

Quicksilver Needle Bearing Assembly Lubricant

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product NAME	Quicksilver Needle Bearing Assembly
Product number	92-825265A 1, 92-802868Q 1, 92-42649A 1
PRODUCT USE	Lubricating Grease
Company	Mercury Marine P.O. Box 1939, W6250 W. Pioneer Road Fond du Lac, WI 54935 Tel: (920) 929-5000
EMERGENCY TELEPHONE	CHEMTREC U.S. Only - (800) 424-9300
Date of last issue	2010-02-10

2. COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS No.	WEIGHT
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	Mixture**(2)	87-97 %
*OCTADECANOIC ACID, 12-HYDROXY-, MONOLITHIUM SALT	7620-77-1	2-10 %
ADDITIVES, EACH <1%	Proprietary	1-2 %
*PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	68649-42-3	0.2-1 %

* This chemical(s) is hazardous according to OSHA/WHMIS criteria

COMPOSITION COMMENTS

Refer to section eight (8) for exposure limits on ingredients.

Chemical ingredients not regulated by OSHA, SARA, state or federal agencies are treated confidentially.

** (2) The base oil for this product can be a mixture of any of the following highly refined petroleum streams:

CAS 64741-88-4; CAS 64741-89-5; CAS 64741-95-3; CAS 64741-96-4; CAS 64741-97-5; CAS 64742-01-4; CAS 64742-52-5; CAS 64742-53-6; CAS 64742-54-7; CAS 64742-55-8; CAS 64742-56-9; CAS 64742-57-0; CAS 64742-62-7; CAS 64742-63-8; CAS 64742-65-0; CAS 72623-83-7; CAS 72623-85-9; CAS 72623-86-0; CAS 72623-87-1. Carcinogenicity: The petroleum base oils contained in this product have been highly refined by a variety of processes including solvent extraction, solvent

dewaxing and hydrotreating to remove aromatics and improve performance characteristics. All petroleum base oils contained in this product meet the IP 346 criteria of less than 3 percent DMSO extractable PAH's and are not considered carcinogens by IARC, NTP or OSHA.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HEALTH HAZARDS, GENERAL	Exposure to vapors generated at high temperatures may cause respiratory irritation.
SENSITIZATION	No known information.
CARCINOGENICITY	IARC: Not listed as a Group 1, 2A, or 2B agent. OSHA: Not regulated. NTP: Not listed.
TERATOGENICITY	No known information.
HEALTH WARNINGS	SKIN CONTACT. Slightly irritating. Repeated or prolonged contact can result in drying of the skin. EYE CONTACT. Irritating. INGESTION. Can cause stomach ache and vomiting. INHALATION. Heating can generate vapors that may cause respiratory irritation, nausea and headaches. Inhalation hazard at room temperature is unlikely due to the low volatility of this product.
ROUTE OF ENTRY	Inhalation. Skin and/or eye contact. Ingestion.

4. FIRST AID MEASURES

INHALATION	Move the exposed person to fresh air at once. For breathing difficulties oxygen may be necessary. Get medical attention if any discomfort continues.
EYES	Rinse with water. Contact physician if discomfort continues.
SKIN	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
INGESTION	DO NOT INDUCE VOMITING! Get medical attention immediately!

5. FIRE FIGHTING MEASURES

FLASH POINT (°C)	224 (435°F) Cd OC (Cleveland open cup).
FLAMMABILITY LIMIT - LOWER(%)	N/D
FLAMMABILITY LIMIT - UPPER(%)	N/D
EXTINGUISHING MEDIA	Use: Foam. Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc.
SPECIAL FIRE FIGHTING PROCEDURES	Use water to keep fire exposed containers cool and disperse vapors. Water spray may be used to flush spills away from exposures and dilute spills to non-flammable mixtures.
UNUSUAL FIRE & EXPLOSION HAZARDS	Pressure will increase in over heated, closed containers.
HAZARDOUS COMBUSTION PRODUCTS	Acrid smoke/fumes. Oxides of: Carbon. Sulfur.

PROTECTIVE MEASURES IN CASE OF FIRE Self-contained breathing equipment and chemical resistant clothing recommended.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS Minimize skin contact. Avoid breathing vapors. Wear an appropriate respirator if exposure exceeds recommended guidelines. Remove sources of ignition.

PRECAUTIONS TO PROTECT THE ENVIRONMENT Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with applicable government regulations.

SPILL CLEAN-UP PROCEDURES Collect in closed container. Flush area with flooding amounts of water. Do not let washing down water contaminate ponds or waterways.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS Eye wash station should be available at the work place.

STORAGE PRECAUTIONS Keep away from heat, sparks and open flame. Store separated from: Acids. Oxidizing materials.

STORAGE CRITERIA Chemical storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

COMPONENT	STD	TWA	STEL	TWA	STEL
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	OSHA			5 mg/m ³ as oil mist	
	ACGIH			5 mg/m ³ as oil mist	10 mg/m ³ as oil mist

PROTECTIVE EQUIPMENT



ENGINEERING CONTROLS Use engineering controls to reduce air contamination to permissible exposure level.

VENTILATION No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.

RESPIRATORS No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

PROTECTIVE GLOVES Chemical resistant gloves required for prolonged or repeated contact.

EYE PROTECTION Wear splash-proof eye goggles to prevent any possibility of eye contact.

PROTECTIVE CLOTHING Wear appropriate clothing to prevent repeated or prolonged skin contact.

