

SAFETY DATA SHEET TS, Part A

Texrite Epoxyplus

As of date: 2020

Section 1 Product Description

Product Name: Epoxyplus TS, Part A
Recommended Use: Epoxy bonding mortar
Synonyms: Epoxy Hardener, Fatty Amidoamine Resin

Manufacturer: Texas Cement Products, dba Texrite
4000 Pinemont, Houston, Texas 77018, USA
713-682-8411 www.texrite.com

General Phone Number: 713-682-8411 (8am-3pm, CST, M-F)
General Fax Number: 713-688-2488

Section 2 Hazards Identification

Classification of the chemical in accordance with paragraph (d) of 1910.1200;



Signal Word: Danger.

GHS Class: Acute Toxicity Dermal, Category 4.
Eye Irritant, Category 1.
Skin Corrosive, Category 1B.
Skin Sensitizer, Category 1B.

Hazard Statements: H312 - Harmful in contact with skin.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction

Precautionary Statements: P261 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the work place.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Remove /Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P310 - Call a POISON CENTER or doctor/physician.
P333+P313 - If skin irritation or a rash occurs: Get medical advice /attention.
P337+P313 - If eye irritation persists get medical advice /attention.
P362+P364 - Take off contaminated clothing and wash before use.
P391 - Collect spillage.

P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Emergency Overview: Irritant. Corrosive. Avoid contact with skin, eyes and clothing. Avoid contact with the skin and the eyes.

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Eye:	Causes eye irritation.
Skin:	Causes skin irritation.
Inhalation:	Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. May cause vomiting.
Chronic Health Effects:	Prolonged or repeated skin contact may cause sensitization, with itching, swelling, or rashes on later exposure.

Target Organs: Eyes. Skin. Respiratory system. Digestive system.

Aggravation of Pre-Existing Conditions: None generally recognized.

Section 3 Composition Information and Ingredients

<u>Chemical Name</u>	<u>CAS#</u>	<u>Ingredient Percent</u>	<u>EC Num.</u>
Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids and triethylenetetramine	68082-29-1	95-100 by weight	500-191-5
Amines, polyethylenepoly-	68131-73-7	1-5 by weight	268-626-9

Section 4 First-Aid Measures

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eye lids with fingers. Remove contacts if present and easy to do. Continue rinsing. Get medical attention, if irritation or symptoms of overexposure persists.
Skin Contact:	Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
Note to Physicians:	Treat symptomatically.

Section 5 Fire Fighting Measures

Flash Point:	>200°F (93°C)
Flash Point Method:	Pensky-Marten Closed Cup (PMCC)
Lower Flammable /Explosive Limit:	Not determined.
Upper Flammable /Explosive Limit:	Not determined.

Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
<u>NFPA Ratings:</u>	
NFPA Health:	3
NFPA Flammability:	1
NFPA Reactivity:	0

Section 6 Accidental Release Measures

Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Use proper personal protective equipment as listed in section 8.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Methods for containment:	Contain spills with an inert absorbent material such as soil or sand. Prevent from spreading by covering, diking or other means. Provide ventilation.
Methods for cleanup:	Clean up spills immediately observing precautions in the protective equipment section. Place into a suitable container for disposal. Provide ventilation. After removal, flush spill area with soap and water to remove trace residue.

Section 7 Handling and Storage

Handling:	Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, and incompatible substances. Keep container tightly closed when not in use.
Hygiene Practices:	Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

Section 8 Exposure Controls / Personal Protection

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye /Face Protection: 1910.133, OSHA	Wear appropriate protective glasses or splash goggles as described by 29 CFR eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Chemical-resistant gloves and chemical goggles, face -shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister maybe permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an eye wash facility and a safety shower.

Section 9 Physical and Chemical Properties

Physical State:	Liquid.
Color:	Amber.
Odor:	Amine odor.
Odor Threshold:	Not determined.
Boiling Point:	205 °C (> 400 °F) (Decomposes.)
Melting Point:	Not determined.
Density:	Not determined.
Specific Gravity:	0.95
Solubility:	Negligible to slightly soluble in water
Vapor Density:	Not available.
Vapor Pressure :	< 1 mm Hg @ 20°C (68 °F)
Percent Volatile:	Not determined.
Evaporation Rate:	Not determined.
pH:	Not determined.
Viscosity:	Not available.
Coefficient of Water/Oil Distribution:	Not determined.
Flash Point:	>200°F (93°C)
Flash Point Method:	Pensky-Marten Closed Cup (PMCC)
VOC Content:	Not determined.

