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1	1	0	-
Health	Flammability	Reactivity	Other

## MATERIAL SAFETY DATA SHEET

PRODUCT **OCEANIC HW-540** ISSUE DATE **11/17/99**  
 PRODUCT CODE **74906** REVISED DATE **3/17/2004**  
 24 Hour Emergency Number: **CHEMTREC(1-800-424-9300)** **3**

### SECTION 1 :- PRODUCT IDENTIFICATION

TRADE NAME OCEANIC HW-540  
 CHEMICAL FAMILY ORGANIC MIXTURE  
 FORMULA Proprietary Mixture

#### HMIS RATING:

**1** Health **1** Flammability  
**0** Reactivity **Other**

(0 = Insignificant, 1 = Slight, 2 = Moderate, 3 = High and 4 = Extreme)

### SECTION 2 :- COMPOSITION / INFORMATION ON INGREDIENTS

MacDermid Inc. has identified the following chemical ingredient(s) as hazardous.

Ingredient	CAS#	By Weight %
Ethylene glycol butyl ether	111-76-2	1 - 3
Ethylene glycol	107-21-1	40 - 50

### SECTION 3 :- PHYSICAL DATA

<b>DENSITY</b>	8.84 Lb/Gl	<b>FORM</b>	Liquid
<b>SPECIFIC GRAVITY</b>	1.06	<b>PH</b>	9.4
<b>FREEZING POINT</b>	Unknown	<b>FLASH POINT</b>	>212 F / 100 C Not listed
<b>VAPOR PRESSURE</b>	Unknown	<b>VOLATILE %</b>	Unknown
<b>BOILING POINT</b>	212 F 100 C	<b>MELTING POINT</b>	Unknown
<b>CHEMICAL OXYGEN DEMAND (COD)</b>	Unknown mg/l		
<b>BIOLOGICAL OXYGEN DEMAND (BOD)</b>	Unknown		
<b>SOLUBILITY IN WATER</b>	Complete		
<b>COLOR/ODOR</b>	Blue/mild		

**NOTE:** These physical properties are typical values for this product.

### SECTION 4 :- FIRE AND EXPLOSION DATA

**FLASH POINT** >212 F / 100 C Not listed  
**EXTINGUISHING MEDIA** Dry chemical, carbon dioxide, foam, water. As appropriate for surrounding material.  
 NEVER allow run-off to enter sewers or waterways.  
**UNUSUAL FIRE & EXPLOSION HAZARDS** When heated to decomposition, toxic fumes are emitted. Wear self-contained breathing apparatus/protective clothing.

<b>SECTION 5 :-</b>	<b>FIRST AID DATA</b>
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**EYES** Take the victim immediately to the nearest eyewash or shower. Flush eyes under running water for 15 minutes. Seek medical attention immediately.

**SKIN** Remove contaminated clothing. Wash skin with soap & water. If irritation develops, contact a physician.

**INGESTION** Rinse mouth with water. Give water to drink. Contact physician. Induce vomiting if advised by physician.

**INHALATION** Remove the victim to a cool uncontaminated area. Monitor for respiratory distress.

**CAUTION** If unconscious - having trouble breathing - or in convulsions do not induce vomiting or give water.

Always clean contaminated clothing and gear prior to reuse. NEVER administer anything to an unconscious person.

<b>SECTION 6 :-</b>	<b>HEALTH EFFECTS DATA</b>
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**Primary Route(s) of Exposure : Eye, Skin, Inhalation and Ingestion**

**EYE CONTACT (ACUTE)** May cause irritation, tears, blurred vision and redness to the eyes.

**EYE CONTACT (CHRONIC)** There are no known chronic effects associated with this material.

**SKIN CONTACT (ACUTE)** May cause irritation to the skin.

**SKIN CONTACT (CHRONIC)** There are no known chronic effects associated with this material.

**INGESTION (ACUTE)** May cause abdominal discomfort, nausea, vomiting, central nervous system effects, convulsions and coma, Cardiac failure and pulmonary edema may develop. Severe kidney damage follows the swallowing of large volumes of ethylene glycol. May be fatal.

**INGESTION (CHRONIC)** Chronic overexposure to ethylene glycol may aggravate an existing kidney disease.

**INHALATION (ACUTE)** Vapors/mists: Exposure to vapors or mists is possible and may produce irritation of the mucous membranes of nose, mouth, throat and respiratory tract. Large amounts may cause difficulty in breathing and be harmful. Headache or nausea may occur.

