

**MATERIAL SAFETY DATA SHEET**

PRODUCT NAME : OceanMaster Universal Primer Base Grey

**SECTION I - MANUFACTURER IDENTIFICATION**

MANUFACTURER'S NAME : Oceanic Link Pte Ltd  
ADDRESS : 196 Pandan Loop, Pantech Industrial Complex  
#01-17 Singapore 639027  
CONTACT NO. : 68622383  
DATE PREPARED : 2 August 2012  
REVISION : 00

**SECTION II - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION**

Hazardous components	CAS NO.	% by weight	OSHA (ppm)
*****			
Epoxy Resin	025036-25-3	< 25%	100
Dibutylphthalate	84-74-2	< 2%	NE
Xylene	1330-20-7	< 15%	100
Propylene Glycol Monomethyl Ether	107-98-2	< 5%	150
Magnesium Silicate	14807-96-6	< 25%	0.1
Silicate	14808-60-7	< 25%	0.1
NonylPhenol	25154-53-3	< 2.0%	NE

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NE: Not established

**SECTION III - PHYSICAL AND CHEMICAL PROPERTIES**

Specific gravity @ 28°C : 0.92 +/-0.02  
Viscosity @ 28°C : 70 - 75 KU  
Solubility in water : Insoluble  
Flash point : 29 ° C

**SECTION IV - FIRE & EXPLOSION HAZARD DATA**

EXTINGUISHING MEDIA: CO<sub>2</sub>, 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**

Stable under normal conditions. Avoid peroxides, strong acids, amines and strong oxidizers. Hazardous decomposition products such as toxic gases and vapors such as oxides of carbon may be released in a fire. Hazardous polymerization will not occur.

**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 lungs with the risk of getting pneumonia.

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

**SECTION VII – TOXICOLOGICAL INFORMATION**

**Xylene:**

TLV: 100 ppm

TDL: Ihl-cac LCLo: 8000 ppm/ 4H; Ipr-rat LDLo: 2000 mg/kg; scu-rat LDLo: 5000 mg/kg

**Propylene Glycol Monomethyl Ether**

Eye: The degree of irritation was insufficient to warrant labeling as an eye irritation.

Skin: The degree of irritation was insufficient to warrant labeling as an skin irritation.

Reproductive/Developmental Toxicity: Studies on pregnant animals have indicated that this solvent is not teratogenic (did not cause malformations in the offspring). Studies in laboratory animals have shown no effects on fertility in the following species:mice.

**Epoxy Resin**

Skin: The dermal LD50 has not been determined.

Ingestion: Based on information for the components, the LD50 for rats is expected to be > 2000mg/kg.

Mutagenicity: Results of in vitro ('Test tube') and in vivo mutagenicity tests on xylene have been negative. Some similar resins have shown mutagenic activity in the vitro ('Test tube') mutagenicity tests, while other

have not.

**Dibutylphthalate:**

Acute toxicity

LD<sub>50</sub> (oral/rat): >8000 mg/kg

LD<sub>50</sub> (dermal/rabbit): >20000 mg/kg

Primary skin irritation/rabbit/OECD test: Non-irritant.

Primary mucous membrane irritation/rabbits eyes/ OECD test; Non-irritant.

Sensitization

No sensitizing effect (Maximization test).

Reproduction toxicity

Reproduction toxicity tested in vivo: rat, mouse.

After oral administration, teratogenic effect, risk of impaired fertility only after administration of very high doses of the substance.

**Silicate:**

Extended exposure to dust concentrations higher than the TLV values for respirable free quartz can possibly lead to development of silicosis.

There is no acute toxicity

The oral intake of quartz is not hazardous.

**NonylPhenol:**

LD<sub>50</sub> (oral, rat): 1900 mg/kg Lit (1)

LD<sub>50</sub> (dermal, rabbit): 2140 mg/kg Lit (2)

Skin: corrosive (burn within 60 minutes/OECD test 404) Lit (1)

Sensitization (Magnesium/Kilgman): Not sensitizing. Lit (1)

Eyes: Moderately irritating, irreversible damage possible. Lit (1)

Lit (1): HULS investigation.

Lit (2): RTECS 07/89

**SECTION VIII- TRANSPORT INFORMATION**

H.S. Code: 320890

U.N Class: 3

**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:

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 Universal Primer Hardener

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**SECTION II - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION**

Hazardous components	CAS NO.	% by weight	OSHA(ppm)
*****			
Xylene	1330-20-7	< 35%	100
Isobutyl alcohol	78-83-1	< 25%	100
Epoxy Resin	025036-25-3	< 25%	100
Tris-2,4,6-(Dimethylaminomethyl) Phenol	90-72-2	< 5%	NE
Triethylenetetramine	112-24-3	< 30%	NE

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**SECTION III - PHYSICAL AND CHEMICAL PROPERTIES**

Specific gravity @ 25°C : 0.92 – 0.94  
Viscosity @ 25°C : 55 - 60 KU  
Colour : Clear, yellowish  
Odour : Likes amines  
Solubility in water : Fractional  
Flash point : 28°C

**SECTION IV - FIRE & EXPLOSION HAZARD DATA**

EXTINGUISHING MEDIA: CO<sub>2</sub>, 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**

Stable under normal conditions. Avoid peroxides, strong acids, amines and strong oxidizers. Hazardous decomposition products such as toxic gases and vapors such as oxides of carbon may be released in a fire.

Hazardous polymerization will not occur.

#### **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.

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

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#### **SECTION VII – TOXICOLOGICAL INFORMATION**

##### **Xylene:**

TLV: 100 ppm

TDL: Ihl-cac LCLo: 8000 ppm/ 4H; Ipr-rat LDLo: 2000 mg/kg; scu-rat LDLo: 5000 mg/kg

##### **Iso Butyl Alcohol:**

PEL (Long term): 50 ppm

##### **Tris-2, 4, 6-(Dimethylaminomethyl) Phenol:**

Acute oral toxicity (LD<sub>50</sub>, rat): 1670 mg/kg

Acute dermal toxicity (LD<sub>50</sub>, rabbit): >1400 mg/kg (estimate)

Acute inhalation toxicity (LC<sub>50</sub>, rat): No data

Other acute effects: No data

Irritation effect data

Corrosive to the eyes of rabbit. Severe irritant to the skin of a rabbit.

Chronic/subchronic data

Subchronic exposure in the test animals has caused abnormalities in: Central nervous system. The product does not cause sensitization.

##### **Epoxy Resin:**

Skin: The dermal LD<sub>50</sub> has not been determined.

Ingestion: Based on information for the components, the LD<sub>50</sub> for rats is expected to be >2000mg/kg.

Mutagenicity: Results of in vitro ('Test tube') and in vivo mutagenicity tests on xylene have been negative. Some similar resins have shown mutagenic activity in the vitro ('Test tube') mutagenicity tests, while others have not.

**Triethylenetetramine**

Acute toxicity (lethal doses)

LD50 oral, rat : >5000 mg/kg

Eye irritation, rabbit: Irritating

Skin irritation dermal rabbit: Irritating.Sensitization dermal, guinea pig: Causes sensitization.

**SECTION VIII- TRANSPORT INFORMATION**

H.S. Code: 320890

UN Class: 3

**SECTION IX - SPILL OR LEAK PROCEDURES**

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