



## 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

**Name:** MS-905 Hardener  
Hardener Part of an Epoxy Adhesive

**Product Use:** Hardener part of a two component adhesive system

### **MANUFACTURER/DISTRIBUTOR:**

**Miller-Stephenson Chemical**  
55 Backus Ave.  
Danbury, Conn. 06810 USA  
(203) 743-4447

**Emergency Phone Number:**  
(800) 424-9300

## 2. HAZARDS IDENTIFICATION

### **Hazard classification**

Acute toxicity, Oral: Category 4  
Acute toxicity, Inhalation: Category 4  
Harmful if swallowed or inhaled.  
Acute aquatic toxicity: Category 2

### **Label elements:**

**Signal word**  
Warning

### **Pictograms**



### **Hazard Statements**

Harmful if swallowed or if inhaled.  
Acute aquatic toxicity

### **Precautionary Statements**

Avoid breathing mist/vapors/spray.  
Wash skin thoroughly after handling.  
Do not eat, drink, or smoke when using this product.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Call a POISON CENTER/doctor if you feel unwell.  
If inhaled, remove to fresh air.  
Dispose of unused contents in accordance with local regulations

### 3. INGREDIENTS

<u>Material (s)</u>	<u>CAS No.</u>	<u>Reach No.</u>	<u>Approximate %</u>
2,2'-[1,2-ethanediylbis(oxy)]bis(ethanethiol)	14970-87-7	239-044-2	60- 100

### 4. FIRST AID MEASURES

**Inhalation:** If breathing is difficult, remove victim to fresh air, and keep at rest in a position comfortable for breathing. If symptoms develop and persist, get medical attention.

**Eye:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, consult a specialist.

**Skin:** Immediately remove contaminated clothing. Immediately wash skin with plenty of water and soap. Get medical attention if symptoms occur.

**Oral:** DO NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth immediately and drink plenty of water. Never give anything to an unconscious person. Get medical attention.

### 5. FIRE FIGHTING MEASURES

**Flash Point:** 315°F/157°C

**Method:** Cleveland open cup

**Autoignition Temperature:** Not Determined

**Flammable Limits in Air, % by Vol.:** Not Determined

**Extinguishing Media:** Water spray, extinguishing powder, carbon dioxide and foam.

**Hazardous combustion products:** Oxides of carbon, Nitrogen oxides, and Sulphur oxides

**Special Fire Fighting Instruction:** Wear self-contained breathing apparatus and full protective clothing. In case of fire and/or explosion do not breathe fumes.

**Additional information:** Collect contaminated fire extinguishing water separately. Do not allow water to enter drains or surface water. Use water spray to protect personnel and to cool endangered containers.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Provide adequate ventilation. Do not breathe vapor. Avoid contact with skin, eyes and clothing. Wear personal protection equipment (refer to section 8).

**Environmental precautions:** Prevent product from entering drains, sewers or open waters.

**Clean-up methods:** Ensure adequate ventilation. Wear appropriate personal protective equipment. Soak up with inert material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a closed container, and treat as prescribed in the section on waste disposal (see section 13). Clean contaminated objects and areas thoroughly observing environmental regulations

## 7. HANDLING AND STORAGE

**Handling:** Do not breathe mist or vapors. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use only with adequate ventilation.

**Storage:** Store in original container until ready to use. Keep in a cool, well ventilated area. Do not store together with: Explosives, Oxidizing solids, Oxidizing liquids, Radioactive substances, infectious substances. Protect against: Heat, Humidity, UV-radiation/sunlight.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls:** Use local exhaust ventilation to maintain worker exposure below established exposure limits.

**Protective and hygiene measures:** Always have the containers closed tightly after the removal of product. Wash hands after use. Do not eat, drink or smoke while using this product.

**Respiratory protection:** With correct and proper use, and under normal conditions, breathing protection is not required. Respiratory protection may be necessary with insufficient ventilation. Suitable respiratory protection apparatus: Combination filtering device (EN 14387) Type A-P2/3.

**Skin protection:** Chemical resistant, impermeable gloves, like Nitrile rubber. Check leak, tightness/impermeability prior to use.

**Eye/face protection:** Safety goggles or safety glasses with side shields.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Boiling Point:** >300°F/149°C

**Vapor Pressure (mmHg):** N.A.

**Specific Gravity:** 1.30

**Solubility in H<sub>2</sub>O:** Slight

**Vapor Density (Air=1):** N.A.

**Evaporation Rate (Ether=1):** N.A.

**pH Information:** N.A.

**Appearance:** Liquid

**Color:** Clear

**Odor:** Characteristic

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions of storage and use.

**Hazardous reactions:** No information available.

**Hazardous decomposition products:** Oxides of carbon. Nitrogen oxides, Sulphur oxides.

**Incompatibility:** Oxidizing agent, Acid.

**Conditions to avoid:** Protect against direct sunlight. Keep away from heat.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** Harmful if swallowed or if inhaled.

**2,2'-[1,2-ethanediylbis(oxy)]bis(ethanethiol)**

**Oral:** Acute Toxicity Estimate: 500mg/kg

**Inhalation vapor:** Acute Toxicity Estimate: 11mg/kg

**Irritation and corrosivity:** Based on available data, the classification criteria are not met.

**Sensitizing effects:** Based on available data, the classification criteria are not met.

**STOT – single exposure:** Based on available data, the classification criteria are not met.

**Severe effects after repeated or prolonged exposure:** Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction:** Based on available data, the classification criteria are not met.

**Aspiration hazard:** Based on available data, the classification criteria are not met.

**Specific effects in experiment on an animal:** No data available.

## 12. ECOLOGICAL INFORMATION

**Toxicity:** No data available.

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No indication of bioaccumulation potential.

**Mobility in soil:** No data available.

**Results of PBT and vPvB assessment:** The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**Further information:** Do not allow to enter into surface water or drains.

## 13. DISPOSAL CONSIDERATIONS

**Recommended method of disposal:** Dispose according to local, state, federal and provincial regulations. Consult a licensed professional waste disposal expert about proper waste disposal.

#### 14. TRANSPORT INFORMATION

**U.S. DOT**

Not Regulated

**IATA**

Not Regulated

**IMDG**

Not Regulated

#### 15. REGULATORY INFORMATION

##### United States Regulatory Information

**TSCA:** All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

**SARA 302 Components:** None of the chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA Section 311/312:** Acute Health Hazard

**Massachusetts Right to Know Components:** None

**Pennsylvania Right to Know Components:** 2,2'-[1,2-ethanediylbis(oxy)]bis(ethanethiol) CAS# 14970-87-7

**New Jersey Right to Know:** 2,2'-[1,2-ethanediylbis(oxy)]bis(ethanethiol) CAS# 14970-87-7

**California Proposition 65:** None

#### 16. OTHER INFORMATION

##### FOR INDUSTRIAL USE ONLY

**REVISION DATE: AUGUST 2015**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.