

MATERIAL SAFETY DATA SHEET

Supplier:	Marine Group 36 Pine Street	EMERGENCIES: Health/spills:: Chemtrec Assistance: Chemtrec Outside USA:	800-548-0489 800-424-9300 703-527-3887
		Kop-Coat, Inc. Product Information Outside USA	800-221-4466 973-625-3100

1. Product Information

Product name	Hydrocoat Blue 1240 Antifouling Paint
Product code	1124000\1

Issuing date: 04/12/2011 Contact Environmental Health & Safety Mgr

2. Hazards identification

Mild

Emergency Overview

Appearance: Blue liquid

ue liquid Odor:

Hazards: WARNING!

Causes eye and skin irritation. May be fatal if swallowed or inhaled.

May be harmful if absorbed through skin.

Potential health effects

Primary Routes of

Entry:

Eye contact, ingestion, skin contact, inhalation, and absorption.

Eye contact:

May cause eye irritation. Symptoms may include stinging, tearing, and redness of eyes.

Ingestion:

May cause gastrointestinal distress. Symptoms may include irritation to the mouth, throat and stomach and gastrointestinal disturbances such as nausea, vomiting or diarrhea and effects similar to those described in the Inhalation section. Aspiration of this product into the lungs during ingestion, gagging or vomiting may cause lung damage, which can be fatal.

Skin contact:

May cause skin irritation. Symptoms may include dryness, itching, burning sensation, redness, cracking and swelling depending on the extent of exposure. May be harmful if absorbed through the skin in toxic amounts and cause

systemic effects.

Inhalation:

May cause irritation to the nose, throat and respiratory tract. Inhalation of high concentrations of vapors may cause respiratory tract irritation and central nervous system depression. Symptoms may include headache, nausea, dizziness and drowsiness. Continued inhalation may result in unconsciousness or death.

Chronic effects:

Prolonged or repeated dermal exposure to this product can cause skin dermatitis characterized by red, dry, scaly skin.

Target Organs: Not Determined

This product contains carcinogens or potential carcinogens as listed by IARC or NTP. See Section 3 NTP, IARC (Carc.) columns for chemical identification.

3. Composition/information on ingredients

Chemical Name	CAS-No.	Weight %	<u>Carc</u>
Cuprous oxide	1317-39-1	30 - 50	
Barium Sulfate	7727-43-7	10 - 20	
Titanium dioxide	13463-67-7	1 - 10	*
Ethylene glycol monobutyl ether	111-76-2	1 - 10	
Glycol	Proprietary	1 - 10	
Cupric Oxide	1317-38-0	1 - 10	
Dibutyl Phthalate	84-74-2	1 - 10	

4. FIRST AID MEASURES

Eye contact:

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Take care not to rinse contaminated water into the unaffected eye or onto the face. Call poison control center, hospital emergency room, or physician immediately.

Ingestion:

NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 2 to 8 oz. (60 to 240 mL) of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Have victim rinse mouth with water again. Immediately obtain medical advice.

Skin contact:

As quickly as possible, remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately wash with lukewarm, gently flowing water and non-abrasive soap for 15-20 minutes. Immediately obtain medical advice. Completely decontaminate clothing, shoes and leather goods before reuse or discard.

Inhalation:

Remove to fresh air. If not breathing, administer CPR until help arrives or the victim starts to breathe on his own. If breathing is difficult, give oxygen. Call poison control center, hospital emergency room, or physician immediately. Keep victim quiet and warm until emergency help arrives.

Note to Physician:

There is no specific antidote for effects from overexposure to this material. Treatment should be directed at the control of symptoms and the clinical condition.

5. FIRE-FIGHTING MEASURES

Flash point

> 200 deg F / > 93 deg C

Extinguishing media:

Use water spray or fog, foam, dry chemical or carbon dioxide.

Hazardous combustion products:

See Section 10 for potential decomposition products.

Protective equipment and precautions for firefighters:

Evacuate all persons from the fire area to a safe location. Move non-burning material, as feasible, to a safe location as soon as possible. Fire fighters should be protected from potential explosion hazards while extinguishing the fire. Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. Thoroughly decontaminate all protective equipment after use. Containers of this material may build up pressure if exposed to heat (fire). Use water spray to cool fire-exposed containers. Use water spray to disperse vapors if a spill or leak has not ignited.

