

MATERIAL SAFETY DATA SHEET

Product: OceanMaster Kruiser 3 Antifouling

SECTION 1 – MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME : Oceanic Link Pte Ltd
ADDRESS : 196 Pandan Loop, #01-17, Pantech Business Hub, Singapore 128384
INFORMATION PHONE : +65 67776001
DATE PREPARED : 2 January 2010
REVISION NO. : 02

SECTION II - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

<u>Hazardous components</u>	<u>CAS Number</u>	<u>Concentration Range %</u>
Cuprous Oxide	1317-39-1	< 50
Zinc Oxide	1314-13-2	< 20
Butyl Alcohol	71-36-3	< 9.7
Xylene	1330-20-7	< 6.8
Polyamide Resin	68139-80-0	< 5
Plasticizer	1077-56-1	< 5
Ethylbenzene	100-41-4	< 1.7

Non hazardous ingredients to a total of 100%

SECTION III - PHYSICAL/ CHEMICAL PROPERTIES

Boiling Point	B.P. Text: 212-277 F
Melt/ Freeze Point	M.P / F.P Text: None
Decomp Temp	None
Vapor Density	Heavier
Evaporation Rate & Reference	Is slower than Butyl Alcohol
Appearance and Odor	Liquid Solvent
Percent Volatiles by Vol	45.55%

FIRE FIGHTING MEASURES

Flash point Method	SCC
Flash Point (C)	28.3 C, 83.F
Autoignition Temp	None
Lower Limits	1.0%
Upper Limits	11.2%

SECTION IV - FIRE & EXPLOSION HAZARD DATA**EXTINGUISHING MEDIA:**

CO2, foam, dry powder; in cases of larger fires, water spray should be used.

FIRE AND EXPLOSION HAZARDS:

Flashback along vapour trail may occur. This material may be ignited by heat, sparks, flame or static electricity. Close containers may explode when exposed to extreme heat.

FIRE FIGHTING PROCEDURES:

The use of a self contained breathing apparatus is recommended for fire fighters. Water spray may be useful in minimizing vapors and cooling containers exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.

SECTION V - REACTIVITY DATA

Hazardous decomposition products: No hazardous decomposition products when stored and handled correctly.

Hazardous reactions: Exothermic reaction with amines and alcohols; reacts slowly with water forming CO₂, in closed containers risk of bursting owing to increase of pressure.

SECTION VI - HEALTH HAZARD DATA**INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:**

Inhalation of excessive concentrations of vapors or mists may cause headache, dizziness and drowsiness.

FIRST AID: Remove to fresh air. Restore breathing. Treat symptomatically. Consult a physician.

SKIN CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

May cause irritation. Prolonged or repeated contact may cause sensitization.

FIRST AID: Remove contaminated clothing. Wash affected thoroughly with soap and water. Consult a physician if irritation persists.

EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

This product is a severe eye irritant. Direct contact with the liquid or exposure to its vapors or mists may cause burning, tearing, redness and swelling.

FIRST AID: Flush immediately with large amounts of water for at least 15 minutes. Take to physician for medical treatment.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

May cause nausea, headaches and dizziness. May cause droplets to enter the lung with the risk of getting pneumonia.

FIRST AID: Drink 1 or 2 glasses of water to dilute. Do not induce vomiting. Consult physician or poison control center immediately. Treat symptomatically.

SECTION VII – TOXICOLOGICAL INFORMATION

LD50 LC50 Mixture: LD50 Dermal. Rabbit LC50 Inhalation rat

Routes of entry: Inhalation: Yes Skin: Yes Indigestion: Yes

Effects of overexposure: Skin irritation, sensitization or allergic reaction, such as rash or hives. Can be absorbed through skin. Inhalation: Lung injury. Central nervous system damage.

Eyes: Irritant. Indigestion: Can be fatal if swallowed. Aspiration into lungs can damage lungs and cause chemical pneumonia. Target organs: Kidneys, liver, blood, lungs, heart, skin, eyes, stomach.

Zinc Oxide

OSHA PEL : 15 MG/M³

Butyl Alcohol

OSHA PEL : 300 MG/M³;100 PPM

ACGIH STEL: C152 MG/M³; C50 PPM

Xylene

ACGIH TLV: 434 MG/M3; 100 PPM
 ACGIH STEL: 651 MG/M3; 150 PPM

Ethylbenzene

OSHA PEL: 435 MG/M3; 100PPM
 ACGIH TLV: 434 MG/M3; 100PPM
 ACGIH STEL: 543 MG/M3; 125 PPM

SECTION VIII - TRANSPORT INFORMATION

Transport only in accordance with the following regulations:

Road and Rail Transport: 1263, Paint, 3, III, 3[Y]

IMDG Reference:	Class/Div.	3	Subsidiary Class
	Proper Shipping Name	Paint	
	UN No.	1263	MFAG
	no data	F-E,S-E	
	Packaging Group	III	
	Marine pollutant	Yes	
ICAO/IATA	Shipping Name	Paint	
	Class	3	
	UN No.	1263	
	Packaging Group	III	

SECTION IX - SPILL OR LEAK PROCEDURES

IN CASE OF SPILL OR LEAK:

Remove all sources of ignition (flames, hot surfaces and electrical static, or frictional sparks). Avoid breathing vapours, ventilate area. Remove with inert absorbent and non-sparking tools.

DISPOSAL METHOD:

Empty containers may be disposed of after neutralizing any product remaining on the walls of the container With a mixture of isopropanol, ammonia and water. Afterwards, remove warning labels.

SECTION X - SAFE HANDLING AND USE INFORMATION

Wear suitable protective clothing, protective gloves (made of PVC or rubber) and protective goggles/mask. Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask, or for short periods of work, a combination of charcoal filter and particulate filter is recommended.

In case of hypersensitivity of the respiratory tract (e.g. asthmatics and those who suffer from chronic bronchitis) it is inadvisable to work with the product.

Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at end of work. Keep working clothes separate. Take off immediately all contaminated clothing.

SECTION XI - SPECIAL PRECAUTIONS

HANDLING AND STORAGE

Keep container dry and tightly closed in a cool and well ventilated place. Avoid exposure to temperature above 50°C. Ensure adequate ventilation or exhaust ventilation in the working area. Exhaust ventilation necessary if product is sprayed.

Avoid contact with skin and eyes.

Provide adequate ventilation and if necessary, air extraction in working areas. Explosion protection required.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.