Section 10 Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures.
Reactivity:	No information.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Extreme heats, sparks and open flame. Incompatible materials, oxidizers and oxidizing conditions.
Incompatible Materials:	Epoxy resins under uncontrolled conditions. Special
Decomposition Products:	Nitrogen oxides when burned.

Section 11 Toxicological Information

Notes:	No information.
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Section 12 Ecological Information

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

Section 13 Disposal Considerations

Waste Disposal:	Consult with the US EPA Guide lines listed in 40CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guide lines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.
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Section 14 Transport Information

DOT Shipping Name: Amines or polyamines, liquid, corrosive, n.o.s. (contains Polyethylenepolyamines)
 DOT UN Number: UN 2735
 DOT Hazard Class: 8
 DOT Packing Group: III
 DOT Pictograms:



IATA Shipping Name: Amines or polyamines, liquid, corrosive, n.o.s. (contains Polyethylenepolyamines)
 IATA UN Number: UN 2735
 IATA Hazard Class: 8
 IATA Packing Group: III

IMDG UN Number: UN 2735
 IMDG Shipping Name: Amines or polyamines, liquid, corrosive, n.o.s. (contains Polyethylenepolyamines)
 IMDG Hazard Class: 8
 IMDG Packing Group: III

Marine Pollutant: Yes

Section 15 Regulatory Information

Section 311/312 Hazard Categories: Acute Health. Delayed Health.

Canada DSL: Listed

Canada WHMIS: WHMIS Hazard Class(es):
 Controlled - Class: D2B Toxic
 Controlled - Class E - Corrosive material
 This product has been classified in accordance with the hazard criteria of the Controlled Products. Regulations and the MSDS contain all of the information required by the Controlled Products Regulations.

Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids and triethylenetetramine :

TSC A Inventory Status: Listed
 Canada DSL: Listed
 EC Number: 500-191-5

Amines, polyethylenepoly- :

TSC A Inventory Status: Listed
 Canada DSL: Listed
 EC Number: 268-626-9

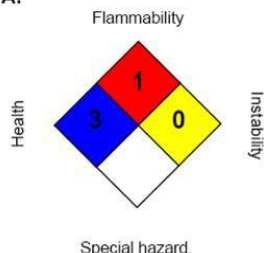
WHMIS Pictograms:



Section 16 Other Information

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

HMIS Ratings:

HMIS Health Hazard: 3
HMIS Fire Hazard: 1
HMIS Reactivity: 0
HMIS Personal Protection: X

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Texrite makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

IARC -International Agency for Research on Cancer
N/A -Not Available
NTP -National Toxicology Program
OSHA -Occupational Safety and Health Administration
PEL -Permissible Exposure Limit
ppm -Parts per million

RCRA -Resource Conservation and Recovery Act
SARA -Superfund Amendments and Reauthorization
TLV -Threshold Limit Value
TSCA -Toxic Substances Control Act
IDLH -Immediately dangerous to life and health

Glossary

ACGIH -American Conference of Governmental Industrial Hygienists
CAS -Chemical Abstract Service Number
CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act
DOT -U.S. Department of Transportation

SAFETY DATA SHEET TS, Part B

Texrite Epoxyplus

As of date: 2020

Section 1 Product Description

Product Name: Epoxyplus TS, Part B
Recommended Use: Epoxy bonding mortar
Synonyms: Epoxy Resin

Manufacturer:
Texas Cement Products, dba Texrite
4000 Pinemont, Houston, Texas 77018, USA
713-682-8411 www.texrite.com
General Phone Number: 713-682-8411 (8am-3pm, CST, M-F)
General Fax Number: 713-688-2488

Section 2 Hazards Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;



Signal Word: WARNING!

