

**Performance
Polymers**

4917 Dawn Avenue
East Lansing, MI 48823-5691

8:30am to 4:30pm Phone: (517) 351-5900
24-Hour Health/Environmental Emergency Phone: 1-800-873-1138



Value beyond chemistry

Effective Date: 6/18/99

Material Safety Data Sheet

MSDS No: 5805

1. PRODUCT IDENTIFICATION

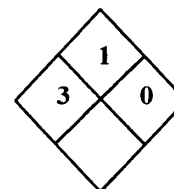
Trade Name: Hardener HW 8680

Chemical Family: Polyol

Synonyms:

XMH 8680 Hardener

Intended Use or Product Type: Two Part Urethane Hardener



NFPA RATING

HEALTH	3
FLAMMABILITY	1
REACTIVITY	0
PROTECTIVE EQUIPMENT	

HMIS RATING

2. COMPOSITION / INFORMATION ON INGREDIENTS

O S H A	CAS#	CHEMICAL IDENTITY	EXPOSURE LIMITS					CARCINOGEN STATUS			
			ACGIH TWA	ACGIH STEL	OSHA PEL	OSHA STEL	MFR.	IARC	NTP	OSHA	
*	14808-60-7	Quartz (SiO ₂) Common Name: Crystalline Silica	.1 mg/m ³	NE	NE	NE	NE	NE	Yes	Yes	NR
*	3077-13-2	2-Propanol-1,1'-(phenylamino)bis Common Name: 2-Hydroxypropyl aniline	NE	NE	NE	NE	NE	NE	NR	NR	NR
*	694-83-7	1,2-Cyclohexanediamine Common Name: 1,2-Diaminocyclohexane	NE	NE	NE	NE	NE	NE	NR	NR	NR
*	919-30-2	1-Propanamine, 3-(triethoxysilyl)-	NE	NE	NE	NE	NE	NE	NR	NR	NR
	94-96-2	2-Ethyl-1,3-hexanediol Common Name: 2-Ethyl-1,3-hexanediol	NE	NE	NE	NE	NE	NE	NR	NR	NR

NE = Not Established NR = Not Reviewed * = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: Danger! Corrosive - Causes eye burns and skin irritation.

Primary Route(s) of Entry: Dermal; heated product may produce inhalable vapors.

Chronic: This product contains Crystalline silica. Repeated inhalation of respirable free Crystalline silica dust may cause delayed lung injury (silicosis) and cancer.

4. FIRST AID MEASURES

Ingestion: If conscious, give 2 - 4 glasses of water to drink. Do not induce vomiting. Call a physician.

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes.

Inhalation: Remove to fresh air. Call a physician.

Eyes: Immediately flush eyes with water for at least 15 minutes. Call a physician.

Overexposure Effects: Danger! Corrosive - Causes eye burns. Causes skin irritation.

Medical Conditions Aggravated by Exposure: Skin and eye conditions.

Additional Information: Referral to a physician is recommended if there is any question about the seriousness of any injury.

5. FIRE FIGHTING MEASURES

Flash Point:	> 200°F (> 93 °C)
Flash Point Method Used:	Estimated
Flammable Limits in Air (Lower - % by volume):	Not established
Flammable Limits in Air (Upper - % by volume):	Not established

Fire Fighting Extinguishing Media: Carbon dioxide, dry chemical, foam, water.

Fire Fighting Equipment: Use self-contained breathing apparatus.

Fire and Explosion Hazards: Decomposition and combustion products may be toxic.

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Remove spillage by absorbing in absorbent material.

7. HANDLING AND STORAGE

Precautions: Danger! Corrosive. Causes eye burns and skin irritation. Do not get in eyes. Avoid contact with skin and clothing. Do not breathe dust. Avoid breathing vapor or mist. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury.

Other Handling Information: Crystalline silica may be generated when machining cured products. Overexposure may create possible cancer and silicosis hazard.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Skin Protection: Wear impermeable gloves.

Respiratory Protection: Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.

Eye Protection: Full face shield.

