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Date Prepared: 9/8/09
Date Printed: 9/9/09
MSDS No.: 0252-09

Product: G.A.I.CUTTING OIL

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: G.A.I. CUTTING OIL

Product Code:

General or Generic ID:

Company

Copper Harbor Company, Inc.

2300 Davis Street

San Leandro, CA 94577-2204

510-639-4670

Emergency Telephone Number:

1-800-451-8346

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Material</u>	<u>CAS#</u>	% by Weight	
Water	7732-18-5	40 – 60	
Ethylene Glycol	107-21-1	30 - 60	
Diethylene Glycol	111-46-6	0 – 15	
Dipotassium Phosphate	7758-11-4	0 – 5	
Other	n/a	0-10	

This chemical is subject to the reporting requirements of Section 313 of SARA Title 110.

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye: Data N/A

Skin:

Effect on lungs and kidneys.

Swallowing:

Effect on lungs thorax or respiration.

Inhalation:

Pulmonary edema.

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Medical Conditions Generally Aggravated By Exposure:

Pre-existing lung conditions. Pre-existing urinary conditions.

4. FIRST AID MEASURES

Inhalation:

If respiratory symptoms or other symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek immediate medical attention.

Ingestion:

If conscious, give large quantities of water. CALL PHYSICIAN AT ONCE.

Eyes:

Flush for 15 minutes. Call physician immediately.

Skin:

Remove contaminated clothing and flush affected area(s) with large amounts water.

Note To Physician:

Delayed pulmonary edema may occur.

5. FIRE FIGHTING MEASURES

Flash Point: 245F (give method): TCC(after product evaporates to 50% of original volume.)

Extinguishing Media:

CO₂, dry chemical, foam, water fog. Not incompatible with usual media.

SPECIAL FIRE-FIGHTING PROCEDURES:

Fire-fighters must use class B extinguishers. Water may be used to cool sealed cans and to protect firefighters.

NFPA CODES: Health: 1 Flammability: 1 Reactivity: 0 HMIS CODES: Health: 2 Flammability: 1 Reactivity: 0

6. PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled:

Hazardous concentrations in air may be found in local spill area and immediately downwind.

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Spill Response Procedures:

Combustible, keep all sources of ignition away from spill. Stay upwind and away from spill. Isolate hazard area and limit entry to authorized personnel. Stop spill if it can be done without risk. Wear appropriate protective equipment including respiratory protection as conditions warrant. Wear respirator with organic vapor canisters. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material. Notify fire authorities and appropriate federal, state and local agencies. Clean up immediately.

7. PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Ventilation and engineering controls: Must be calibrated for air flow and removal of standard contaminant from workplace air.

Other handling and storage requirements: Store product in tightly sealed containers in cool and dry place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection:

Use in a well-ventilated area only.

Ventilation:

Local Exhaust: Necessary Special: Not Determined

Mechanical (General): Recommended when used indoors or a prolonged basis

Other: Not Determined

Protective Gloves:

Necessary

Eye Protection:

Necessary

Other Protective Clothing or Equipment:

Wear apron, boots and a face shield with safety glasses. A full impermeable suit is recommended if exposure is possible to large portion of body.

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Work/Hygienic Practices:

See Section 7

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light Green Liquid

Boiling Point: ~171 F

Specific Gravity: <Water

Evaporation Rate: No data

Solubility in Water: Complete

10. STABILITY AND REACTIVITY

Incompatibility: Oxidizers

Hazardous Polymerization: May occur

Stable: Yes

11. TOXICOLOGICAL INFORMATION

Routes of Absorption:

Oral, dermal, inhalation and eye contact.

Warning Statements and Warning Properties:

Harmful or fatal if inhaled or swallowed. Causes severe eye, skin, digestive tract, and respiratory tract burns. Can cause lung damage.

This product is not manufactured to contain known carcinogens. Extremely small amounts of these materials may be present in this product from general environmental sources.

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12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE

Movement & Partitioning: Bioconcentration potential is low (BCF less than 100 or Log Kow less than 3). Log octanol/water partition coefficient (log Kow) is -1.36. Henry's Law Constant (H) is 6.0E-08 atm-m3/mol. Bioconcentration factor (BCF) is 10 in golden orfe.

