

MVE² 100% Solids Epoxy – Part B

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: MVE ² 100% Solids Epoxy – Part B	Product Use: MOISTURE MITIGATION COMPONENT
Manufacturer's Name: The Concure Group	Emergency Telephone: 610-864-8502
Address: 18 Campus Blvd Suite 100 Newtown Square, PA 19073	Telephone Number: 267-356-7994
Date Prepared: JANUARY 2017	Date Updated: January 2, 2017

SECTION 2: HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION



GHS05 Corrosion

Skin Corrosion 1A H314 Causes severe skin burns and eye damage.

Eye Damage 1 H318 Causes serious eye damage.



GHS07

Acute Toxicity 4 H302 Harmful if swallowed. Acute Toxicity 4 H332 Harmful if inhaled.

Skin Sensitization 1 H317 May cause an allergic skin reaction

LABEL ELEMENTS

Hazard Pictogram:







Signal Word: Danger

Hazard Statements: Corrosive. Harmful. Irritant.

H302 – Harmful if swallowed.

H314 – Causes severe skin burns and eye damage.

H315 – Causes skin irritation.

H317 – May cause an allergic skin reaction.

H318 – Causes serious eye damage.

H332 – Harmful if inhaled.

H335 – May cause respiratory irritation.

Precautionary Statements:

P101 – If medical advice is needed, have product container or label at hand.

P102 – Keep out of reach of children.

P202 – Do not handle until all safety precautions have been read and understood.



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- P233 Keep container tightly closed.
- P234 Keep only in original container.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P264 Wash thoroughly with plenty of water immediately after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment and drains.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P284 Wear respiratory protection.
- P314 Get medical advice/attention if you feel unwell.
- P391 Collect spillage.
- P402 + P404 Store in a dry place. Store in a closed container.
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents and container as hazardous waste in accordance with all local, regional, national and international regulations.

ADDITIONAL INFORMATION

Hazards not otherwise classified: Not applicable.

30.0 % of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

MATERIAL OR INGREDIENT	CAS#	WT. %	
Benzyl alcohol	100-51-6	< 25 %	
Aminopropylmorpholine, 4-	123-00-2	< 20 %	
Benzene-1,3-dimethaneamine (MXDA)	1477-55-0	< 10 %	
Formaldehyde, polymer with 1,3, dimethylbenzene 26139-75-3 < 10%			
Tetraethylenepentamine	112-57-2	< 1 %	
Exact composition percentage/concentration has been	112 07 2	1 - 77	

SECTION 4: FIRST-AID MEASURES

DESCRIPTION OF THE FIRST AID MEASURE

P301 + P310 +P330 + P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

P302 + P352 + P361 – IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get immediate medical advice/attention.

P304 + P311 + P340 + P341 + P342 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P305 + P313 + P337 + P338 + P351 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

P306 + P360 – IF ON CLOTHING: Immediately rinse contaminated clothing and skin with plenty of water before removing clothes.

P314 – Get medical advice/attention if you feel unwell.



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IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye: Product vapor in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema can cause the perception of "blue haze" or "fog" around lights, although this is a temporary effect and has no known residual effect. Causes eye burns. May cause blindness. Severe eye irritation.

Skin: Causes skin burns. Contact with skin may result in redness, drying of the skin, dermatitis and defatting. If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Harmful in contact with skin.

Inhalation: Harmful if inhaled and may cause delayed lung injury. Inhalation of aerosol may cause irritation to the upper respiratory tract. Risk of serious damage to the lungs (by inhalation). May cause nose, throat, and lung irritation. Can cause severe eye, skin and respiratory tract burns. May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Ingestion: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. May cause central nervous system effects, such as headache, nausea, vomiting, abdominal pain, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure. Harmful if swallowed.

