



Material Safety Data Sheet

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

MSDS Date: 07-01-08
Product Name: Syntho-Steel Epoxy Mastic (Resin) Part A
Manufacturer: Neptune Research, Inc.

I. Product and Company Description

NRI, Neptune Research, Inc.
1683 Latham Rd.
West Palm Beach, FL 33409

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



Material Safety Data Sheet

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

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.



Material Safety Data Sheet

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

Ingestion:

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.



Material Safety Data Sheet

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

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 ³
Titanium Dioxide	ND	ND	15mg/m ³
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

Physical Appearance: Dark Paste

Odor: None

Boling Point: >200°C

pH: ND

Specific Gravity: 17 lb/gal

Water Solubility: Insoluble

Melting Point Range: ND

Vapor Pressure: <0.01 mm Hg@ 20°C



Material Safety Data Sheet

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

Percent Volatiles by Volume: <0.5

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:



Material Safety Data Sheet

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

Not Determined

Acute Oral Toxicity:
Not Determined

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:

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

XV. Regulatory Information

Federal Regulations:

SARA Title III Hazard Classes:



Material Safety Data Sheet

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

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

The information contained herein is based on the data available to us and is believed to be accurate. The data is offered in good faith as typical values and not as product specification. The information in this data sheet was compiled from information supplied by the vendors of the components of this compound. Neptune Research Inc. makes no warranty either expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. The recommended industrial hygiene and safe handling procedures are believed to be genuinely applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate. Neptune Research Inc. assumes



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no responsibility for injury from the use of the product described herein. The information is intended only to assist in the safe handling of this material.