


**MATERIAL SAFETY DATA SHEET**

**Product name:** HM500 Type III, Class C Epoxy   
**Description:** HM-500 Epoxy Injectable Adhesive is a multi-purpose, two components, high strength, high modulus moisture tolerant adhesive, used for anchoring  
**Supplier:** Horse Construction/Polymer Anchoring Systems, Inc. Houston TX 77043

**CONTENTS AND EXPOSURE LIMITS**

Ingredients:	CAS Number:	TLV:	PEL:	STEL:
<b>Part A:</b> Bisphenol A epoxy resin	25068-38-6	NE	NE	NE
Bisphenol F epoxy resin	28064-14-4	NE	NE	NE
Quartz sand	14808-60-7	0.025 mg/m <sup>3</sup> (R)	10 mg/m <sup>3</sup> % SiO <sub>2</sub> + 2	NE
Alkylglycidyl ether	68081-84-5*	NE	NE	NE
Diglycidyl ether	2224-15-9 *	NE	NE	NE
Siloxanes & silicones	67762-90-7	NE	NE	NE
<b>Part B:</b> m-xylene diamine	01477-55-0	NE	NE	C: 0.1 / S
Aliphatic polyamine Blend	68131-73-7*	NE	NE	NE
Quartz sand	14808-60-7	0.025 mg/m <sup>3</sup> (R)	10 mg/m <sup>3</sup> % SiO <sub>2</sub> + 2	NE
Aluminum oxide Cement	01344-28-1	1 mg/m <sup>3</sup> (R)	15 mg/m <sup>3</sup> (T)	NE
Siloxanes & silicones	65997-16-2/67762-90-7	NE	NE	NE

**Abbreviations:** \* = indicates Trade Secret Registry Number. **C** = Ceiling. **NE** = None Established. **R** =dust "respirable" fraction. **PEL** = OSHA Permissible Exposure Limits. **STEL** = ACGIH/OSHA Short Term Exposure Limit **S** = Skin exposure, including the mucous membranes, eyes, and skin. **T** = "total" dust. **TLV** = ACGIH Threshold Limit Values

**PHYSICAL DATA/SPECIFICATIONS**

<b>VOC Content:</b>	4.0 g/l	<b>Appearance and Odor:</b>	A: Gray; B: red / paste. Amine-like odor.
<b>Vapor Pressure:</b>	Not determined.	<b>Boiling Point:</b>	Approx. 212° F
<b>Odor Threshold:</b>	Not determined	<b>Vapor Density: (air = 1)</b>	Not determined.
<b>Solubility in Water:</b>	Insoluble .	<b>Evaporation Rate:</b>	Not applicable.
<b>pH:</b>	11 (Part B with 1:1 water)	<b>Specific Gravity:</b>	1.5

**FIRE AND EXPLOSION HAZARD DATA**

<b>Flash Point:</b>	> 205° F	<b>Flammable Limits:</b>	Not applicable.
<b>Extinguishing Media:</b>	CO <sub>2</sub> , Dry Chemical, Foam, Water Spray.		
<b>Special Fire Fighting Procedures:</b>	OSHA apprvd self-cont. breathing apparatus should be worn when fighting fires involving chemicals.		
<b>Unusual Fire and Explosion Hazards:</b>	None known. Thermal decomposition products can be formed including: CO <sub>x</sub> , NO <sub>x</sub> , water and carbon.		

**REACTIVITY DATA**

<b>Stability:</b>	Stable.	<b>Hazardous Polymerization:</b>	Will not occur.
<b>Incompatibility:</b>	Strong acids and oxidizing agents.		
<b>Decomposition Products:</b>	Thermal decomposition can yield CO <sub>x</sub> , NO <sub>x</sub> , water and carbon.		
<b>Conditions to Avoid:</b>	Avoid temperature extremes that could shorten the shelf-life of this product. (See handling and storage requirements for recommended storage temperatures).		

**CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT**

<b>Ventilation:</b>	General (natural or mechanically induced fresh air movements).
<b>Eye Protection:</b>	Chemical goggles recommended.
<b>Skin Protection:</b>	Impermeable gloves recommended.
<b>Respiratory Protection:</b>	None normally required. Where ventilation is inadequate to control vapors, use a NIOSH-approved respirator with organic vapor cartridges.

## HEALTH HAZARD DATA

<b>Known Hazards:</b>	<b>Part A:</b> Eye and skin irritation. Possible skin sensitizer. <b>Part B:</b> Corrosive
<b>Signs and Symptoms of Exposure:</b>	<b>Part A:</b> Can be irritating to the eyes and skin, Can cause skin sensitization with some individuals (itching, redness, swelling). <b>Part B:</b> Can cause eye and skin burns. Vapors can be irritating. If swallowed, can cause burns.
<b>Routes of Exposure:</b>	Contact. Inhalation.
<b>Carcinogenicity:</b>	IARC classifies crystalline silica (quartz sand) as a Group I carcinogen based upon evidence among workers in industries where there has been long-term and chronic exposure (via inhalation) to silica dust; e.g. mining, quarry, stone crushing, refractory brick and pottery workers. This product does not pose a dust hazard; therefore, this classification is not relevant.
<b>Medical Conditions</b>	<b>Aggravated by Exposure:</b> Eye, skin, and respiratory conditions.

## EMERGENCY AND FIRST AID PROCEDURES

<b>Eyes:</b>	Flush <b>immediately</b> with water for at least 15 minutes. Contact a Physician if symptoms occur.
<b>Skin:</b>	Wash <b>immediately</b> with soap and water. Contact a Physician if symptoms occur.
<b>Inhalation:</b>	If symptoms occur, move to fresh air. Contact a Physician if symptoms occur.
<b>Ingestion:</b>	Do not induce vomiting unless directed by a physician. Contact a Physician immediately.
<b>Other:</b>	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure

## REGULATORY INFORMATION

<b>Hazard Communication:</b>	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
<b>HMIS Codes:</b>	Health 3, Flammability 1, Reactivity 0, PPE B
<b>DOT Shipping Name:</b>	Limited Quantity - LQ
<b>IATA / ICAO Shipping Name:</b>	Amines, solid, corrosive, n.o.s. (M-xylenediamine), Class 8, UN3259, PG II
<b>TSCA Inventory Status:</b>	Chemical components listed on TSCA inventory.
<b>SARA Title III, Section 313:</b>	This product does not contain any toxic chemicals which are subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
<b>EPA Waste Code(s):</b>	Not regulated by EPA as a hazardous waste
<b>Waste Disposal Methods:</b>	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

## PRECAUTIONS FOR SAFE HANDLING AND USE

<b>Handling and Storing Precautions:</b>	For industrial use only. Keep away from children. Use with adequate ventilation. Avoid contact with the eyes or skin. Practice good hygiene; i.e. wash after using and before eating or smoking. Store in a cool dry area between 41° and 77° F (5 - 25° C). Keep from freezing.
<b>Spill Procedures:</b>	Take up with an absorbent material and place in a container for proper disposal.

## CONTACTS

**Customer Service: Health / Safety:** fax 17135101955      **Technical Service:** 17135101955

The recommendations and information contained herein are based upon data believed to be correct; however, not guaranteed or warranty of any kind expressed or implied with respect to the information provided there in.

The information contained in this safety specification sheet reflects our present technical knowledge and satisfies legal requirements at national and CE level. The users' working conditions, however, are not known to us and are beyond our control. Users are responsible for observing all applicable legal provisions. The information contained in this specification sheet describes the safety requirements applicable to our product and implies no guarantee of the properties of the product.



Polymer Anchoring Systems, Inc. Houston TX 77043