Chronic Health Hazard: This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Muscular dysfunction. Prolonged contact may result in chemical burns and permanent damage. Repeated or prolonged contact causes sensitization, asthma and eczemas.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED

Note to Physicians: Symptoms may not appear immediately. Application of corticosteroid cream has been effective in treating skin irritation.

Specific Treatments: In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5 – FIRE-FIGHTING MEASURES

FLAMMABILITY

Flammability: Not flammable by WHMIS/OSHA criteria.

EXTINGUISHING MEDIA

Suitable Extinguishing Media: Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical. Dry sand. Limestone powder.

Unsuitable Extinguishing Media: Not available.

SPECIAL HAZARDS ARISING FROM THE CHEMICAL

Products of Combustion: May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Ammonia gas may be liberated at high temperatures. In case of incomplete combustion an increased formation of oxides of nitrogen (NOx) is to be expected. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes.

Explosion Data: Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS

Avoid contact with the skin. A face shield should be worn. Keep upwind of fire. Use personal protective equipment. Wear self contained breathing apparatus for firefighting. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES



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PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Open enclosed spaces to outside atmosphere. Evacuate personnel to safe areas and do not approach spilled product. If possible, stop flow of product.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN - UP

Methods for Containment: Approach suspected leak areas with caution. Contain and absorb spill with inert material (sand, vermiculite, etc.) and place in a suitable container. Do not flush to sewer or allow material to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Cleaning-Up: Use self-contained breathing apparatus and wear chemically protective clothing, gloves and eye/face protection. Scoop up material and place in a disposal container. Provide adequate ventilation.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Handling: Avoid contact with skin and eyes. Do not swallow. Do not breathe vapor or mist. Good housekeeping is important to prevent accumulation of material. Avoid generating mist. Use only in well-ventilated areas. Handle and open container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking. (See section 8)

General Hygiene Advice: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage: Keep out of the reach of children. Do not store near acids. Do not store in reactive metal containers .Keep containers tightly closed in a dry, cool and well-ventilated place. Store in air-tight labeled containers. Keep containers closed when not in use. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Store in a temperature controlled area between 10° C (50° F) and 30° C (90° F). Use corrosion-resistant structural materials and lighting and ventilation systems in the storage area. (See section 10)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines Occupational Exposure Limits Ingredient **OSHA-PEL ACGIH-TLV** Not available. Not available. Benzyl alcohol Aminopropylmorpholine, 4-Not available. Not available. Benzene-1,3-dimethaneamine 0.1 mg/m^3 0.1 mg/m^3 (MXDA) Formaldehyde, polymer with Not available. Not available. 1,3, dimethylbenzene

Tetraethylenepentamine EXPOSURE CONTROLS

CONTROL PARAMETERS

Engineering Controls: Use adequate ventilation to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

INDIVIDUAL PROTECTIVE MEASURES

Personal Protective Equipment:

Eye/Face Protection: Wear approved face (face shield) protection with properly fitted splash-proof chemical safety goggles.

5 mg/m3 TWA

1 mg/m3



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Skin Protection:

Hand Protection: Wear suitable impervious Neoprene gloves, PVC disposable gloves, or Nitrile rubber gloves.

Body Protection: Wear suitable impervious protective clothing.

Respiratory Protection: A NIOSH approved Mist Respirator or filtering facepiece. Respirators should be selected by and used under the direction of a trained health and safety professional following OSHA and ANSI requirement standards.

General Health and Safety Measures: Handle according to established industrial hygiene and safety practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Color	Light Yellow to Amber
Odor	Amine-like
рН	> 11
Initial Boiling Point and Boiling Range	107°C (224°F)
Flash Point	$> 100^{\circ}$ C (212°F)
Evaporation Rate	Not Available
Flammability	Not Available
Lower Flammability/Explosive Limit	Not Available
Upper Flammability/Explosive Limit	Not Available
Vapor Pressure	1.30 mmHg at 21°C (70°F)
Vapor Density	Not Available
Relative Density/Specific Gravity	1.0 to 1.1
Solubility	Partial
Auto-Ignition Temperature	Not Available
Decomposition Temperature	Not Available
Oxidizing Properties	Not Available
Explosive Properties	Not Available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY	ľ
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Stable under normal conditions and conditions of normal use.

