

**EW INDUSTRIES INC.**

DATE OF PREPARATION 08/15/11

Material Safety Data Sheet

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**PRODUCT NAME:** Flexible Epoxy Hardener**PRODUCT CLASS:** Epoxy Curing Agent**Chemical Name and/or Family Description:** AMINE MIXTURE

COMPANY INFORMATION: EW INDUSTRIES INC. ENTERPRISES
Box 336
Imperial, SK S0G 2J0
TELEPHONE # (888) 799-3960
CHEM TREC # 800-424-9300

SECTION 2 COMPOSITION AND INFORMATION ON INGREDIENTS

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION ARE AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT 0.1% OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0% OR GREATER; NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0% OR GREATER. THIS IS NOT INTENDED TO BE COMPLETE COMPOSITIONAL DISCLOSURE. REFER TO SECTION 14 FOR APPLICABLE STATES' RIGHT TO KNOW AND OTHER REGULATORY INFORMATION.

PRODUCT AND/OR COMPONENT(S) CARCINOGENIC ACCORDING TO:

OSHA	IARC	NTP	OTHER	NONE X
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COMPOSITION:**CHEMICAL NAME**

Poly(oxy(methyl-1,2-ethanediyl)), alpha-(2-Aminomethylethyl)omega-(2-aminomethylethoxy)

CAS

9046-10-0

%

55-65%

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Nonyl Phenol 84852-15-3 <40%
Proprietary Ingredients <25%

THIS PRODUCT IS CONSIDERED HAZARDOUS ACCORDING TO OSHA (1910.1200)

SECTION 3 HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Appearance: Pale Yellow Liquid

Odor: Ammonia-like odor

WARNING STATEMENT

**DANGER! CORROSIVE – CAUSES EYE AND SKIN BURNS
HARMFUL OR FATAL IF SWALLOWED
ASPIRATION HAZARD IF SWALLOWED
CAN ENTER LUNGS AND CAUSE DAMAGE
CAUSES RESPIRATORY TRACT IRRITATION AND CAN
CAUSE DAMAGE**

Hazardous Material Information System (United States)

Health	3
Fire	1
Reactivity	0
Personal Protection	-

National Fire Protection Association NFPA (United States)

Health	3
Flammability	1
Reactivity	0
Specific Danger	-

POTENTIAL HEALTH EFFECTS

Primary Route of Exposure

EYE X SKIN X INHALATION X INGESTION

EFFECTS OF OVEREXPOSURE:

Acute:

Eyes: Causes irritation, experienced as pain, with excess blinking and tear production, and seen as extreme redness and swelling of the eye and chemical burns of the eye. Severe eye damage may cause blindness.

Skin: Causes severe irritation with pain, severe excess redness and swelling with chemical burns, blister formation, and possible tissue destruction. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects, below, and Section 11 for information regarding potential long term effects.

Inhalation: Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, are irritating and cause nasal discharge, coughing, and discomfort in nose and throat. Prolonged or repeated overexposure may result in lung damage.

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Ingestion: Causes burning of mouth, throat, and stomach with abdominal and chest pain, nausea, vomiting, diarrhea, thirst, weakness, and collapse. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Sensitization Properties: This product is not expected to be a human skin sensitizer based on animal data.

Chronic: Repeated skin contact may cause a persistent irritation or dermatitis. Repeated inhalation may cause lung damage.

Medical Conditions Aggravated by Exposure: Skin contact may aggravate an existing dermatitis (skin condition). Overexposure to vapor, dust or mist may aggravate existing respiratory conditions, such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease.

Other Remarks: This product contains one or more amines that may produce temporary and reversible hazy or blurred vision. Symptoms disappear when exposure is terminated.

SECTION 4 FIRST AID MEASURES

EYES: Immediately flush with large amounts of water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Do not attempt to neutralize with chemical agents. Obtain medical attention immediately. Continue flushing for an additional 15 minutes if medical attention is not immediately available.