GHS Class: Skin Irritant, Category 2.
Skin Sensitizer, Category 1.
Eye Irritant, Category 2.
Specific Target Organ Toxicity, Single Exposure, Category 3.
Acute Aquatic Toxicity, Category 2.
Chronic Aquatic Toxicity, Category 2.

Hazard Statements: H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H411 - Toxic to aquatic life long lasting.

Precautionary Statements: P261 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P271 - Use outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the work place.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P333+P313 - If skin irritation or a rash occurs: Get medical advice /attention.
P337+P313 - If eye irritation persists get medical advice /attention.

P362+P364 - Take off contaminated clothing and wash before use.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Emergency Overview: Irritant.

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Eye:	Causes eye irritation.
Skin:	Causes skin irritation.
Inhalation:	Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. May cause vomiting.
Chronic Health Effects:	Prolonged or repeated skin contact may cause irritation or allergic skin sensitization reaction.

Target Organs: Eyes. Skin. Respiratory system. Digestive system.

Aggravation of Pre-Existing Conditions: May aggravate pre-existing respiratory disorder, allergy, eczema, or skin conditions.

Section 3 Composition Information and Ingredients

Chemical Name	CAS#	Ingredient Percent	EC Num.
Phenol,4,4'-(1-methylethylidene) bis, polymer with 2-(chloromethyl) oxirane	25068-38-6	70- 85 by weight	500-033-5
Aliphatic Glycidyl Ether	68609-97-2	15-25 by weight	271-846-8

Section 4 First-Aid Measures

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eye lids with fingers. Remove contacts if present and easy to do. Continue rinsing. Get medical attention, if irritation or symptoms of overexposure persists.
Skin Contact:	Take off contaminated clothing and shoes immediately. Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
Note to Physicians:	Treat symptomatically.

Section 5 Fire Fighting Measures

Flash Point:	>200°F (93°C)
Flash Point Method:	Pensky-Marten Closed Cup (PMC C)

Lower Flammable /Explosive Limit:	Not applicable.
Upper Flammable /Explosive Limit:	Not applicable.
Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
<u>NFPA Ratings:</u>	
NFPA Health:	2
NFPA Flammability:	1
NFPA Reactivity:	0

Section 6 Accidental Release Measures

Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Use proper personal protective equipment as listed in section 8.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Methods for containment:	Contain spills with an inert absorbent material such as soil or sand. Prevent from spreading by covering, diking or other means. Provide ventilation.
Methods for cleanup:	Clean up spills immediately observing precautions in the protective equipment section. Place into a suitable container for disposal. Provide ventilation. After removal, flush spill area with soap and water to remove trace residue.

Section 7 Handling and Storage

Handling:	Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, and incompatible substances. Keep container tightly closed when not in use.
Hygiene Practices:	Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

Section 8 Exposure Controls / Personal Protection

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye /Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA
Skin Protection Description:	Chemical-resistant gloves and chemical goggles, face -shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister maybe permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective:

Facilities storing or utilizing this material should be equipped with an eye wash facility and a safety shower.

Section 9 Physical and Chemical Properties

Physical State:	Viscous liquid.
Color:	Clear amber.
Odor:	Slight odor.
Odor Threshold:	Not determined.
Boiling Point:	200°C (> 392°F)
Melting Point:	Not determined.
Density:	Not determined.
Specific Gravity:	1.10
Solubility:	Negligible soluble in water
Vapor Density:	Heavier than air.
Vapor Pressure:	0.03 mbar @ 77°C (170.6 °F)
Percent Volatile:	Not determined.
Evaporation Rate:	Not determined.
pH:	Not determined.
Viscosity:	Not determined.
Coefficient of Water/Oil	
Distribution:	Not determined.
Flash Point:	>200°F (93°C)
Flash Point Method:	Pensky-Marten Closed Cup (PMCC)
VOC Content:	Not determined.

Section 10 Stability and Reactivity

Chemical Stability:	Stable under normal conditions.
Reactivity:	Exothermic reactions including polymerization may occur in contact with amines, strong acids, bases, alcohols, strong oxidizing agents and excessive heat.
Hazardous Polymerization:	None under normal processing
Conditions to Avoid:	Heats, flame, incompatible materials, and freezing or temperatures below 0°C (32°F).
Incompatible Materials:	Strong oxidizing agents, strong acids, strong bases. Avoid contact with amines.