CHEMICAL STABILITY

Stable under normal storage conditions and conditions of normal use.

POSSIBILITY OF HAZARDOUS REACTIONS

Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.

CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.



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CONDITIONS TO AVOID

Avoid temperatures above 100°C (212°F). Toxic decomposition products may be formed during combustion.

INCOMPATIBLE MATERIALS

Sodium hypochlorite.

Organic (i.e. acetic acid, citric acid etc.) and Mineral acids.

Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.

Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.

CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.

Nitrous acid and other nitrosating agents.

Reactive metals (e.g. sodium, calcium, zinc etc.).

Materials reactive with hydroxyl compounds.

Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Nitric acid.

Ammonia.

Nitrogen oxides (NOx). Nitrogen oxide can react with water vapors to form corrosive nitric acid.

Carbon monoxide.

Carbon dioxide (CO2).

Nitrosamine.

Aldehydes.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

Likely Routes of Exposure: Skin contact, skin absorption, eye contact, inhalation, and ingestion.

Symptoms related to physical/chemical/toxicological characteristics:

Eye: Product vapor in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema can cause the perception of "blue haze" or "fog" around lights, although this is a temporary effect and has no known residual effect. Causes eye burns. May cause blindness. Severe eye irritation.

Skin: Causes skin burns. Contact with skin may result in redness, drying of the skin, dermatitis and defatting. If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Harmful in contact with skin.

Inhalation: Harmful if inhaled and may cause delayed lung injury. Inhalation of aerosol may cause irritation to the upper respiratory tract. Risk of serious damage to the lungs (by inhalation). May cause nose, throat, and lung irritation. Can cause severe eye, skin and respiratory tract burns. May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Ingestion: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. May cause central nervous system effects, such as headache, nausea, vomiting, abdominal pain, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure. Harmful if swallowed.

Acute Toxicity:

Ingredient	LC50	LD50
Benzyl alcohol	4 hr. Aerosol 4.178 mg/L,	Oral 1230 mg/kg, rat
Benzyi alcohor	rat	Dermal 2000 mg/kg, rat
Aminopropylmorpholine, 4-	Not available.	Oral 3560 mg/kg, rat Dermal 1230 mg/kg, rat
Benzene-1,3- dimethaneamine (MXDA)	Not available.	Oral 1230 mg/kg, rat



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Formaldehyde, polymer with 1,3, dimethylbenzene	Not available.	Oral 2000 mg/kg, rat
Tetraethylenepentamine	Not available.	Not available.

Calculated overall Chemical Acute Toxicity Values		
LC50 (inhalation)	LD50 (oral)	LD50 (dermal)
Not available.	Not available.	Not available.

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)*
Benzyl alcohol	Not listed.
Aminopropylmorpholine, 4-	Not listed.
Benzene-1,3-dimethaneamine (MXDA)	Not listed.
Formaldehyde, polymer with 1,3, dimethylbenzene	Not listed.
Tetraethylenepentamine	Not listed.

(* See Section 15)

DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT-TERM AND LONG-TERM EXPOSURE

Skin Corrosion/Irritation: Severe skin irritation. Corrosive to skin.

Serious Eye Damage/Irritation: Severe eye damage.

Respiratory Sensitization: Harmful if inhaled and may cause delayed lung injury. Can cause severe respiratory tract burns. May cause irritation to the upper respiratory tract with risk of serious damage to the lungs by inhalation. May cause nose, throat, and lung irritation.

Skin Sensitization: May cause an allergic skin reaction. **STOT-Single Exposure:** May cause respiratory irritation.

