base oil components of this product have shown no carcinogenic activity in experimental animals (long-term repeated skin painting tests).

TOXICITY DATA:

ACUTE:

No test data are available for the complete formulated product. The potential health hazards described were therefore derived from what is generally known of the toxicity of the base oils and the additives, taking into account the concentrations at which they are present. The general effects of mineral oils of this type are well known and are described in numerous publications including CONCAWE Report 5/87 "Health Aspects of Lubricants".

CHRONIC:

The base oils for this product have been subjected to a lifetime skin painting bioassay using a standard Exxon test protocol; there was no evidence of carcinogenicity.

12. ECOLOGICAL INFORMATION

In the absence of specific environmental data for this product, this assessment is based on information for general hydrocarbon components found in lubricant mineral oils. Lubricant mineral oils, immediately following a release into the environment, will remain largely on the soil surface, and in water, will remain largely on the water surface. Based on chemical/physical information from the literature for this product category, no harmful effects to terrestrial or aquatic habitats would be expected. This product is expected to be resistant to biodegradation and to persist in the environment. This product may contain additives for which no environmental data is available. Hence, the above assessment concerns the base oil(s) only.

13. DISPOSAL CONSIDERATIONS

Collect and dispose of waste product at an authorised disposal facility, in conformance with national and local regulations, and in accordance with EEC Directives on the disposal of waste oil.

14. TRANSPORT INFORMATION

USUAL SHIPPING CONTAINERS:

Drums, cans.

TRANSPORT TEMPERATURE deg. C: Ambient to 40

15. REGULATORY INFORMATION

EC DANGEROUS SUBSTANCES/PREPARATIONS CLASSIFICATION:
Not regulated

Refer to your national legislation implementing the EC Directive 91/155/EC

16. OTHER INFORMATION

PRODUCT TYPE / USES:
Lubricating grease.

SOURCE OF KEY DATA:

The recommendations presented in this Material Safety Data Sheet were compiled from actual test data (when available), comparison with similar products, component information from suppliers and from recognised codes of good practice.

The information and recommendations contained herein are, to the best of ExxonMobil's knowledge and belief, accurate and reliable as of the date issued, but are offered without guarantee or warranty. They relate to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Conditions of use of the material are under the control of the user; therefore, it is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.