



MSDS Dated 23rd April 2007

## HEALTH AND SAFETY DATA SHEET

### 1. IDENTIFICATION OF PRODUCT AND SUPPLIER

**Product Name** TM Marine Epoxy Resin Part B  
**Supplier** Tiflex Limited  
Tiflex House  
Liskeard, Cornwall  
PL14 4NB.  
**Telephone** +44 (0)1579 320808  
**Fax** +44 (0)1579 320802

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Approx. %	Hazard Classification and Risk Phrases
2-Piperazine-1-ylethylamine	140-31-8	1-5%	C; R34, Xn; R21/22, R43, R52/53
Benzyl alcohol	100-51-6	5-10%	Xn; R20/22
Nonyphenol	25154-52-3	1-5%	Repr. Cat. 3; R62, R63, C; R34, Xn; R22, N; R50/53
Polyethylenepolyamines (NOS)	-	1-5%	C, N, R21/22, R34, R43, R50/53

### 3. HAZARDS IDENTIFICATION

May cause sensitisation by skin contact. Irritating to eyes and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION Xi; R36/38. R43. N; R51/53.

### 4. FIRST AID MEASURES

**Inhalation:** Move exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention.

**Ingestion:** DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSONS VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical, only if persons is fully conscious. Get medical attention immediately! Provide rest, warmth and fresh air.

**Skin Contact:** Remove affected person from source of contamination. Rinse the skin with lots of water. Get medical attention promptly if symptoms occur after washing.

**Eye Contact:** Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eye before rinsing. Promptly wash eyes with plenty of water whilst lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

### 5. FIRE FIGHTING MEASURES

**Extinguishing Media:** Use fire-extinguishing media appropriate for surrounding materials. Water spray. Foam. Dry Powder. or Carbon Dioxide.

## 6. SPILLAGE AND ACCIDENTAL RELEASE MEASURES

**Spill clean up methods:** Stop leak if possible without risk. DO NOT touch spilled material! Wear necessary protective equipment. Absorb in vermiculate, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage. Run off or release to sewer, waterway or ground is forbidden. Inform Authorities if large amounts are involved.

## 7. HANDLING AND STORAGE

**Usage Precautions:** Avoid spilling, skin and eye contact. Provide good ventilation.

**Storage Precautions:** Store in tightly closed original container in a cool, dry, well-ventilated place. Keep in original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTIVE EQUIPMENT

**Engineering measures:** No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

**Respiratory Protection:** No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

**Hand Protection:** Use protective gloves.

**Eye Protection:** Use approved safety goggles or face shield.

**Other protection:** Wear appropriate clothing to prevent any possibility of skin contact.

**Hygiene measures:** DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

## 9. PHYSICAL CHARACTERISTICS

<b>Appearance:</b>	Liquid.	<b>Boiling Point/Range:</b>	>200°C
<b>Odour:</b>	Characteristic	<b>Flash Point:</b>	>130°C
<b>Colour:</b>	Amber.	<b>Relative Density:</b>	1.02
<b>Viscosity:</b>	6.0 Ps 25°C		

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal temperature conditions.

**Conditions to avoid:** Avoid contact with acids and oxidising substances.

**Hazardous Decomposition products:** High temperatures generate: Vapours / gases / fumes of: Carbon monoxide (CO) and Carbon Dioxide (CO<sub>2</sub>).

## 11. TOXICOLOGICAL INFORMATION

**Inhalation:** Harmful by inhalation.

**Ingestion:** Harmful if swallowed.

**Skin contact:** Irritating to skin. May cause sensitisation by skin contact. Harmful in contact with skin. Causes burns

**Eye contact:** Irritating to eyes.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Dangerous for the environment; May cause long-term adverse effects in the aquatic environment.

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods:** Dispose of waste and residues in accordance with local authority requirements.

## 14. TRANSPORTATION INFORMATION

**ADR Class:** Not classified for transportation.

**Marine Pollutant:** No.

## 15. REGULATORY INFORMATION

**Hazard Symbols:**



Xi - Irritant.



N - Dangerous for the environment.

**Contains:** 2-Piperazine-1-ylethylamine  
Polyethylenepolyamines (NOS)

**Risk Phrases:** R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R43 May cause sensitisation by skin contact.  
R36/38 Irritating to eyes and skin

**Safety Phrases:** S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S37 Wear suitable protective gloves.  
S24/25 Avoid contact with skin and eyes.  
S57 Use appropriate container to avoid environmental contamination.  
S60 This material and its container must be disposed of as hazardous waste.  
S61 Avoid release to the environment. Refer to special instructions/MSDS

## 16. OTHER INFORMATION

This information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy his/herself as to the suitability of such information for his/her own particular use. This product falls within the scope of the Control of Substances Hazardous to Health (COSHH) Regulations. Users are reminded that this document does not in itself constitute an assessment of workplace risk as required by those regulations.