

**Epoxy.com Product #680 POLYMER CONCRETE
MATERIAL SAFETY DATA SHEET**

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Epoxy.com Product #680 Liquid, Epoxy.com Product #680 Winter Liquid
Product Description: High Strength Acrylic-Based – Resin
Company: Epoxy Systems, Inc.
Address: 20774 West Pennsylvania Ave.
Dunnellon, FL 34431 USA
Emergency Telephone Number: 1-800-633-8253 (PERS)
Date Prepared or Revised: May 2013
For most current MSDS, please visit our website at www.epoxy.com

2. COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS

Chemical Name	Concentration (Weight %)	CAS Number	OSHA Hazard
Methyl Methacrylate	Proprietary	80-62-6	Yes

Composition Note: The remaining ingredients are designated as “trade secret”.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING! FLAMMABLE. MAY CAUSE EYE AND/OR SKIN IRRITATION. PROLONGED OR REPEATED EXPOSURE MAY CAUSE SKIN SENSITIZATION.

POTENTIAL HEALTH EFFECTS

Acute

Eye Contact: Exposure during handling may cause eye irritation, swelling, tearing, redness or cornea damage.

Skin Contact: Exposure during handling may cause moderate irritation. May cause skin sensitization, evidenced by rashes and hives.

Inhalation: Exposure to this product in excess of the applicable TVL or PEL may cause moderate irritation to the nose and respiratory tract. May cause Central Nervous System depression evidenced by headache, dizziness, and nausea.

Ingestion: Ingestion may cause irritation to the gastrointestinal tract. May cause Central Nervous System depression or other systemic effects.

Systemic Effects: Lungs, eyes, and skin.

Chronic: None known

Medical Conditions which May be Aggravated by Inhalation or Dermal Exposure:
Persons with eye, skin or respiratory disorders or unusual (hyper) sensitivity to chemicals may experience adverse reactions to this product.

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. If redness, burning, blurred vision, or swelling persists, **CONSULT A PHYSICIAN.**

Skin Contact: In case of contact, remove product and immediately wash affected area with plenty of soap and water for at least 5 minutes. Do not apply greases or ointments. Remove contaminated clothing. Clean contaminated clothing with soap and water before re-use. If redness, burning, or swelling persists, **CONSULT A PHYSICIAN.**

Ingestion: **DO NOT INDUCE VOMITING.** Never administer anything by mouth to an unconscious person. Rinse out mouth with water, then drink sips of water to remove taste from mouth. **CONSULT A PHYSICIAN.** Do not leave victim unattended. If vomiting occurs spontaneously, lay victim on the side and keep head lower than waist to prevent aspiration.

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Inhalation: If respiratory irritation or distress occurs, remove victim to fresh air. If breathing is difficult, give oxygen. If breathing stop, apply artificial respiration. **CONSULT A PHYSICIAN.**

Notes to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water fog, carbon dioxide or dry chemical, aqueous foam.

Fire And Explosion Hazards: Hazardous gases/vapors produced are methyl methacrylate, carbon monoxide, carbon dioxide, and smoke. Toxic and flammable vapors may be produced under combustion. Sealed containers exposed to elevated temperatures may rupture explosively due to polymerization. Vapors are heavier than air and may travel to ignition sources and flash back. Do not allow run-off from fire fighting to enter drains or water courses.

Fire Fighting Equipment and Procedures: Wear full protective clothing and self-contained breathing apparatus for fire fighting. Isolate fuel supply from fire. Use water spray to cool fire-exposed surfaces and containers.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use cautious judgment when cleaning up spill. Shut off leaks, if possible without personal risk. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Environmental Precautions: Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, and soils.

Clean-up Methods: **Small spills:** Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal. **Large spills:** Approach suspected leak areas with caution. Create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

Additional Information: Notify authorities if any exposures to the general public or environment occur or are likely to occur. Dispose in accordance with federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling (Personnel): To prevent skin and eyes contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing fumes. Handle in a well-ventilated work area.

Handling (Physical Aspects): Close container after each use. Ground drum and bond to container to prevent static spark. Keep away from heat, sparks and flames.

Storage: Keep away from: acids, oxidizing agents, heat, or flames. Store in a cool, dry, well-ventilated area in closed containers. Protect containers from physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)
Methyl Methacrylate	50 ppm	100 ppm

Engineering Controls: Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure techniques may be used to effectively minimize employee exposures.