HYGIENIC WORK PRACTICES

Wash at the end of each work shift and before eating, smoking and using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE	Grease.		
COLOR	Amber.		
ODOR	Mild (or faint). Petroleum.		
SOLUBILITY DESCRIPTION	Insoluble in water.		
DENSITY	0.90	Temperature (°C)	15.6 (60°F)
VAPOR DENSITY (air=1)	> 5		
VAPOR PRESSURE	< 0.1 mmHg	Temperature (°C)	20 (68°F)
EVAPORATION RATE	< 1	Reference	BuAc=1
pH-VALUE, CONC. SOLUTION	N/A		

10. STABILITY AND REACTIVITY

STABILITY	Normally stable.
CONDITIONS TO AVOID	Avoid contact with acids and oxidizing substances.
HAZARDOUS POLYMERIZATION	Will not polymerize.
HAZARDOUS DECOMPOSITION PRODUCTS	Oxides of: Carbon. Sulfur.

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION No experimental toxicological data on the preparation as such is available.

COMPONENT	LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)
TOXICOLOGICAL DATA	WHMIS (Canada) = Not a controlled product. Carcinogenicity. IP 346 = <3% DMSO Extracts.
TOXIC DOSE - LD 50	> 5000 mg/kg (oral rat)
TOXIC DOSE - LD 50 SKIN	> 2000 mg/kg (skn rbt)
TOXIC CONC. - LC 50	No Information Available (NIA).
IRRITATION	Prolonged skin contact may cause irritation.
SENSITIZATION	Not known to be a sensitizer.
COMPONENT	OCTADECANOIC ACID, 12-HYDROXY-, MONOLITHIUM SALT
TOXICOLOGICAL DATA	Irritating effects. Skin.
TOXIC DOSE - LD 50	No Information Available (NIA).
TOXIC CONC. - LC 50	No Information Available (NIA).

COMPONENT	ADDITIVES, EACH <1%
COMPONENT	PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS
TOXIC DOSE - LD 50	4739 mg/kg (oral rat)
TOXIC DOSE - LD 50 SKIN	> 2000 mg/kg (skn rbt)

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION	There is no ecological data on the product itself.
COMPONENT	LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)
COMPONENT	OCTADECANOIC ACID, 12-HYDROXY-, MONOLITHIUM SALT
COMPONENT	ADDITIVES, EACH <1%
COMPONENT	PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS
ECOTOXICOLOGICAL DATA	WGK 2

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS	Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.
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14. TRANSPORT INFORMATION

DOT HAZARD CLASS	Not regulated.
TDGR CLASS	Not Regulated.
SEA TRANSPORT NOTES	Not regulated per IMDG.
AIR TRANSPORT NOTES	Not regulated per IATA.

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

COMPONENT	SARA 30	CERCLA	SARA 313
OCTADECANOIC ACID, 12-HYDROXY-, MONOLITHIUM SALT	No	No	No
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	No	***	N982 - Zn
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	No	No	No

REGULATORY STATUS

*** Indicates that no RQ is assigned to this generic or broad class, although the class is a CERCLA hazardous substance. See 50 Federal Register 13456 (April 4, 1985). Values in Section 313 column represent Category Codes for reporting under Section 313.

CLEAN AIR ACT

COMPONENT	CAA Accidental Release Prevention
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	No
OCTADECANOIC ACID, 12-HYDROXY-, MONOLITHIUM SALT	No
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	No

SARA HAZARD CATEGORIES None

US STATE REGULATIONS

COMPONENT	CA	MA	FL	MN	NJ	PA	RI
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	No	No	No	No	No	No	No
OCTADECANOIC ACID, 12-HYDROXY-, MONOLITHIUM SALT	No	No	No	No	No	No	No
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	No	No	Yes	Yes	Yes	EH	No

STATE REGULATORY STATUS

CALIFORNIA PROPOSITION 65: This product may contain the following chemical(s) considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer or reproductive toxicity, and for which warnings are now required:
Cadmium, <1ppm
Arsenic, <1ppm
Lead, <1ppm

PENNSYLVANIA RIGHT-TO-KNOW: This product contains the following chemicals that the state of Pennsylvania has identified as Special Hazardous Substances (SHS), Environmental Hazards (EH), or both (ESHS). The PA regulations require that the MSDS identify all SHS or EH chemicals by chemical name, common name, and CAS Number if they comprise 0.01% or more.
Zinc compounds regulated under CERCLA and SARA 313, Environmental Hazard

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

CONTROLLED PRODUCT CLASSIFICATION

Not a controlled product.

GLOBAL INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	PHLP	CHN
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
OCTADECANOIC ACID, 12-HYDROXY-, MONOLITHIUM SALT	DSL	Yes	EINECS	Yes	2-1416	Yes	Yes	Yes

CANADA CEPA: All components of this product comply with new substance notification requirements under the Canadian Environmental Protection Act (CEPA).
US TSCA: All components of this material are listed on the US TSCA Inventory or excluded from being listed or exempt from regulation under TSCA.

16. OTHER INFORMATION

NFPA-HMIS HAZARD RATING

HEALTH	Irritation, minor residual injury (1) - HMIS/NFPA
FLAMMABILITY	Burns only if pre-heated (1) - HMIS/NFPA
REACTIVITY	Normally Stable (0) - HMIS/NFPA
PERSONAL PROTECTION INDEX	B - Safety Eyewear and Gloves
REVISION COMMENTS	Section 1: Manufacturer Section 11: Toxicological Information Section 12: Ecological Information Section 15: US State Regulations Section 16: Disclaimer
PREPARED BY	Regulatory Department, Chemtool, Incorporated
Replacement of MSDS generated	2006-04-05
MSDS No.	12173
DATE	2010-02-10
DISCLAIMER	While the information and recommendations set forth herein are believed to be accurate as of the date thereof, Chemtool Incorporated makes no warranty with respect thereto and disclaims all liability from reliance therein.

MFR: Chemtool Incorporated P.O. Box 538, 8200 Ridgefield Road Crystal Lake, IL 60039-0538 USA

* Information revised since previous MSDS version

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