6. ACCIDENTAL RELEASE MEASURES

Personal & Environmental Precautions:

Remove sources of ignition immediately. Stop flow of material if safe to do so. Contain spill and keep out of water courses. Ventilate area. Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal using non-sparking tools. Follow personal protective equipment recommendations found in Section 8. Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

Methods of Containment & Clean-up and Other Information:

This product, if released in large enough quantities, may need to be reported to the US Coast Guard National Response Center at 1-800-424-8802. Contain spills with dikes and absorbents (sand, earth, dry chemical absorbent) to prevent migration and entry into waterways.

7. HANDLING AND STORAGE

Handling:

Showering and clothing change recommended at the end of each shift. Wash work clothes separately from other household clothing. Clean contaminated equipment thoroughly prior to welding or cutting. If post application/use processing of this product generates dust or if spray application is made, airborne exposure limits apply. Do not use until manufacturer's recommendations have been read and understood. Avoid contact with eyes, skin or clothing. Avoid inhalation (vapor, mist, dust or fume, as applicable). Use only with adequate ventilation. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling.

Storage:

Store in areas/buildings designed to comply with OSHA 1910.106. Store away from sources of ignition and heat. Keep containers closed when not in use. Store in cool, well ventilated space away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	CAS-No.	<u>Z-1 PEL</u>	Z-2 PEL	ACGIH TLV
Cuprous oxide	1317-39-1			
Barium Sulfate	7727-43-7	15 MGM3		10 MGM3
Titanium dioxide	13463-67-7	15 MGM3		10 MGM3
Ethylene glycol monobutyl ether	111-76-2	240 MGM3 (50 PPM)		20 PPM
Glycol	Proprietary			
Cupric Oxide	1317-38-0			
Dibutyl Phthalate	84-74-2	5 MGM3		5 MGM3

Engineering measures:

Use adequate ventilation to maintain airborne concentrations at levels below permissible or recommended occupational exposure limits. Supplementary local exhaust ventilation may be necessary in poorly ventilated spaces, during spraying, heating or other non-routine activities.

Eye/face protection:

Wear chemical-resistant glasses and/or goggles and a face shield when eye and face contact is possible due to splashing or spraying of material.

Skin protection:

Chemical-resistant, flexible-type gloves (Viton(R), neoprene, nitrile or equal) to prevent contact. Gloves should be rinsed and removed immediately after use. Wash hands after removing gloves. Wear chemical-resistant clothing (e.g. apron, pants, coveralls) and safety footwear as appropriate.

Respiratory protection:

Respiratory protection may be necessary under certain use conditions. Under such conditions, an appropriate, properly fitted NIOSH-approved respirator must be worn. If respirators are used, a program should be instituted to assure compliace with 29 CFR 1910.34 and 42 CFR 84.

General hygiene considerations:

Facilities utilizing this material should be equipped with an eyewash station and safety shower. Thoroughly clean shoes and wash contaminated clothes before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical stateLiquidAppearance:Blue liquidOdorMildpH8.0 - 8.5

Boiling point not determined

Flash point $> 200 \deg F / > 93 \deg C$

Solubility in water:

Specific Gravity:

Weight per gallon (LB/GAL):

Evaporation rate (n-Butyl acetate = 1):

Volatile by Weight (including water and exempt compounds) (%):

Negligible
2.185

18.2

>1

26.5

Volatile Organic Content (VOC): 93 g/L

10. STABILITY AND REACTIVITY

Stability:

Stable under normal conditions.

Incompatibility:

Acids, reducing and oxidizing agents, chlorates, bromates, potassium nitrate, and hydrogen peroxide. Oxidizing and reducing agents. Keep away from heat, sparks and open flames.

Hazardous decomposition products:

Carbon monoxide, carbon dioxide, oxides of nitrogen and other toxic organic compounds. Copper compounds and acetic acid vapors.

