

FIELD-APPLIED COMPOSITE SYSTEMS LLC 925 North Todd Avenue, Azusa, CA 91702 USA Phone (626) 633-0294 www.facs.llc

SAFETY DATA SHEET

5/20 Epoxy Stick

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 5/20 Epoxy Sticks

MFR'S NAME: Field-Applied Composite Systems LLC, 925 North Todd Avenue, Azusa CA 91702 EMERGENCY PHONE: 800.424.9300 (CHEMTREC) GENERAL INFORMATION: 626.633.0294 USE OF THE SUBSTANCE: Epoxy-based filler material used with AquaWrap[™] and PowerSleeve[™] products in the repair of pipelines or other structures.

SECTION 2: HAZARDS IDENTIFICATION

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

GHS Label Elements: Hazard Pictograms:



Signal Word:

Hazard Statements and GHS Classifications:	
H315, H319 Causes skin and eye irritation.	Category 2

H 317	May cause an allergic skin reaction.	Category 1

Precautionary Statements:

Prevention:	P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves, clothing, and eye/face protection.
Responses:	 P301+P312 IF SWALLOWED: Call POISON CENTER and/or doctor if you feel unwell. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313: If skin irritation or rash occurs, get medical attention. P362+P364: Take off contaminated clothing and wash it before reuse. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention. P391: Collect spillage.
Storage:	P403+P233: Store in a well-ventilated place. Keep containers tightly closed. P405: Store in a secured area.

Disposal: P501: Dispose of contents and containers in accordance with all local, regional and international regulations.

Other Hazards: No additional information is available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture.

Ingredient	% by WT	CAS #	67/548/EEC	Regulation (EC) 1272/2008 (CLP)
Bisphenol-A Epoxy Resin (Epichlorhydrin)	10-30%	25068-38-6 (US) 25085-99-8 (EC)	No Data Available.	No Data Available.
2,4,6-tris(dimethylaminomethyl) phenol	1-5%	90-72-2		
Crystalline silica-non-respirable	0.1-1%	14808-60-7		

Occupational Exposure Limits, if available, are listed in Section 8.

Other ingredients are considered trade secrets.

SECTION 4: FIRST AID MEASURES

Description of necessary first aid measures:

General	Get medical attention immediately for any person who is having trouble or not breathing, or any unconscious person. Provide oxygen or artificial respiration to a person if they have trouble breathing. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Place an unconscious person in a recovery position, maintain an open airway and loosen tight clothing.
Inhalation	Remove victim to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin Contact	Remove contaminated clothing and shoes. Wash the affected area with plenty of soap and water until no evidence of the chemical remains. Launder clothing and clean shoes before reuse. Get medical attention if symptoms persist.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Ingestion	Wash out mouth with water. Remove dentures, if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give water to drink unless victim feels nauseous. DO NOT induce vomiting. Get medical attention if symptoms persist or are severe.
	ptoms/Effects, Acute and Long –Term:
Potential Acute Heal Inhalation	th Effects: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed after exposure. Harmful if inhaled in high airborne concentrations.
Skin Contact	Causes skin irritation. May cause an allergic skin irritation.
Eye Contact	Causes serious eye irritation.
Ingestion	Irritating to mouth, throat and stomach if swallowed.

Overexposure Signs/Symptoms:

Inhalation No specific data.

Skin Contact Adverse symptoms may include the following: Irritation and/or Redness.

Eye Contact Adverse symptoms may include the following: Pain or Irritation. Watering. Redness.

Ingestion No specific data.

Indication of Immediate Medical Attention and/or Special Treatment needed:

Notes to Physician Treat symptomatically. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be under medical surveillance for up to 48 hours.

Specific Treatments No specific treatment(s).

See also Toxicological Information in Section 11.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media Dry chemicals, water spray, foam or carbon dioxide. Spray containers with water to keep cool and avoid rupture due to pressure buildup.

Unsuitable Media None known.

Specific Hazards No specific fire or explosion hazard. Material will not sustain combustion.