Section 11 Toxicological Information

Phenol,4,4'-(1-

thylethylidene) bis, polymer with 2-(chloromethyl) oxirane:

Eye:

Administration into the eye –Rabbit Standard Draize test: 100 mg [Mild]
Administration into the eye –Rabbit Standard Draize test: 20 mg/24H [Moderate]
Administration into the eye –Rabbit Standard Draize test: 100 mg [Mild]
Administration into the eye –Rabbit Standard Draize test: 5 mg/24H [Severe]
Administration into the eye –Rabbit Standard Draize test: 100 mg [Mild] (RTECS)

Skin:

Administration into the skin - Rabbit LD50 - Lethal dose. 50 percent kill: >20 mL/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Administration into the skin - Rat LD50 -Lethal dose, 50 percent kill: >1200 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Ingestion: Oral - Rat LD50 - Lethal dose, 50 percent kill: 10700 uL/kg [Details of toxic effects not reported other than lethal dose value]
 Oral - Rat LD50 - Lethal dose, 50 percent kill: 13600 mg/kg [Behavioral-Somnolence (general depressed activity) Lungs, Thorax, or Respiration-Dyspnea, Nutritional and Gross Metabolic-Weight loss or decreased weight gain]
 Oral - Rat LD50 - Lethal dose, 50 percent kill: 13.6gm/kg [Details of toxic effects not reported other than lethal dose value]
 Oral - Rat LD50 - Lethal dose, 50 percent kill: 11.4 gm/kg [Details of toxic effects not reported other than lethal dose value]
 Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Behavioral-Somnolence (general depressed activity) Lungs, Thorax, or Respiration-Dyspnea, Nutritional and Gross Metabolic-Weight loss or decreased weight gain]
 Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

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Aliphatic Glycidyl Oral - Rat LD50 - Lethal dose, 50 percent kill: 17100 mg/kg [Details of toxic effects not reported other than lethal dose value]
 Ingestion: Oral - Rat LD50 - Lethal dose, 50 percent kill: 19.2 mL/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Section 12 Ecological Information

Ecotoxicity: No ecotoxicity data was found for the product.
 Environmental Fate: No environmental information found for this product.

Section 13 Disposal Considerations

Waste Disposal: Consult with the US EPA Guide lines listed in 40CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guide lines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

Section 14 Transport Information

DOT Shipping Name: Not regulated as hazardous material for transportation
 DOT UN Number: Not regulated as hazardous material for transportation

IATA Shipping Name: Environmentally Hazardous Substance, Liquid, n.o.s. (Epoxy Resin)
 IATA UN Number: UN 3082
 IATA Hazard Class: 9
 IATA Packing Group: III

IMDG UN Number: UN 3082
 IMDG Shipping Name: Environmentally Hazardous Substance, Liquid, n.o.s. (Epoxy Resin)
 IMDG Hazard Class: 9
 IMDG Packing Group: III

Marine Pollutant: Yes

Section 15 Regulatory Information

Section 311/312 Hazard Categories: Acute Health. Delayed Health.

Canada WHMIS: WHMIS Hazard Class(es):
Controlled - Class: D2B Toxic
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contain all of the information required by the Controlled Products Regulations.

Phenol,4,4'-(1-methylethylidene) bis, polymer with 2-(chloromethyl) oxirane:

TSC A Inventory Status: Listed
Canada DSL: Listed
EC Number: 500-033-5

Aliphatic Glycidyl Ether:

TSC A Inventory Status: Listed
Canada DSL: Listed
EC Number: 271-846-8

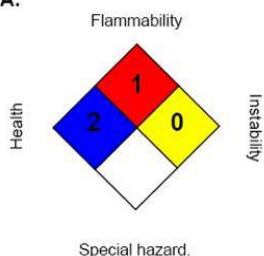
WHMIS Pictograms:



Section 16 Other Information

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

HMIS Ratings:
HMIS Health Hazard: 2
HMIS Fire Hazard: 1
HMIS Reactivity: 0
HMIS Personal Protection: X

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Texrite makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH -American Conference of Governmental
Industrial Hygienists

