



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

Date Revised: October 2013

2. HAZARDS IDENTIFICATION

WARNING: MAY BE HARMFUL IF SWALLOWED.
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION

RELEVANT ROUTES OF EXPOSURE: Skin, Inhalation, Eyes, Ingestion

INHALATION: Prolong inhalation of large concentrations can be irritating to the lungs, and mucous membranes of the nose and throat.

SKIN: Prolonged or repeated contact may cause irritation.

EYE: May cause irritation.

INGESTION: May be harmful if swallowed.

EXISTING CONDITIONS AGGRAVATED BY EXPOSURE: Eye, skin and respiratory disorders. Pre-existing skin or lung allergies may increase the chance of developing allergic symptoms from exposure to this product.

3. INGREDIENTS

<u>Material (s)</u>	<u>CAS No.</u>	<u>Symbols</u>	<u>R-phrases</u>	<u>Approximate %</u>
triethylene glycol dimercaptan EC-No.: 239-044-2	14970-87-7	Xn	R20/22	66
N(3-dimethylaminopropyl)- 1,3-propylenediamine EC-No. 234-148-4	10563-29-8	C	R21/22 R34 R43	24
Terphenyl EC-No.: 247-477-3	26140-60-3	N	R50/53	10

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.

Eye: Immediately flush eyes with plenty of water for at least 15 minutes. If eye irritation persists, consult a specialist.

Skin: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if symptoms occur.

Oral: DO NOT induce vomiting unless directed to do so by medical personnel. Keep individual calm. Never give anything by mouth to an unconscious person. Get medical attention if symptoms develop and persist.

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

Fire and Explosion: None

Extinguishing Media: Water spray (fog), dry chemical, carbon dioxide and foam.

Special Fire Fighting Instruction: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Hazardous combustion products: Oxides of carbon. Smoke. Oxides of nitrogen.

6. ACCIDENTAL RELEASE MEASURES

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

Clean-up methods: Evacuate and ventilate spill area; dike spill to prevent entry into water system. Remove all sources of ignition. Soak up with inert absorbent material (sand, silica gel, acid binder, universal binder, sawdust). Scrape up. Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

Handling: Keep away from heat, spark and flame. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not breathe mist or vapors. Keep container closed. Wash thoroughly after handling.

Storage: Keep in a cool, well-ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Use local exhaust ventilation to maintain airborne concentrations below established exposure limits.

Respiratory protection: Use a NIOSH approved respirator if ventilation is inadequate.

Skin protection: Chemical resistant, impermeable gloves.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: >300°F/149°C

VOC: 0%

Specific Gravity: 1.30

Vapor Pressure(mmHg): N.A.

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

Solubility in H₂O: Slight

pH Information: N.A.

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

Appearance: Liquid

Odor: Strong

Color: Clear

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Hazardous polymerization: None under normal processing.

Hazardous decomposition products: Oxides of carbon. Smoke. Oxides of nitrogen.

Incompatibility: Oxidizing agents. Acids

Conditions to avoid: Heat, flames and sparks. Storage with incompatible materials.

11. TOXICOLOGICAL INFORMATION

Hazardous components	Carcinogen Status		OSHA Carcinogen
	NTP Carcinogen	IARC Carcinogen	
Polymercaptan hardener Proprietary	No	No	No
Tertiary amine Proprietary	No	No	No

Literature Referenced Target Organ & Other Health Effects

Hazardous components	Health Effects/Target Organs
Polymercaptan hardener Proprietary	No Data
Tertiary amine Proprietary	No Data

12. ECOLOGICAL INFORMATION

Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose according to local, state, federal and provincial regulations.

EPA hazardous waste number: Not a RCRA hazardous waste.

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.

TSCA 12 (b) Export Notification: None.

CERCLA/SARA Section 302 EHS: None.

CERCLA/SARA Section 311/312: Immediate Health Hazard

CERCLA/SARA 313: None.

California Proposition 65: This product does not contain a chemical known to the State of California to cause cancer and/or birth defects or other reproductive harm.

CANADA REGULATORY INFORMATION

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

WHMIS hazard class: D.2.B

LABELLING ACCORDING TO EEC DIRECTIVE

Labeling required

Symbols:	Xi	Irritant
R-phrase:	R43	May cause sensitization by skin contact.
	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase:	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

16. OTHER INFORMATION

List of R-phrases (Section 3)

R20/22 Harmful by inhalation and if swallowed.

R21/22 Harmful in contact with skin and if swallowed.

R34 Causes burns.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

NPCA-HMIS Ratings:

Health - 2

Flammability - 1

Reactivity - 0

Personal Protective rating to be supplied by user depending on the conditions.

FOR INDUSTRIAL USE ONLY