Chronic Health Effects:

Carcinogenicity: Not hazardous by WHMIS/OSHA criteria. Germ Cell Mutagenicity: Not hazardous by WHMIS/OSHA criteria.

Reproductive Toxicity:

Developmental: Based on available data, the classification criteria are not met.

Teratogenicity: Not hazardous by WHMIS/OSHA criteria. **Embryotoxicity:** Not hazardous by WHMIS/OSHA criteria.

Fertility: Based on available data, the classification criteria are not met.

STOT-Repeated Exposure: Not available.

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

Toxicologically Synergistic Materials: Not available.

Other Information: Not available.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY

Acute/Chronic Toxicity: May cause long-term adverse effects in the aquatic environment.

Toxicity to fish - Components

Benzyl alcohol LC50 (96 h): 10 mg/l Species: Bluegill sunfish (Lepomis macrochirus).



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Benzyl alcohol LC50 (96 h): 460 mg/l Species: Fathead minnow (Pimephales promelas).

Toxicity to algae - Components

Benzyl alcohol LC50 (72 h): 700 mg/l Species: Algae.

Toxicity to other organisms: No data available.

PERSISTENCE AND DEGRADABILITY

Not available.

BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Not available.

MOBILITY IN SOIL

Not available.

OTHER ADVERSE EFFECTS

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

Disposal Method: This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Other Disposal Recommendations: Not available

SECTION 14: TRANSPORT INFORMATION

UN NUMBER

UN2735

UN PROPER SHIPPING NAME

Amines, liquid, corrosive, n.o.s., (Amidoamine)

TRANSPORT HAZARD CLASS (ES)

Class or Division: 8 Packing group: II

ENVIRONMENTAL HAZARDS

Regulated as a Marine Pollutant, or meets the definition of toxic to the aquatic environment.

SPECIAL PRECAUTIONS

Do not handle until all safety precautions have been read and understood.

SECTION 15: REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATIONS SPECIFIC FOR THE CHEMICAL

SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

SARA Title III				
Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Benzyl alcohol	Not listed.	Not listed.	Not listed.	Not listed.



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Aminopropylmorpholine, 4-	Not listed.	Not listed.	Not listed.	Not listed.
Benzene-1,3-dimethaneamine (MXDA)	Not listed.	Not listed.	Not listed.	Not listed.
Formaldehyde, polymer with 1,3, dimethylbenzene	Not listed.	Not listed.	Not listed.	Not listed.
Tetraethylenepentamine	Not listed.	Not listed.	Not listed.	Not listed.

California Proposition 65: This product does not contain chemicals known to the state of California to cause cancer.

WHMIS Classification(s):

Class E – Corrosive Material

Class D2B - Skin/Eye Irritant, Sensitizer

TSCA:

Ingredient	USA TSCA LISTED
Benzyl alcohol	Yes.
Aminopropylmorpholine, 4-	Yes.
Benzene-1,3-	Yes.
dimethaneamine (MXDA)	Tes.
Formaldehyde, polymer	Yes.
with 1,3, dimethylbenzene	Tes.
Tetraethylenepentamine	Yes.

WHMIS Hazard Symbols:



NFPA National Fire Protection Association		
Health:	3	
Fire:	1	
Reactivity:	1	

HMIS-Hazardous Materials Identification System	
Health:	3*
Fire:	1
Reactivity:	1

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

* SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

CP65 California Proposition 65

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

- A1 Confirmed human carcinogen.
- A2 Suspected human carcinogen.
- A3 Animal carcinogen.
- A4 Not classifiable as a human carcinogen.
- A5 Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

- 1 The agent (mixture) is carcinogenic to humans.
- 2A The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
- 2B The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
- 3 The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
- 4 The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

- 1 Known to be carcinogens.
- 2 Reasonably anticipated to be carcinogens.

SECTION 16: OTHER INFORMATION



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Date of Preparation:	January 2, 2017
Version:	1701
Revision Date:	Initial Issue
Prepared by:	

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