CAS -Chemical Abstract Service Number

CERCLA -Comprehensive Environmental Response,
Compensation, and Liability Act

DOT -U.S. Department of Transportation

IARC -International Agency for Research on
Cancer

N/A -Not Available

NTP -National Toxicology Program

OSHA -Occupational Safety and Health
Administration

PEL -Permissible Exposure Limit

ppm -Parts per million

RCRA -Resource Conservation and Recovery Act

SARA -Superfund Amendments and
Reauthorization

TLV -Threshold Limit Value

TSCA -Toxic Substances Control Act

IDLH -Immediately dangerous to life and
health

SAFETY DATA SHEET TS, Part C

Texrite Epoxyplus

As of date: 2020

Section 1 Product Description

Product Name: Epoxyplus TS, Part C
Recommended Use: Epoxy bonding mortar
Synonyms: Crystalline Silica (quartz), silicon dioxide (SiO₂), sand, silica sand, colored quartz filler

Manufacturer: Texas Cement Products, dba Texrite
4000 Pinemont, Houston, Texas 77018, USA
713-682-8411 www.texrite.com

General Phone Number: 713-682-8411 (8am-3pm, CST, M-F)
General Fax Number: 713-688-2488

Section 2 Hazards Identification

Classification of the chemical in accordance with paragraph (d) of 1910.1200;



Signal Word: DANGER

GHS Class: Carcinogen, Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Hazard Statements: May cause cancer by inhalation. Causes damage to lungs through prolonged or repeated exposure by inhalation.

Response: If exposed or concerned: Get medical advice.

Disposal: Dispose of contents/containers in accordance with local regulation

Precautionary Statements: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Do not eat, drink or smoke when using this product. Wear protective gloves and safety glasses or goggles. In case of inadequate ventilation wear respiratory protection.

Emergency Overview: Irritant.

Route of Exposure: Eyes. Inhalation.

Potential Health Effects:

Eye:	Causes eye irritation.
Skin:	First aid is not required.
Inhalation:	Dust may cause respiratory tract irritation.
Ingestion:	First aid is not required.

Chronic Health Effects:	May cause cancer by inhalation. Causes damage to lungs through prolonged or repeated exposure by inhalation
Target Organs:	Respiratory system.
Aggravation of Pre-Existing Conditions:	May aggravate pre-existing respiratory disorder, allergy, eczema, or skin conditions.

Section 3 Composition Information and Ingredients

Chemical Name	CAS#	Ingredient Percent	EC Num.
Crystalline Silica (quartz)	14808-60-7	95-100 by weight	

Section 4 First-Aid Measures

Eye Contact:	Wash immediately with plenty of water. Do not rub eyes. Ensure adequate flushing of the eyes by separating the eye lids with fingers. Remove contacts if present and easy to do. Continue rinsing. Get medical attention, if irritation or symptoms persists.
Skin Contact:	First aid is not required.
Inhalation:	First aid is not generally required. If irritation develops from breathing dust, move the person from the overexposure and seek medical attention if needed.
Ingestion:	First aid is not required.
Note to Physicians:	<p>Most important symptoms/effects, acute and delayed: Particulates may cause abrasive eye injury. Inhalation of dust may cause respiratory tract irritation. Symptoms of exposure may include cough, sore throat, nasal congestion, sneezing, wheezing and shortness of breath. Prolonged inhalation of respirable crystalline silica above certain concentrations may cause lung diseases, including silicosis and lung cancer.</p> <p>Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention is not required.</p>

Section 5 Fire Fighting Measures

Flash Point:	Not flammable, combustible or explosive.
Flash Point Method:	Not flammable, combustible or explosive.
Lower Flammable/Explosive Limit:	Not flammable, combustible or explosive.
Upper Flammable/Explosive Limit:	Not flammable, combustible or explosive.
Extinguishing Media:	Use extinguishing media appropriate for surrounding fire.
Protective Equipment:	None required.

NFPA Ratings:

NFPA Health:	0
NFPA Flammability:	0
NFPA Reactivity:	0

Section 6 Accidental Release Measures

Personnel Precautions:

Wear appropriate protective clothing and respiratory protection (see Section 8). Avoid generating airborne dust during clean-up.