National Fire Protection Association (USA) Ratings:

Health: 2 Flammability: 1 Reactivity: 0

Hazardous Thermal Decomposition Products

Irritating or toxic substances may be emitted upon burning or decomposition. See **Section 10** for additional information.

Special Protective Actions for Fire Fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special Protective Equipment for Fire Fighters

Fire Fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in a positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Keep unauthorized persons away. Provide adequate ventilation and avoid breathing vapors. Put on appropriate personal protective equipment (see **Section 8**). If spilled in an enclosed area, ventilate area or use SCBA.

Environmental Precautions

Avoid dispersal of material and runoff from contact with soil, waterways, drains and/or sewers.

Methods and Materials for Containment and Cleaning Up (Small or Large Spill)

Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum spilled material with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling/Personal Hygiene

Use appropriate personal protective equipment as per **Section 8**. Keep in the original container or an approved alternative; keep containers tightly closed when not in use. Do not reuse containers.

Keep away from heat, sparks and open flame. Eating, drinking and/or smoking should be prohibited where this material is being used. Workers should remove contaminated clothing/protective equipment and wash hands and face and before entering eating areas and eating, drinking and/or smoking.

Conditions for Safe Storage, including any Incompatibilities

Store in sealed original containers, or approved alternatives, when not in use in a dry, well-ventilated area. Protect containers from direct sunlight in a dry, cool and well-ventilated area. Do not allow to freeze or exceed $35^{\circ}C$ (~ $100^{\circ}F$). Do not reuse containers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits

Ingredient	CAS#	Exposure Limits (ACGIH-TWA or ACGIH-STEL)
Bisphenol-A Epoxy Resin (Epichlorhydrin)	25068-38-6 (US) 25085-99-8 (EC)	Not Available or not applicable.
2,4,6-tris(dimethylaminomethyl) phenol	90-72-2	
Crystalline silica-non-respirable*	14808-60-7	

***Note:** Silica, if airborne and in respirable form, has exposure limits established by OSHA (US) and is suspected of causing cancer. As used in this product, silica is bound into the mixture and also represents an immaterial fraction.

Appropriate Engineering Controls

Good general ventilation should be sufficient to control worker exposure to any airborne contaminants. If working in enclosed spaces, provide additional local ventilation.

Exposure controls

Respiratory Protection

If necessary, a properly-fitted vapor mask/respirator (organic vapor respirator) or SCBA should be used.

Hand Protection

Chemical-resistant or impervious gloves (such as nitrile rubber of .35mm thickness or similar) should be worn when handling this material. Contaminated gloves should be disposed of properly.

Body Protection

Chemically resistant long-sleeved shirts and long pants or lab coats are recommended. Contaminated clothing should be washed separately from other clothes before reuse. Footwear appropriate for the work being performed should be worn and cleaned carefully if contaminated, before reuse. Heavily soiled clothing or shoes should be discarded.

Eye/Face Protection

Safety eyewear and face shields appropriate for the work being performed should be used. Ordinarily, this means a minimum of safety eyewear or splash goggles.

Physical State:	Solid	Color:	Beige
Odor:	Pungent (sulphur)	Odor Threshold:	N/A

рН	N/A	Melting Point:	N/A
Boiling Point:	N/A	Flash Point:	>93°C (~200°F)
Relative Density	1.95	Viscosity:	N/A
Auto-Ignition Temp.	N/A	Decomposition Temp.	N/A
Solubility:	Readily soluble in acetone or methanol. Not soluble in water.		
VOC Content:	N/A-none.		

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	No specific data is available.
Chemical Stability:	This product is stable under normal conditions.
Possibility of Hazardous Reactions:	No specific data is available.
Conditions to Avoid:	No specific data is available.
Incompatible Materials:	No specific data is available.

