

MATERIAL SAFETY DATA SHEET

PRODUCT NAME : OceanMaster Everseal Epoxy Timber Preservative Base

SECTION I – 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 2009
REVISION NO. : 02

SECTION II – HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Hazardous Components	CAS NO.	% by weight	OSHA (ppm)

Epoxy Resin	---	> 40%	N.E
Pine oil	008002-09-3	< 10%	N.E
Glycol Ether	110-80-5	< 20%	5
Methyl Isobutyl Ketone	108-10-1	< 10%	50
Xylene	1330-20-7	< 15%	100
Isobutyl alcohol	78-83-1	< 10%	50
Isopropyl Alcohol	67-63-0	< 10%	400 (TWA), 500 (STEL)
Methyl Ethyl Ketone	78-93-3	< 10%	50 (TWA), 75 (STEL)

N.E – Not Established

SECTION III – PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity @ 28°C : 0.98 +/- 0.02
Viscosity @ 28°C : 50 +/- 2 KU
Solubility in water : Insoluble
Flash point : - 4°C

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 fatigue, convulsions, unconsciousness, headache, dizziness, nausea, drowsiness and irritation to the nose and mucous membranes.

FIRST AID: Remove to fresh air. Restore breathing. Get medical attention. Call a physician.

SKIN CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

May cause irritation. Prolonged or repeated contact may cause sensitization, scaling and dermatitis.

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

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, inflammation and swelling.

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

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

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

FIRST AID: Rinse mouth with water. Drink 1 to 2 glasses of water to dilute. Do not induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Consult physician or poison control center immediately. Treat symptomatically.

SECTION VII – TOXICOLOGICAL INFORMATION

Epoxy Resin

Eye irritation: Slight eye irritation

Skin irritation: Non-irritant

Ingestion: LD50 (rats) > 2000 mg/kg

Glycol Ether

PEL (Long term): 5 ppm

PEL (Short term): 18 ppm

Methyl Isobutyl Ketone

Ingestion: It was reported an oral LD50 of 2.08 g/kg for rats when MIBK was administered as a 20% emulsion in Tergitol 7 surfactant.

Skin contact: A single application of MIBK to the skin of rabbits produced only transient erythema, but daily applications of 10ml for 7 days caused drying and flaking of the skin.

Eye contact: Undiluted MIBK (0.1 ml) produced some irritation within 10 min when instilled in the rabbit eye. Inflammation and swelling occurred in 8 hours and inflammation, swelling and exudates were present in 24 hours.

Inhalation: Exposure to 19,500 ppm of MIBK produced anesthesia in 7 of 10 mice within 30 mins. When the animals were removed to fresh air, four recovered immediately and three were awake within 5 mins.

Mutagenicity: Tests have shown that MIBK is nonmutagenic.

Carcinogenicity: From available evidence, MIBK is not regards, as a carcinogenic substance

Xylene

PEL (Long term): 100 ppm

PEL (Short term): 150 ppm

Isobutyl Alcohol

PEL(Long term): 50 ppm

Isopropyl Alcohol:

PEL (Long term): 400 ppm

PEL (Short term): 500 ppm

Methyl Ethyl Ketone:

LD₅₀ (Oral): > 2000 mg/kg

LD₅₀ (Dermal): > 2000 mg/kg

LC₅₀ (Inhalation): > 5 mg/L

SECTION VIII – TRANSPORT INFORMATION

UN Number / Class: UN1263 / Class 3

Packing Group: PG III

HS Code: 320890

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 vapour, ventilate area. Remove with inert absorbent and non-sparking tools.

DISPOSAL METHOD:

Whatever cannot be saved for recovery may be burned in an approved incinerator or disposed in an approved waste facility. Ensure compliance with local, state and federal regulations.

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.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME : OceanMaster Everseal Epoxy Timber Preservative Hardener

SECTION I – MANUFACTURER IDENTIFICATION

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INFORMATION PHONE : +65 67776001
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SECTION II – HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Hazardous components	CAS NO.	% by weight	OSHA (ppm)

Polyaminoamide	---	< 10%	N.E
Diethylenetriamine	111-40-0	< 10%	1
Pine oil	008002-09-3	< 10%	N.E
Isopropyl Alcohol	67-63-0	< 20 %	
Toluene	108-88-3	< 30 %	
Ethylene Glycol Monoethyl Ether	110-80-5	< 5%	5
Iso Butyl Alcohol	78-83-1	< 5%	50
Xylene	1330-20-7	< 30%	100

N.E – Not Established

SECTION III – PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity @ 28°C : 0.91 +/- 0.02
Viscosity @ 28°C : 50 +/- 2KU
Colour : Clear
Solubility in water : Insoluble
Flash point : 7°C

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 areas 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

Polyaminoamide

Acute toxicity LD50 oral rat: > 5000 mg/kg

Eye irritation (rabbit): irritating

Skin irritation (dermal rabbit): irritating

Triethylenetetramine

Inhalation: Vapour may irritate respiratory system or lungs.

Ingestion: May cause chemical burns in mouth, esophagus and stomach.

Skin: Irritating to skin. May cause sensitization by skin contact.

Eyes: Irritating to eyes.

Xylene

PEL (Long term): 100 ppm

PEL (Short term): 150 ppm

Isobutyl Alcohol

PEL(Long term): 50 ppm

SECTION VIII – TRANSPORT INFORMATION

Ethylene Glycol Monoethyl Ether

PEL (Long term): 5 ppm

PEL (Short term): 18ppm

Toluene

PEL(Long term): 50 ppm

Iso Butyl Alcohol

PEL (Long term): 50 ppm

UN Number / Class: UN1263 / Class 8

Packing Group: PG II

HS Code: 320890

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 deg 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.

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