Environmental Precautions:

No specific precautions. Report releases to regulatory authorities if required by local, state and federal regulations.

Methods for containment:

Use water spraying/flushing or ventilated or HEPA filtered vacuum cleaning system, or wet before sweeping. Avoid dry sweeping. Do not use compressed air to clean spilled sand or ground silica.

Methods for cleanup:

Avoid dry sweeping. Do not use compressed air to clean spilled sand or ground silica. Use water spraying/flushing or ventilated or HEPA filtered vacuum cleaning system, or wet before sweeping. Dispose of in closed containers.

Section 7 Handling and Storage

DO NOT USE SAND OR CRYSTALLINE (QUARTZ) SILICA FOR SAND BLASTING

Handling:

Avoid generating dust. Do not breathe dust. Do not rely on your sight to determine if dust is in the air. Respirable crystalline silica dust may be in the air without a visible dust cloud. Use adequate exhaust ventilation and dust collection to reduce respirable crystalline silica dust levels to below the permissible exposure limit ("PEL").

Storage:

Use dust collection to trap dust produced during loading and unloading. Keep containers closed and store bags to avoid accidental tearing, breaking, or bursting.

Hygiene Practices:

Maintain and test ventilation and dust collection equipment. Use all available work practices to control dust exposures, such as water sprays. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Keep airborne dust concentrations below permissible exposure limits. Where necessary to reduce exposures below the PEL or other applicable limit (if lower than the PEL), wear a respirator approved for silica containing dust when using, handling, storing or disposing of this product or the respirator. Do not alter a tight-fitting respirator with facial hair such as a beard or mustache that prevents a good face to face piece seal between the respirator and face. Maintain, clean, and fit test respirators in accordance with applicable standards. Wash or vacuum clothing that has become dusty. Participate in training, exposure monitoring, and health surveillance programs to monitor any potential adverse health effects that may be caused by breathing respirable crystalline silica. The OSHA Hazard Communication Standard, 29 CFR Sections 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59 and 1928.21, and state and local worker or community "right-to-know" laws and regulations should be strictly followed.

Section 8 Exposure Controls / Personal Protection

Component	OSHA PEL	ACGIH TLV	NIOSH REL
Crystalline Silica (quartz)	10 mg/m ³ %SiO ₂ + 2 TWA (respirable dust)	0.025 mg/m ³ TWA (respirable dust)	0.05 mg/m ³ TWA (respirable dust)
	30 mg/m ³ %SiO ₂ + 2 TWA (total dust)		

If crystalline silica (quartz) is heated to more than 870°C, quartz can change to a form of crystalline silica known as tridymite; if crystalline silica (quartz) is heated to more than 1470°C, quartz can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as tridymite or cristobalite is one-half of the OSHA PEL

for crystalline silica (quartz).

- Engineering Controls:** Use adequate general or local exhaust ventilation to maintain concentrations in the workplace below the applicable exposure limits listed above.
- Eye /Face Protection:** Safety glasses with side shields or goggles recommended if eye contact is anticipated.
- Skin Protection Description:** Maintain good industrial hygiene. Protection recommended for workers suffering from dermatitis or sensitive skin. Gloves and Safety glasses with side shields or goggles, face - shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
- Respiratory Protection:** If it is not possible to reduce airborne exposure levels to below the OSHA PEL or other applicable limit with ventilation, use the table below to assist you in selecting respirators that will reduce personal exposures to below the OSHA PEL. This table is part of the NIOSH Respirator Selection Logic, 2004, Chapter III, Table 1, "Particulate Respirators". The full document can be found at <http://www.cdc.gov/niosh/topics/respirators/>; the user of this SDS is directed to that site for information concerning respirator selection and use. The assigned protection factor (APF) is the maximum anticipated level of protection provided by each type of respirator worn in accordance with an adequate respiratory protection program. For example, an APF of 10 means that the respirator should reduce the airborne concentration of a particulate by a factor of 10, so that if the workplace concentration of a particulate was 150 ug/m³, then a respirator with an APF of 10 should reduce the concentration of particulate to 15 ug/m³. In using chemical cartridges, consideration must be given to selection of the correct cartridge for the chemical exposure and the maximum use concentration for the cartridge. In additional a cartridge change-out schedule must be developed based on the concentrations in the workplace.