Eye Protection: When engaged in activities where product could contact the eye, wear safety glasses with side shields, chemical splash goggles, or face shield.

Skin Protection: Skin contact should be minimized through use of Nitrile, neoprene or butyl gloves and suitable long sleeved clothing. Consideration must be given both to durability as well as permeation resistance.

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- Respirator Protection:** Avoid actions that cause dust exposure to occur. Use local or general ventilation to control exposures below applicable exposure limits. NIOSH or MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced. Respirator and/or filter cartridge selection should be based on American National Standards Institute (ANSI) Standards Z88.2 Practices for Respiratory Protection.
- Ventilation:** Use local exhaust or general dilution ventilation to control exposure within applicable limits.
- Work Practice Controls:** Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:
- (1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
 - (2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:	Liquid	Color:	Amber
Odor:	Strong acrid odor	Vapor Pressure:	N/E
Boiling Point:	N/E	Freezing Point:	N/E
Flash Point:	73°F (23°C) Closed Cup	Specific Gravity:	N/E
pH:	6.7	Solubility In Water:	N/E

10. STABILITY AND REACTIVITY

- Stability:** Stable under normal conditions. Unstable with heat.
- Conditions To Avoid:** Incompatible chemicals, heat and open flame.
- Materials To Avoid:** Oxidizing and reducing agents.
- Hazardous Decomposition Products:** Decomposes with heat. Combustion may produce carbon monoxide, carbon dioxide, aldehydes and smoke.
- Hazardous Polymerization:** Polymerization can occur when exposed to excessive heat.

11. TOXICOLOGICAL INFORMATION

- Acute Toxicity:**
- Oral (LD₅₀, Rat):** N/E
- Dermal (LD₅₀, Rabbit):** N/E
- Inhalation (LC₅₀, Rat):** N/E
- Chronic Health Hazard:** Prolonged and/or repeated exposure to high levels of methyl methacrylate may lead to kidney, lung, liver, and heart damage. Respirable crystalline silica (quartz) can cause silicosis (scarring) of the lungs. Exposure to silica dust is not likely from normal use of product. Repeated or prolonged exposure may cause allergic reaction and/or limited sensitization
- Carcinogenic Classification:** This product has ingredients that are listed as a carcinogen by one or more of the following NTP, OSHA, ACGIH or IARC.

12. ECOLOGICAL INFORMATION

- Ecotoxicity:** This product has not been evaluated.
- Chemical Fate Information:** No data found for product.

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13. DISPOSAL CONSIDERATIONS

Waste Disposal: This material is a hazardous waste by RCRA criteria (40CFR 261). Dispose of container and unused contents in accordance to local, state and federal regulations.

Container Disposal Method: Emptied container may contain product residue and should not be reused.

14. TRANSPORTATION INFORMATION

DOT/TDG Single Packaging:
UN Number: UN1866
Proper Shipping Name: Resin Solution
Hazard Class: 3
Packing Group: III
Label: 3 Flammable

IATA:
UN Number: UN1866
Proper Shipping Name: Resin Solution
Hazard Class: 3
Packing Group: III
Label: 3 Flammable

IMO:
UN Number: UN1866
Proper Shipping Name: Resin Solution
Hazard Class: 3
Packing Group: III
Flash Point: 23°C c.c
Label: 3 Flammable

Based on the **packaging size**, the supplier may apply the basic description

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS:

OSHA Hazard Communication Standard (29CFR 1910.1200):

This product is considered a "hazardous chemical" under this regulation.

Status Under Toxic Substances Control Act (TSCA) (40 CFR 710):

All chemical(s) comprising this product are either exempt or listed on the TSCA Inventory.

EPA Reportable Quantities:

Clean Water Act (40CFR Section 112): Not listed.

CERCLA Hazardous Substance (40CFR Part 302, Table 302.4):

Methyl Methacrylate CAS # 80-62-6. RQ: 1000 lbs.

EPCRA Extreme Hazardous Substance (40CFR Section 302 Part 355): Not listed.

Toxic Chemical Release Inventory (TRI) Reporting - (SARA Title III Section 313 (40 CFR 372)

Component(s) above 'de minimus' level): Methyl Methacrylate. CAS # 80-62-6.

SARA Title III Hazard Classes (40CFR 370 Sections 311 and 312):

Fire Hazard: Yes
Reactive Hazard: Yes
Release of Pressure: No
Acute Health Hazard: Yes
Chronic Health Hazard: Yes

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US STATE REGULATIONS:

California - "Safe Drinking Water and Toxic Enforcement Act" (Proposition 65):

This product contains chemicals that are known to the State of California to cause cancer and/or reproductive toxicity and other harm.