**INHALATION (CHRONIC)** Chronic exposure may affect central nervous system

<b>SECTION 7 :-</b>	<b>PERSONAL PROTECTIVE DATA</b>
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**RESPIRATORY PROTECTION** If there is a value for OSHA-PEL/ACGIH-TLV in section 13 and it is exceeded, it is recommended that a NIOSH approved respirator be used. Consult with your Industrial Hygienist for appropriate cartridge selection and use. See 29CFR 1910.134 for details. For large spills, entry into large tanks,

vessels or enclosed small spaces with inadequate ventilation, a positive pressure, self contained breathing apparatus is recommended.

**VENTILATION**

General ventilation is recommended. Additionally, local exhaust ventilation is recommended where vapors, dusts, mists or aerosols may be released.

**PROTECTIVE EQUIPMENT**

Chemically resistant apron, boots and gloves. Recommended material of construction: PVC, rubber, neoprene. The availability of a safety shower is recommended. If clothing is contaminated, remove clothing and thoroughly wash the affected body area. Launder contaminated clothing before reuse. Safety glasses or splash proof goggles, face shield. The availability of an eye wash is recommended. Consult with your Safety Professional/Industrial Hygienist for specific information regarding applications at your facility.

These are general recommendations to provide a safe level of protection for various material handling conditions. Consult with your Safety Professional/Industrial Hygienist for specific information regarding applications at your facility

**SECTION 8 :- TOXICOLOGY DATA**

**TOXICITY STUDIES :**

Toxicity studies have not been conducted on this product. However toxicity literature surveys have been conducted on the ingredient(s) in section 2. The results are as follows:

**ACUTE ORAL TOXICITY** Ethylene glycol- orl-rat LD50: 4700 mg/kg

**ACUTE DERMAL TOXICITY** Ethylene glycol- skn-rbt LD50: 19530 mg/kg

**ACUTE RESPIRATORY TOXICITY** Ethylene glycol- ihl-hmn TCLo: 10000 mg/m3

**OTHER TOXICOLOGICAL EFFECTS** Ethylene glycol: human poison by ingestion. Human systemic effects by ingestion and inhalation: abdominal pain, headache, cough, nausea, vomiting, pulmonary, kidney and liver changes. If ingested it causes initial central nervous system stimulation followed by depression. Later, it causes potentially lethal kidney damage. Very toxic in particulate form upon inhalation. An experimental teratogen. A mucous membrane and eye irritant, particularly from mist.

Listed as suspected carcinogen by :

**IARC** NO

**NTP** NO

**OSHA** NO

**SECTION 9 :- REACTIVITY DATA**

**INCOMPATIBILITY** Strong oxidizing agents

**HAZARD DECOMPOSITION PRODUCTS** Thermal decomposition may yield carbon monoxide and/or carbon dioxide.

**STABILITY** Stable

**HAZARDOUS POLYMERIZATION** No hazardous polymerization.

**SECTION 10 :- SPILLS & DISPOSAL DATA**

In case of Transportation Accidents, call the following 24 hour telephone number : **CHEMTREC**  
(1-800-424-9300)

**SPILL CONTROL AND RECOVERY** Soak up into inert absorbent material. DO NOT use sawdust or other organic materials. Collect for disposal in plastic recovery drum. Flush residue with plenty of water to chemical drain. Avoid discharge to waterways or sewer systems.

**DISPOSAL** Dispose of by an approved method at an approved secure facility.

Please ensure that packaging, including drums, are disposed of in a responsible manner and in accordance with federal, and your state's, solid/hazardous waste regulations. You may want to refer to [www.reusablepackaging.org](http://www.reusablepackaging.org) for further disposal guidance.

Due to more restrictive waste disposal regulations, NEVER wastetreat or dispose of material until you check your appropriate local, state, & federal regulations for requirements. Spills may REQUIRE notification to FEDERAL, STATE and/or LOCAL AUTHORITIES.