SKIN: Immediately remove contaminated clothing and shoes. Under a safety shower, flush skin thoroughly with large amounts of running water for at least 15 minutes. Do not attempt to neutralize with chemical agents. Get medical attention immediately. Discard or decontaminate clothing and shoes before reuse.

INGESTION: If person is conscious and can swallow, immediately give two glasses of water (16 oz.) but do not induce vomiting. This material is corrosive. If vomiting occurs, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

INHALATION: If inhaled, remove to fresh air. If not breathing or in respiratory distress, clear person's airway and start artificial respiration. With a physician's advice, give supplemental oxygen using a bag-valve mask or manually triggered oxygen supply.

OTHER INSTRUCTIONS: Swallowing of this corrosive material may result in severe ulceration, inflammation, and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this product during induced emesis can result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Control Center for additional treatment information.

SECTION 5 FIRE – FIGHTING MEASURES

Ignition Temperature – AIT (Degrees C): Not determined

Flash Point (degrees C): 121.1 (250 F) (PMCC)

Flammable Limits % (lower-Upper):

Lower: Not determined

Upper: Not determined

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Recommended Fire Extinguishing Agents and Special Procedures: Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Unusual or Explosive Hazards: None

Special Protective Equipment for firefighters: Wear special chemical protective clothing and positive pressure self-contained breathing apparatus. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues.

SECTION 6 ACCIDENTAL RELEASE MEASURES
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FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC AT 800-424-9300.

Procedures in Case of Accidental Release, Breakage or Leakage: Ventilate breathing vapor. Wear appropriate personal protective equipment, including appropriate respiratory protection. Contain spill if possible. Wipe up or absorb on suitable material and shovel up. Prevent entry into sewers and waterways. Avoid contact with skin, eyes or clothing.

SECTION 7 HANDLING AND STORAGE

Precautions to be Taken In

Handling: Minimum feasible handling temperatures should be maintained. Eye wash and safety shower should be available nearby when this product is handled or used.

Storage: Periods of exposure to high temperatures should be minimized. Water contamination should be avoided. If stored above 100F, a nitrogen atmosphere is recommended.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION
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Protection Equipment (Type)

Eye/Face Protection: Avoid eye contact. Chemical type goggles with face shield must be worn. Do not wear contact lenses.

Skin Protection: Protective clothing such as coveralls or lab coats must be worn. Launder or dry-clean when soiled. Gloves resistant to chemicals and petroleum distillates required. When handling large quantities, impervious suits, gloves, and rubber boots must be worn.

Remove and dry-clean or launder clothing soaked or soiled with this material before reuse. Dry cleaning of contaminated clothing may be more effective than normal laundering. Inform individuals responsible for cleaning of potential hazards associated with handling contaminated clothing.

Respiratory Protection: Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation: Local exhaust ventilation recommended if generating vapor, dust, or mist. If exhaust ventilation is not available or inadequate, use MSHA or NIOSH approved respirator as appropriate.

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Exposure Limit for the Total Product: None established for product.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pale Yellow Liquid
Odor: Ammonia-like odor
Boiling Point (degrees C): 260 (500F)
Melting/Freezing Point (degrees C): Not determined
Specific Gravity (water=1): .95
pH: 11.7 (5% aqueous)
Vapor Pressure: 1 mmHg at 100C (212F)
Viscosity: (77F) 250-800 cps @ 25 degrees C
Vapor Density (Air = 1): >1
Solubility in Water (%): >10
Other: None

SECTION 10 STABILITY AND REACTIVITY
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This Material Reacts Violently With:

AIR WATER HEAT STRONG OXIDIZERS OTHERS X NONE OF THESE

Comments: This material reacts violently with acids.

Products Evolved When Subjected to Heat or Combustion: Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning in a limited air supply.