Degradation & Transformation: Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD greater than 40%). 5-Day biochemical oxygen demand (BOD5) is 0.78 p/p. 10-Day biochemical oxygen demand (BOD10) is 1.06 p/p. 20-Day biochemical oxygen demand (BOD20) is 1.15 p/p. Theoretical oxygen demand (THOD) is calculated to be 1.29 p/p. Biodegradation may occur under both aerobic and anaerobic conditions (in either the presence or absence of oxygen). Inhibitory concentration (IC50) in OECD "Activated Sludge, Respiration Inhibition Test" (Guideline # 209) is < 1000 mg/L. Degradation is expected in the atmospheric environment within days to weeks.

Ecotoxicology: Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species). Acute LC50 for fathead minnow (Pimephales promelas) is 51000 mg/L. Acute LC50 for bluegill (Lepomis macrochirus) is 27549 mg/L. Acute LC50 for rainbow trout (Oncorhynchus mykiss) is about 18000-46000 mg/L. Acute LC50 for guppy (Poecilia reticulata) is 49300 mg/L. Acute LC50 for water flea (Daphnia magna) is 46300-51100 mg/L. Acute LC50 for the cladoceran Ceriodaphnia dubia is 10000-25800 mg/L. Acute LC50 for crayfish is 91430 mg/L. Acute LC50 for brine shrimp (Artemia salina) is 20000 mg/L. Acute LC50 for Full force 50/50 Antifreeze 10 golden orfe (Leuciscus idus) is greater than 10000 mg/L. Acute LC50 for green alga Selenastrum capricornutum is 9500-13000 mg/L.

BOD (% Oxygen	Day	Day	Day	Day
Consumption): Day 5	10	15	20	30
51%		80%		97%

13. DISPOSAL CONSIDERATION

Waste Disposal Method:

Dispose of in accordance with local, state, and federal requirements.

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14. DOT SHIPPING NAME

NON-REGULATED

15. OTHER INFORMATION

THIS PRODUCT CONTAINS COMPONENT(S) CITED ON THE FOLLOWING REGULATIONS.

Chemical Name Cas Number

Ethylene Glycol 107-21-1 United States - TSCA Inventory: Listed

Water Standards: No data available

Atmospheric Standards: Clean Air Act (1990) - List of Hazardous Air Contaminants: listed

CERCLA: Reportable Quantity (RQ): 5,000 pounds (532 gallons)

OSHA Hazard Communication

Standard: This product is a "hazardous chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III: Section 311/312 - Categories: Acute hazard; chronic hazard

<u>Section 312 - Inventory Reporting</u>: Ethylene glycol is subject to Tier I and/or Tier II annual inventory reporting.

<u>Section 313 - Emission Reporting</u>: Ethylene glycol is subject to Form R reporting requirements.

Section 302 - Extremely Hazardous Substances: Ethylene glycol is not listed.

State Right-To-Know:

California - Exposure Limits - Ceilings: vapor-50 ppm ceiling; 125 mg/m3 ceiling

Director's List of Hazardous Substances: listed

Florida - Hazardous Substances List: listed

Massachusetts - Right-to-Know List: listed

Minnesota - Haz. Subs. List: listed (particulate and vapor)

New Jersey - Right-to-Know List (Total): Present greater than 1.0%

Pennsylvania Right-to-Know List: environmental hazard

Canadian Regulations: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required.

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WHMIS Information: D2A - material has potential toxic effects. Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program. Full force 50/50 Antifreeze 12

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California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): The normal consumer use of this product does not result in exposure to chemicals known to the state of California to cause Cancer and/or reproductive harm above the significant risk level for carcinogens or the maximum allowable dose levels for reproductive toxins. Warnings are not required for consumer packaging. However, industrial or other occupational use of this product at higher frequency and using larger quantities of this product may result in exposures exceeding these levels and are labeled accordingly.

California SCAQMD Rule 443.1 (South Coast Air Quality Management District Rule 443.1, Labeling of Materials Containing Organic Solvents):

VOC: Vapor pressure 0.06 mmHg at 20°C: 1113.38 g/l

The information accumulated herein is believed to be accurate but makes no warranty, expressed or implied is made.