



## Material Safety Data Sheet

**Product: Syntho-Steel Epoxy Mastic (Resin) Part A**

**MSDS Date:** 03/16/2010  
**Product Name:** Syntho-Steel Epoxy Mastic (Resin) Part A  
**Manufacturer:** Neptune Research, Inc.

### I. Product and Company Description

Neptune Research, Inc.  
1346 S. Killian Drive  
Lake Park, FL 33403

**Emergency Phone Number:**  
800-535-5053

**For Product Information:**  
(561) 683-6992

**Product Description:**  
Steel Filled Epoxy Resin

**Product Use:**  
Corrosion control, Sealant, Coating and Patching

**Chemical Name or Synonym:**  
NA

**Molecular Formula:**  
NA

### II. Chemical Composition

Component	CAS#	%Composition
Bisphenol A Epoxy Resin	250678-38-6	<30
Iron Power	7439-89-6	>60
Titanium Dioxide	13463-67-7	<5
Hydrophobic Silicon Dioxide	67762-90-7	<5



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### **III. Hazards Identification**

#### **A. Emergency Overview:**

**Physical Appearance and Odor:**

Dark grey paste with no odor

#### **B. Potential Health Effects:**

**Acute Eye:**

May cause eye irritation.

**Acute Skin:**

Repeated exposure may cause skin irritation.

**Acute Inhalation:**

May cause respiratory irritation.

**Acute ingestion:**

May cause gastrointestinal irritation if swallowed.

**Chronic effects:**

Not Determined

**Medical Conditions Aggravated by Exposure:**

Not Determined.

### **IV. First Aid Measures**

#### **First Aid Measures for Accidental:**

**Eye Exposure:**

Hold lids apart and immediately flush eyes with plenty of water for at least 15 minutes. Seek medical advice.

**Skin Exposure:**

Remove contaminated clothing and shoes. Remove product and immediately flush affected area with water for at least 15 minutes. If irritation persists, get medical attention.

**Inhalation:**

Move patient to fresh air, if breathing had stopped or is labored give assisted respiration (e.g. mouth-to-mouth). Supplemental oxygen may be indicated. Seek medical advice. Prevent aspiration of vomit. Turn victim's head to the side.

**Ingestion:**



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In the event of ingestion, administer 3-4 glasses of water. Do not induce vomiting. Seek medical advice.

**Notes to Physician:**

None

### V. Fire Fighting Measures

**Fire Hazard Data:**

**Flash Point:** >200°C

**Method Used:** Pensky-Martens Closed Cup

**Flammability Limits (vol/vol%):** Lower: NA Upper: NA

**Extinguishing Media:**

Foam, dry chemical, and water spray.

**Special Fire Fighting Procedures:**

Use self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards:**

Closed containers may rupture due to pressure buildup when exposed to extreme heat.

**Hazardous Decomposition Materials (Under Fire Conditions):**

Uncontrolled exothermic reaction of epoxy resins may release toxic substances.

### VI. Accidental Release Measures

**Cleanup and Disposal of Spill:**

Absorb with material such as sand, or polypropylene or polyethylene fiber products. Collect in suitable and properly labeled containers. Flush contaminated area with water.

Dispose of materials according to the applicable Federal, State, or local regulations.

### VII. Handling and Storage

**Handling:**

Avoid contact with eyes, skin or clothing. Avoid breathing vapor mist or spray. Use with good ventilation. Wash after handling and before eating, drinking or smoking.

**Storage:**

Store in cool dry area in closed containers.

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### VIII. Exposure Controls / Personal Protection

**Exposure Guidelines:**

Component	Exposure limits		
	ACGIH	NIOSH	OSHA-PELs
Bisphenol A Epoxy resin	ND	ND	ND
Iron Powder	ND	ND	10mg/m <sup>3</sup>
Titanium Dioxide	ND	ND	15mg/m <sup>3</sup>
Hydrophobic Silicon Dioxide	20 mppcf	ND	ND

**Engineering Controls:**

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

**Respiratory Protection:**

None normally required. In case of inadequate ventilation use NIOSH-approved respirator.

**Eye / Face Protection:**

Wear appropriate safety glasses with side shields or chemical goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166.

**Skin Protection:**

Chemical resistant gloves (e.g. neoprene). For operations where extensive or prolonged contact may occur, coveralls and rubber good coverings are recommended.

### IX. Physical and Chemical Properties

<b>Physical Appearance:</b>	Dark Paste
<b>Odor:</b>	None
<b>Boling Point:</b>	>200°C
<b>pH:</b>	ND
<b>Specific Gravity:</b>	17 lb/gal
<b>Water Solubility:</b>	Insoluble
<b>Melting Point Range:</b>	ND
<b>Vapor Pressure:</b>	<0.01 mm Hg @ 20°C
<b>Percent Volatiles by Volume:</b>	<0.5



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### **X. Stability and Reactivity**

**Chemical Stability:**

Stable under standard use and storage conditions.

**Conditions to Avoid:**

Excessive heat. Uncontrolled curing in masses greater than 2 inches thick.

**Materials / Chemicals to be Avoided:**

Avoid contact with oxidizing materials

**Hazardous Decomposition Products:**

Fumes produced when heated may include oxides of carbon, acrid smoke and fumes.

**Hazardous Polymerization:**

Will not occur

### **XI. Toxicological Information**

**Acute Effects:**

Oral-rat LD50: >5000 mg/kg

Dermal-rabbit LD50: >6,000 mg/kg

**Acute Eye Irritation:**

May cause eye irritation.

**Acute Skin Irritation:**

Repeated exposure may cause skin irritation.

**Acute Dermal Toxicity:**

Not Determined

**Acute Respiratory Irritation:**

May cause respiratory irritation.

**Acute Ingestion Toxicity:**

May cause gastrointestinal irritation if swallowed.

**Acute Inhalation Toxicity:**

Not Determined

**Acute Oral Toxicity:**

Not Determined



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**Chronic Toxicity:**  
No Determined

**Mutagenicity (Genetic Effects):**  
Not Determined

**XII. Ecological Information**

**Ecotoxicological Information:**  
Not Determined

**Chemical Fate Information:**  
Not Determined

**XIII. Disposal Considerations**

**Waste Disposal Method:**  
Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.

**Container Handling and Disposal:**  
Dispose of container and unused contents in accordance with federal, state, and local regulations.

**XIV. Transportation Information**

**US Department of Transportation Shipping Name:**

<b>US Department of Transportation</b>	<b>Proper Shipping Name</b>	Not Regulated
	<b>Hazard Class</b>	Not Regulated
	<b>ID Number</b>	Not Regulated
	<b>Packaging Group</b>	Not Regulated
	<b>Label Statement</b>	Not Regulated

**XV. Regulatory Information**

**Federal Regulations:**

**SARA Title III Hazard Classes:**

Fire Hazard:	NO
Reactive Hazard:	NO
Release of Pressure:	NO
Acute Health Hazard:	YES
Chronic Health Hazard:	NO



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### Other Federal Regulations:

#### State Regulations:

None

### XVI. Other Information

#### National Fire Protection Association Hazard Ratings – NFPA(R):

Health Hazard:	2
Flammability:	1
Reactivity:	0

#### Key Legend Information:

N/A – Not Applicable

ND – Not Determined

ACGIH – American Conference of Governmental Industrial Hygienists

OSHA – Occupational Safety and Health Administration

TLV – Threshold Limit Value

PEL – Permissible Exposure Limit

TWA – Time Weighted Average

STEL – Short Term Exposure Limit

NTP – National Toxicology Program

IARC – International Agency for Research on Cancer

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