

**Engineered Polymers, LLC.**  
2842 Progress Road Madison, WI 53716

Phone: (608) 661-2800  
Fax: (608) 661-2817

[www.engineeredpolymers.net](http://www.engineeredpolymers.net)

An Amber Chemical Group Company  
[www.amberchemical.com](http://www.amberchemical.com)

# **REACTAMINE<sup>®</sup> WQS Epoxy-A**

## **SECTION 1 - MATERIAL IDENTIFICATION**

PRODUCT NAME WQS EPOXY-A

### **EMERGENCY OVERVIEW**

HMIS/NFPA HEALTH 3 FLAMMABILITY 1 REACTIVITY 0

PHYSICAL FORM Mobile liquid  
at processing temperature

COLOR Colorless /  
at processing temperature /

ODOR

HAZARDS Harmful if swallowed. Corrosive to eyes. Corrosive to skin. Severe eye irritant. Severe skin irritant. May cause skin sensitization.

EXTINGUISHING MEDIA Ignition will give rise to a Class B fire. In case of large fire use: alcohol foam, water spray. In case of small fire use: carbon dioxide (CO<sub>2</sub>), dry chemical, dry sand or limestone.

C.A.S. CHEMICAL NAME Mixture

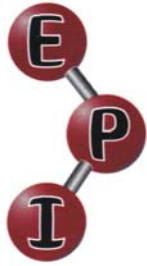
SYNONYMS None

CHEMICAL FAMILY Modified cycloaliphatic amine

EMPIRICAL FORMULA Mixture

INTENDED USE Curing Agent

REVISION NOTES Updated health hazard information. SIGNS AND SYMPTOMS OF EXPOSURE (Acute effects) SIGNS AND SYMPTOMS OF EXPOSURE (Possible Longer Term Effects) First Aid. Updated Physical Data. Updated Reactivity Information. Updated handling and storage information.



**Engineered Polymers, LLC.**  
2842 Progress Road Madison, WI 53716

Phone: (608) 661-2800  
Fax: (608) 661-2817

[www.engineeredpolymers.net](http://www.engineeredpolymers.net)

An Amber Chemical Group Company  
[www.amberchemical.com](http://www.amberchemical.com)

## **REACTAMINE<sup>®</sup> WQS Epoxy-A**

### SECTION 2 - INGREDIENTS

Num	%	CAS Number and Chemical Name
1.	<50.00	100-51-6 BENSYL ALCOHOL
2.	5.00 – 10.00	Phenols
3.	15.00 -30.0	1477-55-0 BENZENE-1, 3-DIMENTHANEAMINE (MXDA)
4.	15.00	2855-13-2 ISOPHORONEDIAMINE (IPD)

The remaining components are trade secret.

### OSHA (ACGIH) EXPOSURE LIMITS

	TWA ppm	mg/m3	STEL ppm	mg/m3	CEILING ppm	mg/m3	
1. OSHA ACGIH	N/E N/E	N/E N/E	N/E N/E	N/E N/E	N/E N/E	N/E N/E	
2. OSHA ACGIH	N/E N/E	N/E N/E	N/E N/E	N/E N/E	N/E N/E	N/E N/E	
3. OSHA ACGIH	N/E N/E	N/E N/E	N/E N/E	N/E N/E	N/E N/E	0.1000 0.1000	Skin Skin
4. OSHA ACGIH	N/E N/E	N/E N/E	N/E N/E	N/E N/E	N/E N/E	N/E N/E	

N/E Not Established.

### SECTION 3 – HEALTH HAZARDS

#### ROUTES OF EXPOSURE

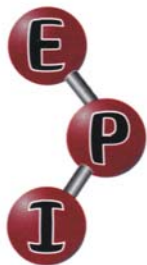
Eye Contact  
Skin Contact  
Ingestion  
Skin Absorption

#### EXPOSURE STANDARDS

See Section 2 for exposure standards on ingredients. Maintain air contaminant concentrations in the workplace at the lowest feasible levels.

