

Anti Corrosion Grease

MATERIAL SAFETY DATA SHEET MSDS

019-0535K

1. PRODUCT AND COMPANY IDENTIFICATION

Product NAME Anti-Corrosion Grease

PRODUCT DESCRIPTION Mercury Precision Product

Part Number(s) 92-802867A 1

PRODUCT USE Lubricating Grease

SUPPLIER Mercury Marine
P. O. Box 1939
W6250 W. Pioneer Rd.
Fond du Lac, WI 54935
Tel: (920) 929 - 5000

Emergency CHEMTREC
US Only (800) 424-9300

EMERGENCY TELEPHONE INFOTRAC
U.S. and Canada - (800) 535-5053 Outside the
U.S. and Canada - +01-352-323-3500

Date of last issue 02-27-2009

2. COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS No.	WEIGHT
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	Mixture**(2)	60-80 %
OVERBASED CALCIUM SULFONATE COMPLEX THICKENER	Proprietary	20-40 %
*PETROLEUM RESINS	64742-16-1	1-5 %
*N-PHENYL-1-NAPHTHYLAMINE	90-30-2	0.2-1 %
*ALUMINUM	7429-90-5	<0.1 %

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

COMPOSITION COMMENTS Refer to section eight 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 64741-96-4; 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 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.
HEALTH WARNINGS	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. Inhalation of product vapor or mist may cause irritation of mucous membranes in nasal passages and throat. SKIN CONTACT. Repeated or prolonged contact can result in drying of the skin. EYE CONTACT. Irritating. INGESTION. Can cause stomach ache and vomiting. Main hazard, if ingested, is aspiration into the lungs and subsequent pneumonitis.
ROUTE OF ENTRY	Inhalation. Skin and/or eye contact. Ingestion.
MEDICAL SYMPTOMS	MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

4. FIRST AID MEASURES

INHALATION Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor of hot product, immediately remove from source of exposure. 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 the eye with water immediately. Continue to rinse for at least 15 minutes. 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) > 475 F (246 C) Cd OC (Cleveland open cup).

EXTINGUISHING MEDIA Use: Carbon dioxide (CO₂). Dry chemicals, sand, dolomite etc. Alcohol resistant foam. Water spray, fog or mist.

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. Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control.

UNUSUAL FIRE & EXPLOSION Pressure will increase in over heated, closed containers.

HAZARDS

HAZARDOUS COMBUSTION Acrid smoke/fumes. Oxides of: Carbon. Sulfur. Nitrogen.

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

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS Minimize skin contact. Avoid breathing vapors. Wear an appropriate respirator if exposure exceeds recommended guidelines. Wear suitable eye protection.

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 Keep all sources of ignition and hot metal surfaces away from spill. Avoid contact with eyes or skin. Place leaking containers in well ventilated area. If fire potential exists, blanket spill with foam or use water spray to disperse vapors. Contain spill to minimize contaminated area and facilitate salvage or disposal. To clean up spill, flush area sparingly with water or use absorbant material. Avoid discharge to natural water ways.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Do not reuse container. Keep lid closed when not in use. Do not store or mix with strong oxidizers. Avoid spilling, skin and eye contact. Eye wash and emergency shower must be available at the work place.

STORAGE PRECAUTIONS Store separate from strong acids and oxidizers. Keep away from heat, sparks and open flame.

STORAGE CRITERIA Chemical storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

COMPONENT

	STD	TWA	STEL	TWA	STEL
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	OSHA			5 mg/m3 as oil mist	mg/m3 as oil mist
OVERBASED CALCIUM SULFONATE COMPLEX	ACGI H OSHA	15 mg/m3 (total)	as CaCO3	5 mg/m3 as nuisance dust	mg/m3 as oil mist 10 mg/m3 as nuisance dust 5 mg/m3 (resp) as CaCO3
THICKENER PETROLEUM RESINS ALUMINUM	ACGI H OSHA ACGI H OSHA ACGI	1 mg/m3 (inh) 15 mg/m3 (total)	NIC 2005	10 mg/m3 ** ^(e) 5 mg/m3 (oil mist) 5 mg/m3 (oil mist) 5 mg/m3 (resp)	10 mg/m3 (oil mist) 10 mg/m3 (oil mist) N/E N/E
PROTECTIVE EQUIPMENT	H				



