

## MRO 8001 – S PUTTY

### Section 1: Product & Company Identification

**Product Name / Trade Name**  
MRO 8001 – S PUTTY

**Product Use**  
Epoxy Putty

**Manufacturers / Suppliers Information**  
MRO INFRA LLP, VADODARA, INDIA

**Pack Type / Size(s)**  
1 Kg Container

**Emergency Telephone Number** (0265) 2255770

**Fax Number**

**Website** [www.mroinfra.com](http://www.mroinfra.com)

*Revision Date 18<sup>th</sup> October 2018*

**Revision Number 1**

### Section 2: Composition / Information On Ingredients

Component	CAS Number	Percent By Weight
Triethylenetetramine	112-24-3	30-<60
N- aminoethylpiperazine	140-31-8	0-<10
nonylphenol	25154-52-3	0-<10
bisphenol A/ epichlorohydrin resin, liquid	25068-38-6	30-60

### Section 3: Hazards Identification

Emergency Overview:

WARNING! Harmful. Potential Sensitizer Irritant.

Routes of Exposure:

Eyes. Skin. Inhalation. Ingestion.

**Potential Health Effects:**

Eye

Can cause moderate irritation, burning sensation, earing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and Permanent injury.

Skin

Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident on exposures to this material.

Inhalation:

Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects. May cause respiratory sensitization with asthma-like symptoms in susceptible individuals.

Ingestion:

Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

**Chronic Health Effects:**

Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction

Signs/Symptoms:

Overexposure can cause headaches, dizziness, nausea, and vomiting.

Target Organs:

Eyes. Skin. Respiratory system. Digestive system.

Aggravation of Pre-Existing Conditions :

Individuals with pre-existing skin disorders, asthma, known sensitization may be more susceptible to the effects of this product.

## Section 4: First Aid Measures

<b>Eyes</b>	Immediately flush eyes with water for at least 15 minutes. Consult Physician if irritation persist.
<b>Skin</b>	Flush skin with soap & water while removing contaminated cloths. Seek medical. Help if required. Wash contaminated cloths before reuse.
<b>Ingestion</b>	If conscious, give large quantities of water. Induce vomiting. Never give anything by mouth to an unconscious person. Call a Physician.
<b>Inhalation:</b>	Move the subject to fresh air. If not breathing, give artificial respiration. If Respiration is difficult, give Oxygen and seek help from physician.
<b>Note to Physician:</b>	There is no specific antidote. Treatment should be given symptomatically on the clinical conditions.

## Section 5: Fire Fighting Measures

Flash Point:	(260°C)
Flash Point Method:	Tag closed cup (TCC)
Auto Ignition Temperature:	
Lower Flammable/Explosive Limit:	Not determined.
Upper Flammable/Explosive Limit:	Not determined
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media:	Use carbon dioxide (CO2) or dry chemical when fighting fires involving this Material.
Unsuitable Media:	Water or foam may cause frothing.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Unusual Fire Hazards:	Sealed containers at elevated temperatures may rupture explosively and spread fire due to polymerization. Heating above 300 deg F in the presence of air may cause slow oxidative decomposition and above 260°C may cause polymerization.

## Section 6: Accidental Release Measures

<b>Spill Cleanup Measures:</b>	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in section 8.
<b>Environmental Precautions</b>	Avoid runoff into storm sewers, ditches, and waterways.
<b>Personal Precautions:</b> area.ventilation.	Evacuate area and keep unnecessary and unprotected personnel from entering the spill
<b>Other Precautions:</b>	Pump or shovel to storage/salvage vessels.

## Section 7: Handling & Storage

<b>Handling :</b>	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.
<b>Storage</b>	Keep container tightly closed in a cool, dry and well-ventilated place away from sources of heat and incompatible materials.. Keep container tightly closed when not in use.
<b>Hygiene Practices:</b>	Wash thoroughly after handling.
<b>Special Handling Procedures:</b>	Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding / flame cutting operations and to protect against dust during sanding / Grinding of cured product.

## Section 8: Exposure Controls / Personal Protection

<b>Engineering Control Measures</b>	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection the personal protective equipment below the exposure limits.
<b>Eyes &amp; Face Protection</b>	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
<b>Hand Protection</b>	Wear protective gloves. Rubber or polyethylene material is recommended. Consult manufacturer specifications for further information.
<b>Respiratory Protection</b>	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances respirators may not provide adequate protection.
<b>Skin Protection</b>	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data
<b>Other Protective:</b>	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

## Section 9: Physical & Chemical Properties

State	Thick paste
Melting Range (°C)	Not Available
Boiling Range (°C)	>232
Flash Point (°C)	Not Available
Decomposition Temp	(°C) Not Available
Auto ignition Temp (°C)	Not Available
Upper Explosive Limit (%)	Not Available
Lower Explosive Limit (%)	Not Available
Volatile Component (%vol)	Not Available
Molecular Weight	Not Applicable
Viscosity	Not Available
Solubility in water (g/L)	Miscible
pH (1% solution)	Not Available
pH (as supplied)	8.75 conc.soln.
Vapor Pressure (kPa)	Not Available
Specific Gravity (water=1)	2.23
Relative Vapor Density (air=1)	Not Available
Evaporation Rate	Not available

## Section 10: Stability & Reactivity

<b>Chemical Stability</b>	Stable under normal temperatures & pressures
<b>Conditions To Avoid</b>	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions. Heating resin above 300°F in the presence of air may cause slow oxidative decomposition.
<b>Chemical Incompatibility</b>	Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (especially primary and secondary aliphatic amines).
<b>Hazardous Polymerization</b>	Not Reported

## Section 11: Toxicological Information

<b>Bisphenol A diglycidyl ether resin:</b>	
Skin Effects :	Skin - rat LD: >2 gm/kg - [Nutritional and Gross Metabolic - other changes] (RTECS)
Ingestion Effects:	Oral - Rat LD: >5 gm/kg - [Nutritional and Gross Metabolic - other changes] (RTECS)

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## Section 12: Ecological Information

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Ecotoxicity: No Eco toxicity data was found for the product.  
Environmental Fate: No environmental information found for this product.

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## Section 13: Disposal Considerations

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Waste Disposal: Consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines  
RCRA Number : None

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## Section 14: Transportation Information

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DOT Shipping Name: Non-Regulated  
DOT UN Number: Not Applicable  
DOT Hazard Class: Not Applicable  
DOT Packing Group: Not Applicable

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## Section 15: Regulatory Information

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**Magnesium silicate hydrate :**  
TSCA Inventory Status: Listed  
State Regulations: Listed  
**Titanium dioxide :**  
TSCA Inventory Status: Listed  
State Regulations: Listed  
**Bisphenol A diglycidyl ether resin :**  
TSCA Inventory Status: Listed  
**Crystalline silica :**  
TSCA Inventory Status: Listed  
State Regulations: Listed

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## Section 16: Other Information

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HMIS Health Hazard: 1\*  
HMIS Fire Hazard: 1  
HMIS Reactivity : 1  
HMIS Personal Protection: X

**Disclaimer :** "This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. The information given in the Data Sheet is designed only as guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment."

**Product Use** For Industrial Use Only

**Prepared By**

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