#### HEALTH HAZARDS

Harmful if swallowed.  
Corrosive to eyes.  
Corrosive to skin.



**Engineered Polymers, LLC.**  
2842 Progress Road      Madison, WI 53716

Phone: (608) 661-2800  
Fax: (608) 661-2817

[www.engineeredpolymers.net](http://www.engineeredpolymers.net)

An Amber Chemical Group Company  
[www.amberchemical.com](http://www.amberchemical.com)

## **REACTAMINE<sup>®</sup> WQS Epoxy-A**

Severe eye irritant.

Severe skin irritant.  
May cause skin sensitization.

### TARGET ORGANS

Eye  
Skin

### SIGNS AND SYMPTOMS OF EXPOSURE (Acute effects)

Burns of the eye may cause blindness. Contact of undiluted product with the eyes or skin quickly causes severe irritation and pain and may cause burns, necrosis and permanent injury. Inhalation of aerosols and mists may severely damage contacted tissue and produce scarring.  
Product is absorbed through the skin and may cause nausea, headache and general discomfort.

### SIGNS AND SYMPTOMS OF EXPOSURE (Possible Longer Term Effects) Repeated and/or prolonged exposure may cause allergic reaction/sensitization.

Repeated and/or prolonged exposures may result in: adverse eye effects (such as conjunctivitis or corneal damage), adverse skin effects (such as rash, irritation or corrosion).

### MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Eye disease  
Skin disorders and Allergies

### CARCINOGENS UNDER OSHA, ACGIH, NIP, IARC, OTHER

This product contains no carcinogens in concentrations of 0.1 percent or greater.

## **SECTION 4 - FIRST AID**

### EYE CONTACT

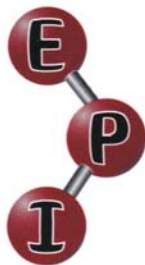
Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Seek medical advice.

Remove contaminated clothing and shoes. Remove product and immediately flush affected area with water for at least 15 minutes. Cover the affected area with a sterile dressing or clean sheeting and transport for medical care. Do not apply greases or ointments. Control shock, if present.

### INHALATION

Move patient to fresh air. If breathing has stopped or is labored give assisted respiration (e.g. mouth—to—mouth). Supplemental oxygen may be indicated. Seek medical advice. Prevent aspiration of vomit. Turn victim's head to the side.

### INGESTION



**Engineered Polymers, LLC.**  
2842 Progress Road Madison, WI 53716

Phone: (608) 661-2800  
Fax: (608) 661-2817

[www.engineeredpolymers.net](http://www.engineeredpolymers.net)

An Amber Chemical Group Company  
[www.amberchemical.com](http://www.amberchemical.com)

## **REACTAMINE<sup>®</sup> WQS Epoxy-A**

In the event of ingestion, administer 3—4 glasses of milk or water. Do not induce vomiting. Seek medical advice.

### **SECTION 5 - FIRE AND EXPLOSION DATA**

FLASH POINT (closed cup)	110.00 C (230.00 F)
UPPER EXPLOSION LIMIT (UEL)	No Data
LOWER EXPLOSION LIMIT (LEL)	No Data
AUTOIGNITION TEMPERATURE	No Data
FIRE HAZARD CLASSIFICATION (OSHA/NFPA)	
Class IIIB	

#### **EXTINGUISHING MEDIA**

Ignition will give rise to a Class B fire. In case of large fire use: water spray, alcohol foam. In case of small fire use: carbon dioxide (CO<sub>2</sub>), dry chemical, dry sand or limestone.

#### **SPECIAL FIRE FIGHTING PROCEDURES**

A face shield should be worn. Firefighters should wear butyl rubber boots, gloves, and body suit and a self-contained breathing apparatus.  
Retain expended liquids from fire fighting for later disposal.