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 recommended to prevent 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	Silver.		
ODOR	Mild (or faint). Petroleum.		
SOLUBILITY DESCRIPTION	Insoluble in water.		
DENSITY	0.9788	Temperature (°C)	15.6 (60°F)
VAPOR DENSITY (air=1)	> 5		
VAPOR PRESSURE	< 0.1 mmHg	Temperature (°C)	20 (68°F)
EVAPORATION RATE	< 0.01	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 occur.

POLYMERIZATION DESCRIPTION Not applicable **HAZARDOUS DECOMPOSITION**

Oxides of: Carbon. Sulfur. Nitrogen.

PRODUCTS

11. TOXICOLOGICAL INFORMATION

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

COMPONENT LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED

TOXICOLOGICAL DATA Carcinogenicity. IP 346 <3% **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).

COMPONENT OVERBASED CALCIUM SULFONATE COMPLEX THICKENER

TOXIC DOSE - LD 50 > 2000 (estimated) mg/kg (oral rat) **TOXIC DOSE - LD 50 SKIN** > 2000 (estimated) mg/kg (skn rbt) **TOXIC CONC. - LC 50** > 0.5 (estimated) mg/l (inh-rat)

COMPONENT PETROLEUM RESINS

TOXIC DOSE - LD 50 7,000 mg/kg (oral rat) **TOXIC CONC. - LC 50** No Information Available (NIA). **CARCINOGENICITY** OSHA: Not regulated. NTP: Not listed. IARC: Not listed as a Group 1, 2A, or 2B agent.

COMPONENT N-PHENYL-1-NAPHTHYLAMINE

TOXICOLOGICAL DATA Sensitization. Skin. Guinea pig. Positive Ciba-Geigy Co. 1981 Sensitization. Magnusson-Kligman Skin. Guinea pig. Positive Bowman A. (1980) Contact Dermatitis. 6:299-300 Sensitization. Skin. Human. 1/2 Positive at 0.5% & 1% PAN Kalimo K. (1989) Contact Dermatitis 20: 151-152 Sensitization. Skin. Human. 2/3 Positive to 1% PAN Carmichael AJ (1990) Contact Dermatitis 22: 298-299 Skin. Rabbit. Slightly Irritating 1944 Test Reported by Van Beek L (1977) **TOXIC DOSE - LD 50** >5,000 mg/kg (oral rat) **TOXIC CONC. - LC 50** No Information Available (NIA). **IRRITATION** Rabbit skin irritation: not irritating. Rabbit eye irritation: not irritating. **SENSITIZATION** May cause sensitization, an allergic reaction, which becomes evident on reexposure to this chemical.

COMPONENT ALUMINUM

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION There is no ecological data on the product itself.

COMPONENT	PETROLEUM RESINS
COMPONENT	N-PHENYL-1-NAPHTHYLAMINE
ECOTOXICOLOGICAL DATA	WGK 2
LC50, 96 HRS, FISH, mg/l	0.74-0.82
EC50, 48 HRS, DAPHNIA, mg/l	0.68
EC50, 72 HRS, ALGAE, mg/l	0.25

COMPONENT ALUMINUM

13. DISPOSAL CONSIDERATIONS

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

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 302	CERCLA	SARA 313
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	No	No	No
OVERBASED CALCIUM SULFONATE COMPLEX THICKENER	No	No	No
PETROLEUM RESINS	No	No	No
N-PHENYL-1-NAPHTHYLAMINE	No	No	No
ALUMINUM	No	No	Yes