Hazardous Decomposition Products: Thermal decomposition may produce smoke, oxides of carbon, and other products of incomplete combustion.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity			
Product/Ingredient	LC ₅₀ Inhalation	LD ₅₀ Oral (Rat)	LD ₅₀ Dermal (Rat)
2,4,6-tris(dimethylaminomethyl) phenol	N/A	1,200mg/kg	>2,000 mg/kg

Estimated Acute Toxicity Va	ilues: Oral: 2,084	mg/kg Dermal: 2	,223 mg/kg
Skin Corrosion/Irritation:	Skin Irritatio	n-no category determine	ed.
Serious Eye Damage/Irrit	ation: Eye Irritation	no category determine	ed.
Respiratory or Skin Sensitiz	ation: No specific d	ata.	
Mutagenicity: No specific data. Carcinogenicity: No specific data.			
Reproductive Toxicity:	No specific data.	Teratogenicity:	No specific data.
Aspiration Hazard: No specific data.			
Specific Target Organ Toxicity (Single and Repeated Exposure): No specific data.			

Information on the Likely Routes of Exposure: Eyes, skin, inhalation and ingestion.

Potential Acute Health Effects and Related Symptoms:

See Section 4.

Delayed, immediate and chronic effects from short and long term exposure:

Some persons may become sensitized after chronic exposure and may exhibit moderate to severe allergic reactions when exposed.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity, Persistence and Degradability: No specific data is available as to toxicity and degradability.

Bioaccumulative Potential:

Ingredient	LogPow	BCF	Potential
Bisphenol-A Epoxy Resin (epichlorhydrin)	2.64-3.78	31	Low
2,4,6-tris(dimethylaminomethyl) phenol	0.219	N/A	Low

Mobility in Soil (soil/water partition coefficient-K_{oc}):

No specific information is available.

Other Adverse Effects: No known significant effects or critical hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of unused material and containers in accordance with national and local regulations. Ensure the use of properly authorized waste management companies, where appropriate. See **Section 8** for recommendations on the use of personal protective equipment.

SECTION 14: TRANSPORTATION INFORMATION

UN No's: No numbers have been assigned. Material is not regulated for shipment for DOT, IATA, TDG, IMDG or ICAO.

DOT/TDG Proper Shipping Name:

None assigned.

Hazard Classes: Not regulated.

Hazard Labels: None assigned.

Pack Groups: Not assigned.

Environmental Hazards: Marine Pollutant: No

Label for Conveyance: None assigned.

SECTION 15: REGULATORY INFORMATION

Hazardous Substance (USA): No.

International and US Inventory Lists

Canada Inventory (DSL)		EU-ELINCS	Not listed.*
Canada Inventory (NDSL)		EU-EINECS	Listed or Exempt
US Toxic Substances	All components listed or	SARA 311/312:	Immediate acute
Control Act (TSCA)	exempt.		health hazard
Australia Inventory			
(AICS)			
China Inventory (IECSC)			
SARA 313	Zinc Sulfide (CAS# 1314-98-3) is present and should be reported on Form R if required.		
MA, NJ and PA	The following components are listed in these states: Soapstone, Silica, Mineral		
	wool fiber, Quartz and/or Zinc compounds.		
CA Prop 65	Silica, if airborne and respirable, is suspected to cause cancer. Silica in this		
	product is bound in a matrix and is not listed. Talc containing asbestiform fibers		
	is suspected of causing cancer. Talc in this product does not contain		
	asbestiform fibers and is not listed.		

*Note: There is no listing on the public inventory, no information is available or the component has not been reviewed.

Substances of Very High Concern: None of the components are listed.

Other Information: No other information is available.

SECTION 16: OTHER INFORMATION

ABBREVIATIONS:

ACGIH: American Conference of Governmental Industrial Hygienists ADR/RID: European dangerous goods transport, road and rail, regulations CAS: Chemical Abstract Service Registry DOT: Department of Transportation (U.S.) GHS: Globally Harmonized System of Classification and Labeling of Chemicals IATA: International Air Transport Association ICAO: International Civil Aviation Organization IMDG: International Maritime Dangerous Goods code **OEL: Occupational Exposure Limits** OSHA: Occupational Safety and Health Administration (U.S.) PEL: Permissible Exposure Limit **RQ:** Reportable Quantity SDS: Safety Data Sheet STEL: Short Term Exposure Limit (15 minute Time Weighted Average) TDG: Canadian Transportation of Dangerous Goods Act and Regulations **UN: United Nations U.S.: United States** N/A: Not available or not applicable.

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Notice:

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