#### **UNUSUAL FIRE AND EXPLOSION HAZARDS**

May generate toxic or irritating combustion products. Contact of liquid with skin must be prevented.  
Personnel in vicinity and downwind should be evacuated.

### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**CONTAINMENT TECHNIQUES** (Removal of ignition sources, diking etc) Stop the leak, if possible. Shut off or remove all ignition sources. Construct a dike to prevent spreading (includes molten liquids until they freeze).

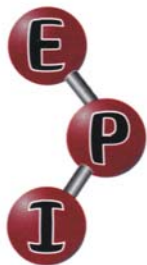
#### **CLEAN—UP PROCEDURES**

If recovery is not feasible, admix with dry soil, sand or nonreactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Place in metal containers for recovery or disposal. Flush area with water spray. Clean—up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with a vacuum truck.

#### **OTHER EMERGENCY ADVICE**

Wear protective clothing, boots, gloves, and eye protection.

### **SECTION 7 - HANDLING AND STORAGE**



**Engineered Polymers, LLC.**  
2842 Progress Road      Madison, WI 53716

Phone: (608) 661-2800  
Fax: (608) 661-2817

[www.engineeredpolymers.net](http://www.engineeredpolymers.net)

An Amber Chemical Group Company  
[www.amberchemical.com](http://www.amberchemical.com)

## **REACTAMINE<sup>®</sup> WQS Epoxy-A**

### STORAGE

Keep in cool, dry, ventilated storage and in closed containers.

### HANDLING

Avoid contact with skin or eyes. When handling, do not eat, drink, or smoke. Avoid using in any spray application without strict conformance to all applicable electrical codes and the OSHA limit for maximum allowable airborne concentrations.

### OTHER PRECAUTIONS

Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations (e.g. OSHA).

## **SECTION 8 - PERSONAL PROTECTION / EXPOSURE CONTROLS**

### EYE PROTECTION

Full face shield with goggles underneath.

### HAND PROTECTION

Impermeable gloves.

### RESPIRATORY PROTECTION

Not required under normal conditions in a well—ventilated workplace. Under the following conditions a respirator may be required: when product vapor concentration exceeds the limits listed in section 2, during repair and cleaning of equipment, during transfer or discharge of the product, sampling, spray applications. Types of respirators that may be used include the following: Chemical Cartridge Respirator with face piece to protect against the organic vapor, Supplied air respirator with full face piece (NIOSH Approved), Self—contained breathing apparatus in pressure demand mode. In emergency conditions use a self—contained breathing apparatus in pressure demand mode.

### PROTECTIVE CLOTHING

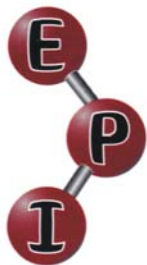
Impervious clothing. Slicker Suit. Rubber boots. Full rubber suit (rain gear). Butyl or latex protective clothing.

### ENGINEERING CONTROLS

Maintain air concentrations in work spaces in accord with standards outlined in Sections 2 and 3.

### WORK AND HYGIENIC PRACTICES

Provide readily accessible eye wash stations and safety showers. Wash at the end of each work shift and before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated.



**Engineered Polymers, LLC.**  
2842 Progress Road      Madison, WI 53716

**Phone: (608) 661-2800**  
**Fax: (608) 661-2817**

[www.engineeredpolymers.net](http://www.engineeredpolymers.net)

An Amber Chemical Group Company  
[www.amberchemical.com](http://www.amberchemical.com)

**REACTAMINE<sup>®</sup> WQS Epoxy-A** 

## SECTION 9 - TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Mobile liquid
COLOR	Colorless /
ODOR	
pH	Alkaline
VAPOR PRESSURE (mm Hg at 21C (70F) )	1.80
VAPOR DENSITY (Air = 1)	No Data
BOILING POINT	>200.00 C (>392.00 F)
MELTING POINT	No Data
SOLUBILITY IN WATER	Slight (0.1 – 1%)
SPECIFIC GRAVITY (Water = 1)	1.04
MOLECULAR WEIGHT	Mixture

## SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY  
Stable

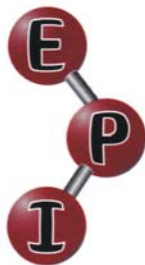
CONDITIONS TO AVOID (if unstable)  
Not applicable

INCOMPATIBILITY (Materials to Avoid)  
None known.