See Section 2 for Additional Information

CLEAN AIR ACT

COMPONENT	CAA Accidental Release Prevention
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	No
OVERBASED CALCIUM SULFONATE COMPLEX THICKENER	No
PETROLEUM RESINS	No
N-PHENYL-1-NAPHTHYLAMINE	No

SARA HAZARD CATEGORIES None

US STATE REGULATIONS

COMPONENT	CA	MA	FL	MN	NJ	PA	RI
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	No	No	No	No	No	Yes	No
OVERBASED CALCIUM SULFONATE COMPLEX THICKENER	No	No	No	No	No	No	No
PETROLEUM RESINS	No	No	No	No	No	No	No
ALUMINUM						EH	
N-PHENYL-1-NAPHTHYLAMINE	No	No	No	No	No	No	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:
 1-Naphthylamine, CAS # 134-32-7, <1 ppm
 2-Naphthylamine, CAS # 91-59-8, <0.1 ppm

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. Aluminum, Environmental Hazard, CAS# 7429-90-5, 0.02%.

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 Not a controlled product.
CLASSIFICATION

GLOBAL INVENTORIES

COMPONENT	CAN	US	EU	AU S	JAP	KO R	PHLP	CHN
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
OVERBASED CALCIUM SULFONATE COMPLEX THICKENER	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
PETROLEUM RESINS	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes

USA (TSCA) All components in this product are listed on the US Toxic Substances Control Act (TSCA) Inventory or are exempt from TSCA Inventory requirements.

CANADA (DSL) All components in this product are listed on the Canada Domestic Substances List (DSL) or are exempt from DSL requirements.

EUROPE (EINECS/ELINCS/NLP) All components in this product are listed on the European Inventory of New and Existing Chemical Substances (EINECS), the European List of Notified Chemical Substances (ELINCS), or the No Longer Polymers (NLP) list, or are exempt from EU listing requirements.

JAPAN (ENCS) All components in this product are listed on the Japan Inventory of Existing and New Chemical Substances (ENCS) or are exempt from ENCS requirements.

PHILIPPINES (PICCS) All components in this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or are exempt from PICCS requirements.

AUSTRALIA (AICS) All components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or are exempt from AICS requirements.

KOREA (ECL) All components in this product are listed on the Korea Existing Chemicals List (ECL) or are exempt from KECL requirements.

CHINA (IECS) All components in this product are listed on the China Inventory of Existing Chemical Substances (IECS) or are exempt from IECS requirements.

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
NPCA HMIS HAZARD INDEX	Slight: Slightly Toxic - May cause slight irritation (1).
PERSONAL PROTECTION INDEX	B - Safety Eyewear and Gloves
NPCA HMIS FLAMMABILITY INDEX	Burns only if pre-heated (1).
NPCA HMIS REACTIVITY INDEX	Normally stable (0).
Tariff Code (Schedule B)	<p>3403.19.0000 Lubricating preparations (including cutting-oil preparations, bolt or nut release preparations, antirust or anticorrosion preparations and mold release preparations, based on lubricants) and preparations of a kind used for the oil or grease treatment of textile materials, leather, furskins or other materials, but excluding preparations containing, as basic constituents, 70 percent or more by weight of petroleum oils or oils obtained from bituminous minerals: Containing petroleum oils or oils obtained from bituminous minerals: Other (- Grades 1-2-3</p> <p>2710.19.3750 Lubricating greases, with or without additives. - Grades 0-00-00</p> <p>disclaims all liability from reliance therein.</p> <p>While the information and recommendations set forth herein are believed to be accurate as of the date thereof, the company makes no warranty with respect thereto and</p> <p>MFR: Chemtool Incorporated P. O.Box 538 8200 Ridgefield Road Crystal Lake, IL 60039 - 0538 Tel: (815) 459 - 1250 Fax: (815) 459 - 1955</p>

- **Information revised since previous MSDS version**
- **Date:** 2009-02-27
- **PRINTING DATE:** 2009-03-02