Component	Regulation	% In Blend (approx.)	Remark
Silica Quartz	ACGIH	< 45	Carcinogenic

INTERNATIONAL REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS:

Components of this product are listed on the Canadian DSL or NDSL inventories.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS:

Class B-4: Flammable

Class D-2B: Material causing other toxic effects



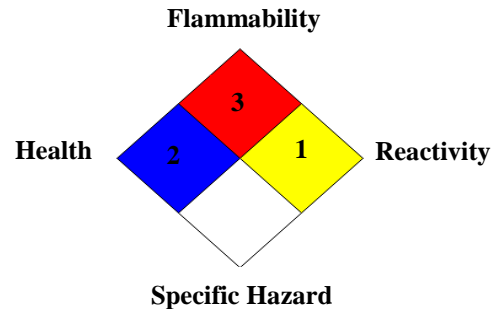
16. OTHER INFORMATION

HAZARD RATINGS:

Hazardous Material Information System (HMIS)

Health	2
Flammability	3
Physical Hazard	1
Personal Protection	B

National Fire Protection Association (NFPA)



HMIS/NFPA Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: Safety glasses, gloves

This Material Safety Data Sheet (MSDS) is prepared by Epoxy Systems, Inc. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this MSDS. This MSDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

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I. PRODUCT AND COMPANY IDENTIFICATION

Company: Epoxy Systems, Inc.
Address: 20774 West Pennsylvania Ave
Dunnellon, FL 34431

Product Name: Epoxy.com Product #680 POWDER
Product Description: Polymer Concrete

Emergency Telephone Number: 1-800-633-8253 (PERS)

Date Prepared or Revised: May 2013

For most current MSDS, please visit our website at www.epoxy.com

COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Names	CAS Numbers
Crystalline Silica	14808-60-7

The remaining ingredients are designated as "trade secret".

III. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

May cause serious eye and skin irritation or damage
When combined with water may cause moderate to severe alkali burns,
Contains material that may cause cancer from inhalation crystalline Silica (Quartz)

POTENTIAL HEALTH EFFECTS

ACUTE

Eye Contact: May cause eye irritation, swelling, tearing, redness or cornea damage
Skin Contact: Moderate irritation. May cause skin sensitization, evidenced by rashes and hives.
Inhalation: Moderate irritation to the nose and respiratory tract.
Ingestion: May cause irritation to the gastrointestinal tract.
Systemic Effects: Lungs, eyes, and skin.

IV. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. If redness, burning, blurred vision, or swelling persists, **CONSULT A PHYSICIAN.**

Skin Contact: Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. If redness, burning, or swelling persists, **CONSULT A PHYSICIAN.**

Ingestion: Rinse mouth immediately. DO NOT INDUCE VOMITING.

Inhalation: Remove patient to fresh air. If patient continues to experience difficulty breathing, **CONSULT A PHYSICIAN.**

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V. FIRE-FIGHTING MEASURES

Flashpoint: N/A

Flammability: Does not ignite

Suitable Extinguishing Media: Foam, water spray, dry powder, carbon dioxide

Unsuitable Extinguishing Media for Safety Reasons: Water jet

Additional Information: Product itself is non-combustible. Only the packaging materials can catch fire. The extinguishing agent normally used is sufficient.

Hazards during Fire-Fighting: Carbon monoxide, carbon dioxide, harmful vapors, evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire. Product is not combustible or explosive.

Protective Equipment for Fire-Fighting: Wear self-contained breathing apparatus

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use cautious judgment when cleaning up spill. Shut off leaks, if possible without personal risk. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Environmental Precautions: Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, and soils.

Clean-up Methods:

Small spills: Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

Large spills: Approach suspected leak areas with caution. Create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

Additional Information: Notify authorities if any exposures to the general public or environment occur or are likely to occur. Dispose in accordance with federal, state, and local regulations

Personal Precautions: Avoid dust formation. Avoid contact with skin and eyes. Use personal protective clothing. Handle in accordance with good building Materials hygiene and safety practice.

Environmental Precautions: Do not discharge into drains/surface waters/groundwater.

Cleanup: Avoid raising dust. For small amounts: Pick up with suitable appliance and dispose of. For large amounts: Pick up with suitable appliance and dispose of. Pack in tightly closed containers for disposal. For residues: Rinse with plenty of water.