HAZARDOUS DECOMPOSITION PRODUCTS (from burning, heating, or reaction with other materials).  
Irritating and toxic fumes at elevated temperatures.

HAZARDOUS POLYMERIZATION  
Will not occur

CONDITIONS TO AVOID (if polymerization may occur)  
Not applicable



**Engineered Polymers, LLC.**  
2842 Progress Road      Madison, WI 53716

Phone: (608) 661-2800  
Fax: (608) 661-2817

[www.engineeredpolymers.net](http://www.engineeredpolymers.net)

An Amber Chemical Group Company  
[www.amberchemical.com](http://www.amberchemical.com)

**REACTAMINE<sup>®</sup> WQS Epoxy-A** 

## SECTION 11 - TOXICOLOGICAL PROPERTIES

ACUTE ORAL TOXICITY (1D50, RAT)  
>1752.00 mg/kg (Estimate)

ACUTE DERMAL TOXICITY (LD50, RABBIT)  
No Data

ACUTE INHALATION TOXICITY (LC50, RAT)  
No Data

OTHER DATA  
Toxicity data from similar products.

OTHER ACUTE EFFECTS  
No Data

IRRITATION EFFECTS DATA  
Corrosive to the skin of a rabbit.

CHRONIC/SUBCHRONIC DATA  
Component has caused allergic sensitization in animals.

## SECTION 12 - ECOLOGICAL INFORMATION

No Data

## SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL  
Comply with all Federal, State and Local Regulations.

## SECTION 14 - TRANSPORT INFORMATION

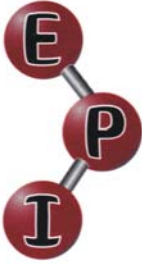
DOT NON—BULK SHIPPING NAME

IMO SHIPPING DATA

Amines, liquid, corrosive, n.o.s.  
(BENZENE-1,3—DIMETHANEAMINE (MXDA)) //  
8 //UN2735 1/PG II //NAERG Guide No:

DOT BULK SHIPPING NAME

153



**Engineered Polymers, LLC.**  
2842 Progress Road      Madison, WI 53716

**Phone: (608) 661-2800**  
**Fax: (608) 661-2817**

[www.engineeredpolymers.net](http://www.engineeredpolymers.net)

An Amber Chemical Group Company  
[www.amberchemical.com](http://www.amberchemical.com)

**REACTAMINE<sup>®</sup> WQS Epoxy-A** 

Refer to Bill of Lading

Refer to Bill of Lading

ICAO/IATA SHIPPING DATA

Amines, liquid, corrosive, n.o.s.  
(BENZENE-1,3-DIMETHANEAMINE (MXDA)) //  
8 //UN2735 //II // Shipment per 49

CFR 171.11 1/NAERG Guide No: 153

## SECTION 15 - REGULATORY INFORMATION

### US FEDERAL REGULATIONS

TOXIC SUBSTANCES CONTROL ACT (TSCA) All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es) Corrosive. Sensitizer.

EPA SARA Title III Section 312 (40CFR370) hazard class Immediate Health Hazard. Delayed Health Hazard.

EPA SARA Title III Section 313 (40CFR372) toxic chemicals above "de minimis" level are  
None

### STATE REGULATIONS

PROPOSITION 65 SUBSTANCES (component(s) known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986")  
None

NEW JERSEY TRADE SECRET REGISTRY NUMBER (S)  
05995500—( H2489U)

**This information herein is given in good faith, but no warranty, expressed or implied, is made.**