**SECTION 11 :- TRANSPORTATION DATA**

**DOT PROPER SHIPPING NAME** If Qty less than RQ: NON REGULATED  
If Qty equal or greater than RQ: ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID N.O.S.  
(CONTAINS ETHYLENE GLYCOL)

**HAZARD** MISCELLANEOUS

**UN/NA#** UN3082

**DOT REPORTABLE QUANTITY (RQ)** 1356 GL **Pkg Grp** III

**IMO NAME** PLATING ADDITIVE

**IMO Class/Sub Class** NON-REGULATED

**UN/NA#** 000000 **Pkg Grp**

**IATA NAME** If Qty less than RQ: PLATING ADDITIVE  
If Qty equal or greater than RQ: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**IATA Cls/Sub Cls** MISCELLANEOUS

**UN/NA#** If Qty less than RQ: **Pkg Grp** III  
000000  
If Qty equal or greater than RQ: UN3082

EXPORT LICENSE MAY BE REQUIRED TO EXPORT THIS PRODUCT

**SECTION 12 :- GENERAL STORAGE DATA**

**STORAGE TEMPERATURE :** Maximum: 120°F 48.8°C Minimum: N/A

Material should be stored in the properly sealed original container

Store in a cool, dry area.

### SECTION 13 :- REGULATORY DATA

The following regulations apply to this product.

#### FEDERAL REGULATIONS

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our evaluation, the following ingredients in this product are subject to this rule:

Chemical Name	CAS#	By Weight%	OSHA-PEL	ACGIH-TLV
Ethylene glycol butyl ether	111-76-2	1 - 3	50	25 PPM
Ethylene glycol	107-21-1	40 - 50	PPM	100 mg/m3
			N/A	

**CERCLA/SUPERFUND, 40 CFR 117, 302/304** : Notification of spills of this product is required

#### SARA/SUPERFUND AMENDMENTS & REAUTHORIZATION ACT OF 1986 (TITLE III)

##### Sections 302, 311, 312 & 313

#### **SECTION 302 : Extremely Hazardous Substances**

This product does not contain ingredient(s) as listed in APPENDIX A of 40 CFR 355.

#### **SECTIONS 311 & 312 - M.S.D.S REQUIREMENTS (40 CFR 370)**

This product contains ingredient(s) that may require reporting under Hazardous Chemical Inventory Reporting

- Immediate (Acute) health hazard       Sudden release of pressure hazard  
 Delayed (Chronic) health hazard       Reactive Hazard  
 Fire hazard

Under Section 311, submittal of MSDS or a list of product names to the local emergency planning commission, state emergency response commission, the local fire department is required after October 17, 1987. Consult the regulation for pertinent changes and updates.

#### **SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372)**

This product contains ingredient(s) listed under 40 CFR 372.65

Ingredient	CAS#	By Weight %
Ethylene glycol	107-21-1	40 - 50

#### **TOXIC SUBSTANCE CONTROL ACT (TSCA)**

TOXIC SUBSTANCE CONTROL ACT (TSCA): The chemical ingredient(s) in this product are listed on the 8(b) Inventory List (40 CFR 710).

#### RESOURCE CONSERVATION & RECOVERY ACT (RCRA), 40 CFR 261 SUBPARTS C & D

Please refer to section 10, disposal information for pertinent data.

**TOTAL TOXIC ORGANICS**

This product does not contain ingredient(s) on the list of Total Toxic Organics.

**OSHA PROCESS SAFETY (1910.119)**

This product does not contain ingredient(s) listed in APPENDIX A of 29 CFR 1910.119 of Highly Hazardous Chemicals, Toxics, and Reactives of OSHA process safety management.

**CLEAN AIR ACT**

This product contains ingredient(s) listed on the Hazardous Air Pollutants of CAA 40 CFR 112(G).

Ingredient	CAS#	By Weight %
Ethylene glycol	107-21-1	40 - 50

**OZONE DEPLETING SUBSTANCES**

This product does not contain ingredient(s) listed on Ozone Depleting Substances of CAA 40 CFR 82.

**STATE REGULATIONS**

**CALIFORNIA PROPOSITION 65**

This product does not contain ingredient(s) listed on California Prop 65 suspected carcinogen/reproductive toxicant list.

**MICHIGAN CRITICAL MATERIALS**

This product contains ingredient(s) listed on the Michigan Critical Material Register.

Ingredient	CAS#	By Weight %
Ethylene glycol butyl ether	111-76-2	1 - 3

The information listed above does not include all Federal, State, and International regulations. The regulations listed above may change from time to time; it is the users responsibility to keep advised of current regulatory requirements.

Prepared by MacDermid Inc. Safety & Regulatory Compliance Department, based upon publicly available reference information.

**SECTION 14 :- USER NOTIFICATION**

To the best of our knowledge the information contained herein is correct. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. Users of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HERE UNDER WITH RESPECT TO THE INFORMATION CONTAINED HEREIN OR THE CHEMICAL TO WHICH THE INFORMATION REFERS.

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