11. TOXICOLOGICAL INFORMATION

Ethylene glycol monobutyl ether (CAS#111-76-2): Laboratory studies on experimental animals indicate that exposure may cause red blood cell damage and damage to the kidney and liver. These effects have not been observed in humans. Laboratory animal studies have reported adverse reproductive and developmental effects from overexposure.

Dibutyl phthalate: Animal tests show that this substance possibly causes toxicity to reproduction or development.

Titanium dioxide (CAS# 13463-67-7): While IARC has concluded there is sufficient evidence in experimental animals for the carcinogenicity of titanium dioxide, several epidemiological stuides have found no association between occupational exposure to titanium dioxide and risk for cancer. In addition, IARC states that, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints."

12. ECOLOGICAL INFORMATION

Contact Kop-Coat for ecological data on individual components of this material.

13. DISPOSAL CONSIDERATIONS

Waste from this material may be a listed and/or characteristic hazardous waste. Dispose of material, contaminated absorbent, container and unused contents in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION

This product is not regulated by the U.S. Department of Transportation (DOT), Transportation:

International Civil Aviation Organization (ICAO), the Canadian Transportation of

Dangerous Goods (TDG) Act, or the International Maritime Organization (IMO).

By Ground:

DOT Hazard Class:

DOT Proper Shipping Name: Not regulated.

DOT Packing Group:

DOT UN Number:

By Air:

IATA Hazard Class:

Not regulated. IATA Proper Shipping Name:

IATA Packing Group:

IATA UN Number:

By Sea:

IMDG Hazard Class:

IMDG Proper Shipping Name: Not regulated.

IMDG Packing Group:

IMDG UN Number:

15. REGULATORY INFORMATION

EPA registration number: 60061-87

Pest Registration Act number: Not applicable.

Other:

Not determined.

Chemical Name	CAS-No.	TSCA 12B	SARA 313	<u>TSCA</u>	<u>DSL</u>	EINECS	Prop 65	<u>Whmis</u>
Cuprous oxide	1317-39-1		*	*	*			
•				*				
Barium Sulfate	7727-43-7				-	•		
Titanium dioxide	13463-67-7		*	*	*	*		
Ethylene glycol monobutyl ether	111-76-2		*	*	*	*		*
Glycol	Proprietary			*	*	*		
Cupric Oxide	1317-38-0		*	*	*	*		
Dibutyl Phthalate	84-74-2		*	*	*	*	*	

16. OTHER INFORMATION

HMIS Health: 2* HMIS Flammability: 1 HMIS Physical Hazard: 0

NFPA Health: 2 NFPA Flammability: 1 NFPA Instability/Reactivity: 0

NOTICE: This document is generated for the purpose of distributing health, safety, and environmental data. The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed, or implied, regarding correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. Kop-Coat makes no warranty with respect thereto and disclaims all liability from reliance thereon.

Key:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service Registry Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLA RQ	CERCLA Reportable Quantity
CFR	Code of Federal Regulations
CPR	Cardiopulmonary resuscitation
DSL	Domestic Substances List of Canada
EINECS	European Inventory of Existing Chemical Substances
EPCRA	Emergency Planning and Community Right-to-know Act
EPCRA EHS	EPCRA Extremely Hazardous Substance
EPCRA TPQ	EPCRA Threshold Planning Quantity
oF	Fahrenheit degrees
g/l	Grams per liter
gal	Gallons
Group A3	Carcinogen Category - Confirmed Animal Carcinogen with Unknown Relevance to Humans
Group A4	Carcinogen Category - Not Classifiable as a Human Carcinogen
нміѕ	Hazardous Materials Indentification System - Chemical Rating
IARC	International Agency for Research on Cancer
lbs or LBS	Pounds
MGM3	Milligrams per cubic meter
MIR	Maximum Incremental Reactivity
MSDS	Material Safety Data Sheet
NFPA	National Fire Protection Association

NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPM	Parts per million
Proposition 65	California's Safe Drinking Water and Toxic Enforcement Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
USEPA	United States Environmental Protection Agency
voc	Volatile Organic Compound
VOL	Volume
WT	Weight
WHMIS	Canadian Workplace Hazardous Materials Information System
UN	United Nations

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