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VII. STORAGE AND HANDLING

Handling General Advice: Avoid dust formation. Avoid inhalation of dusts. Avoid skin contact. Pour downwind and allow as little free fall as possible while emptying bags into equipment. Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection Against Fire and Explosion: No special precautions necessary.

Storage General Advice: Containers should be stored tightly sealed in a dry place.

Storage Incompatibility: General advice: Segregate from metals. Segregate from acids. Segregate from lye. Segregate from oxidants. Segregate from foods and animal feeds.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with Workplace Control Parameters

Crystalline Silica: OSHA TWA value 2.4 millions of particles per cubic foot of air Respirable:
The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.
TWA value 0.1 mg/m³ Respirable:
The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.
TWA value 0.3 mg/m³ Total Dust:
The value is calculated from specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.
ACGIH TWA value 0.025 mg/m³ Respirable fraction

Personal Protective Equipment

Respiratory Protection: Breathing protection if dusts are formed.

Hand Protection: Chemical resistant protective gloves, Manufacturer's directions for use should be observed because of great diversity of types.

Eye Protections: Tightly fitting safety goggles (chemical goggles).

Body Protections: Body protection must be chosen based on level of activity and exposure.

General Safety and Hygiene Measures: Avoid contact with skin, eyes and clothing. Avoid inhalation of dusts. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift, the skin should be cleaned and skin care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks)

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IX. PHYSICAL AND CHEMICAL PROPERTIES

Form: Powder	Freezing Point: N/E
Color: Tan	Flash Point: N/A
Odor: Characteristic	Specific Gravity: 2.65 @ 75°F
Vapor Pressure: N. A.	Solubility In Water: Insoluble
Melting Temperature: >1000°C	

X. REACTIVITY DATA

Stability:	Stable under normal storage conditions.
Condition to Avoid:	Avoid dust formation. Avoid humidity
Substance to Avoid:	Strong acids Strong bases, strong acids
Hazardous Reactions:	The product is stable if stored and handled as prescribed/indicated. Strong bases are formed on the addition of water.
Decomposition Products:	No hazardous decomposition products if stored and handled as prescribed/indicated.

XI. TOXICOLOGICAL PROPERTIES

Acute Oral (LD₅₀, Rat):	N/E
Acute Dermal (LD₅₀, Rabbit):	N/E
Acute Inhalation (LC₅₀, Rat):	N/E
Chronic Health Hazard:	
Irritation / Corrosion:	N/E
Repeated Dose Toxicity:	Information on: Crystalline Silica. Repeated inhalation exposure may affect certain organs. The substance may cause increase in lung mass and lung tissue changes after repeated inhalation. This product may contain greater than 0.1% crystalline silica. Repeated exposure to high concentrations results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing, scarring of the lungs, and repeated, non-specific chest illnesses.
Carcinogenicity:	Information on: Crystalline Silica: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. In long-term animal studies in which the substance was given by inhalation in high doses, a carcinogenic effect was observed. The substance and its compounds in the form of respirable dusts/aerosols classified by the German MAK commission as a category 1 carcinogen (substances that cause cancer to humans). A carcinogenic effect cannot safely be ruled out. The inhalation uptake of the alveolar fraction of the fine dust may cause damage to the lungs. The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen. The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen NTP listed carcinogen

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Experiences in Humans: Information on: Crystalline Silica May cause silicosis.
Other Information: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

XII. DISPOSAL CONSIDERATIONS

Waste Disposal of Substance: This material is not a hazardous waste by RCRA criteria (40 CFR 261). Dispose of in accordance with local authority regulations. Do not discharge into drains/surface waters/groundwater.
Container Disposal: Completely emptied packaging can be given for recycling.

XIII. TRANSPORTATION

DOT: Not Regulated For Transport
ICAO/IATA: Not classified as a dangerous good under transport regulations
IMO: Not classified as a dangerous good under transport regulations

REGULATORY INFORMATION

Country	Regulatory List
USA	TSCA

EPA SARA Title III Section 312 (40 CFR 370) Hazardous Classification: Acute/Chronic

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level:
None.

US. California "Safe Drinking Water and Toxic Enforcement Act" (Proposition 65): This product contains a chemicals that are known to the State of California to cause cancer

Component	Regulation	Concentration	Remarks
Silicon Dioxide	ACGIH	Trace	Carcinogenic

XV. OTHER INFORMATION

HMIS RATING

Health	Flammability	Physical Hazard
2	0	1

N/E – Not Established

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