Engineering Controls: General mechanical and local exhaust in accordance with ACGIH recommendations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	Grey
Odor:	Mild
Physical State:	Paste
Solubility in Water:	Slight
Vapor Pressure:	Not Determined
Specific Gravity:	1.23 (water = 1)
Boiling Point:	Not Determined
Evaporation Rate:	Not Determined
Vapor Density:	Not Determined
pH:	Not Determined

Percent Volatile: Less than 1%.

10. STABILITY AND REACTIVITY

Conditions to Avoid: Excessive heat for prolonged periods of time.

Stability: Stable.

Incompatibility: Strong oxidizing agents.

Hazardous Decomposition Products: Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury.

Skin Irritation: Irritant.

Eye Irritation: Corrosive.

12. ECOLOGICAL INFORMATION

Effective Date: 6/18/99

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.

14. TRANSPORT INFORMATION**DOT: Non-Bulk****Proper Shipping Name:** Resin compounds, N.O.I.

Department of Transportation: Not regulated as a hazardous material by the U.S. Dept. of Transportation (DOT) 49 CFR 172.101 hazardous materials table.

15. REGULATORY INFORMATION

Occupational Safety and Health Act (OSHA): This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

Resource Conservation and Recovery Act (RCRA): Not a hazardous waste under RCRA (40 CFR 261).

SARA Title III: Section 313 Toxic Chemical List (TCL): This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 313 (40 CFR 372).

TSCA Section 8(b) - Inventory Status: Chemical components listed on TSCA Inventory.

TSCA Section 12(b) - Export Notification: This product contains the following chemical(s) that are subject to a Section 12(b) export notification:

Chemical Name: Cyclohexene, 4-ethenyl-

Common Name: Vinyl Cyclohexane

CAS Number: 100-40-3

California Proposition 65: The following is required composition information. This product contains the following chemical(s) which are currently listed on the California list of Known Carcinogens and Reproductive Toxins:

Chemical Name: Quartz (SiO₂)

Common Name: Crystalline Silica

CAS Number: 14808-60-7

Percent in Composition: 0.459 % by wt

Comment: Warning! This chemical is known to the State of California to cause cancer.

Chemical Name: Benzene, methyl-

Common Name: Toluene

CAS Number: 108-88-3

Percent in Composition: 0.0098 % by wt

Comment: Warning! This chemical is known to the State of California to cause birth defects or other reproductive harm.

Chemical Name: Cyclohexene, 4-ethenyl-

Common Name: Vinyl Cyclohexane

Effective Date: 6/18/99

CAS Number: 100-40-3
Percent in Composition: 0.0018 % by wt

Chemical Name: 1,3- Butadiene
Common Name: Butadiene
CAS Number: 106-99-0
Percent in Composition: 0.0002 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

Chemical Name: Arsenic
CAS Number: 7440-38-2
Percent in Composition: 0 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer and birth defects or other reproductive harm.

Chemical Name: Lead
CAS Number: 7439-92-1
Percent in Composition: 0 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer and birth defects or other reproductive harm.

Pennsylvania Right-to-Know: The following is required composition information:

Chemical Name: Homopolymer, hydroxy terminated 1,3-butadiene
Common Name: Polybutadiene polyol
CAS Number: 69102-90-5
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Carbonic acid calcium salt (1:1)
Common Name: Calcium Carbonate
CAS Number: 471-34-1
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Polycaprolactone polyol
CAS Number: Confidential
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 2-Propanol-1,1'-(phenylamino)bis
Common Name: 2-Hydroxypropyl aniline
CAS Number: 3077-13-2
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 2-Ethyl-1,3-hexanediol
Common Name: 2-Ethyl-1,3-hexanediol
CAS Number: 94-96-2
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Titanium dioxide
CAS Number: 13463-67-7
Comment: Hazardous Substance

Effective Date: 6/18/99

16. OTHER INFORMATION

MSDS No: 5805
Approved By: Kenneth L. Payne
Title: E,H&S Manager

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