Hazardous Polymerizations: DO NOT OCCUR

SECTION 11 TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA)

Oral: LD50 2.88 g/kg (rat) slightly toxic

Inhalation: Not determined

Dermal: LD50 2.98 g/kg (rabbit) practically non-toxic

IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)

Skin: (Draize) Believed to be >6.50-8.00/8.0 (rabbit) corrosive

Eyes: (Draize) Believed to be >80.00-110.00/110 (rabbit) extremely irritating

Sensitization: (Buehler) Negative – skin (guinea pig)

OTHER: None

SECTION 12 DISPOSAL CONSIDERATIONS

Waste Disposal Methods: This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Remarks: None

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SECTION 13 TRANSPORTATION INFORMATION

DOT/IMDG INFORMATION

PROPER SHIPPING NAME: Amines, Corrosive, liquid, N.O.S., (polyoxypro-pylenediamine)
HAZARD CLASS: 8
I. D. NUMBER: UN 2735
PACKING GROUP: III
PLACARDS REQUIRED: CORROSIVE

SECTION 14 REGULATORY INFORMATION

FEDERAL REGULATIONS:
SARA TITLE III:

Section 302/304 Extremely Hazardous Substances

<u>Chemical name</u>	<u>Cas Number</u>	<u>Range in %</u>	<u>TPQ</u>	<u>RQ</u>
None				

Section 311 Hazardous Categorization

<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Pressure</u>	<u>Reactive</u>	<u>N/A</u>
X					

Section 313 Toxic Chemical

<u>Chemical name</u>	<u>Cas Number</u>	<u>Concentration</u>
None		

CERCLA 102(A)/DOT HAZARDOUS SUBSTANCES:

<u>Chemical Name</u>	<u>Cas Number</u>	<u>Range in %</u>	<u>RQ</u>
None			

States Right-to-Know Regulations:

<u>Chemical Name</u>	<u>State Right-To-Know</u>
None	

State List: CT (Connecticut), FL (Florida), IL (Illinois), MI (Michigan),
LA (Louisiana), MA (Massachusetts), NJ (New Jersey), PA (Pennsylvania), RI
(Rhode Island)

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 – PROPOSITION 65: The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

<u>Chemical Name</u>	<u>Cas Number</u>
None	

INTERNATIONAL REGULATIONS:

TCSA Inventory Status: This product, or its components, are listed on or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

WHMIS Classification: Class E: Corrosive

Canadian Inventory Status: This product, or its components, are listed on or are exempt from the Canadian Domestic

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Substance List (DSL).

EINECS Inventory Status: This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical substances (ELINCS).

Australian Inventory Status: This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

Japan Inventory Status: This product, or its components, are listed on or are exempt from the Japan Ministry of International Trade and Industry (MITI) inventory.

SECTION 15 ENVIRONMENTAL INFORMATION

MARINE POLLUTANT

Ecotoxicity: It may cause long term adverse effects in the aquatic environment

Toxicity to Fish/Amphibians

<u>Test Type</u>	<u>Species</u>	<u>Value/Units</u>
LC50/96 hours	fish	110 mg/l

Toxicity to Aquatic Invertebrates:

<u>Test Type</u>	<u>Species</u>	<u>Value/Units</u>
EC50/24 hours	Waterflea (daphnia magna)	42 mg/l

Toxicity to Aquatic Plants

<u>Test Type</u>	<u>Species</u>	<u>Value/Units</u>
EC50/72 hours	green algae	37 mg/l

Environmental Fate: No additional information available.

Bioaccumulation: No data available

Biodegradation: This material is expected to be partially or slowly biodegradable.

SECTION 16 OTHER INFORMATION 1/13/99

Additional Precautions: Store as a NFPA Class IIIB liquid. Keep fire and sparks away from drums. Since empty containers retain product residue, do not cut, drill, grind, or weld on or near the container until it is thoroughly cleaned.

Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair. Remove all ignition sources. Check atmosphere for explosiveness and oxygen deficiencies. Use adequate personal protective equipment. Comply with regulations governing confined space entry.

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of EW Industries Inc. Product Safety Program. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information obtained herein. Data sheets are available for all EW Industries Inc. products. You are urged to obtain data sheets for all EW Industries Inc. products you buy, process, use or distribute and you are encouraged and requested to advise those who may come in contact with such products of the information contained therein.

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To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency. EW Industries Inc. does not undertake to furnish advice on such matters.