Assigned protection factor ¹	Type of Respirator (Use only NIOSH-certified respirators)
10	Any air-purifying elastomeric half-mask respirator equipped with appropriate type of particulate filter. ² Appropriate filtering facepiece respirator. ^{2,3} Any air-purifying full facepiece respirator equipped with appropriate type of particulate filter. ² Any negative pressure (demand) supplied-air respirator equipped with a half-mask.
25	Any powered air-purifying respirator equipped with a hood or helmet and a high efficiency (HEPA) filter. Any continuous flow supplied-air respirator equipped with a hood or helmet.
50	Any air-purifying full facepiece respirator equipped with N-100, R-100, or P-100 filter(s). Any powered air-purifying respirator equipped with a tight-fitting facepiece (half or full facepiece) and a high-efficiency filter. Any negative pressure (demand) supplied-air respirator equipped with a full facepiece. Any continuous flow supplied-air respirator equipped with a tight-fitting facepiece (half or full facepiece). Any negative pressure (demand) self-contained respirator equipped with a full facepiece.
1,000	Pressure-demand supplied-air respirator equipped with a half-mask.
<p>1. The protection offered by a given respirator is contingent upon (1) the respirator user adhering to complete program requirements (such as the ones required by OSHA in 29CFR1910.134), (2) the use of NIOSH-certified respirators in their approved configuration, and (3) individual fit testing to rule out those respirators that cannot achieve a good fit on individual workers.</p> <p>2. Appropriate means that the filter medium will provide protection against the particulate in question.</p> <p>3. An APF of 10 can only be achieved if the respirator is qualitatively or quantitatively fit tested on individual workers.</p>	

Other Protective: None known.

Section 9 Physical and Chemical Properties

Physical State:	granular, powder.
Color:	off white, tan solid colors.
Odor:	None.
Odor Threshold:	Not determined.
Boiling Point:	4046°F/2230°C
Melting Point:	3110°F/1710°C
Specific Gravity:	2.65
Solubility:	Insoluble in water
Vapor Density:	Not applicable.
Vapor Pressure:	Not applicable
Percent Volatile:	Not determined.
Evaporation Rate:	Not applicable
Flammable limits:	
LEL:	Not applicable
UEL:	Not applicable
Flammability (solid, gas):	Not applicable
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
pH:	6-8
Viscosity:	Not applicable
Coefficient of Water/Oil Distribution:	Not applicable
Flash Point:	Not applicable
Flash Point Method:	Pensky-Marten Closed Cup (PMCC)
VOC Content:	0 -Not applicable

Section 10 Stability and Reactivity

Chemical Stability:	Stable.
Reactivity:	Not reactive under normal conditions of use.
Hazardous Polymerization:	None under normal processing
Possibility of hazardous reactions:	Contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires.
Conditions to Avoid:	Avoid generation of dust in handling and use.
Incompatible Materials:	Powerful oxidizers such as fluorine, chlorine trifluoride, and oxygen difluoride and hydrofluoric acid.
Hazardous decomposition products:	Silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.

Section 11 Toxicological Information

Crystalline Silica (quartz):

Acute effects of exposure:

Inhalation:	Inhalation of dust may cause respiratory tract irritation. Symptoms of exposure may include cough, sore throat, nasal congestion, sneezing, wheezing and shortness of breath.
Eye:	Particulates may cause abrasive injury.
Skin:	No adverse effects are expected.
Ingestion:	Ingestion in an unlikely route of exposure. If dust is swallowed, it may irritate the mouth and throat.
Chronic effects:	Prolonged inhalation of respirable crystalline silica may cause lung disease, silicosis, lung cancer and other effects as indicated below.

The method of exposure that can lead to the adverse health effects described below is inhalation.

A. SILICOSIS

Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute:

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years (10 to 20 or more) of prolonged repeated inhalation of relatively low levels of airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis. Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less than 1 centimeter in diameter, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability. Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown as radiographic opacities) greater than 1 centimeter in diameter. Complicated silicosis or PMF symptoms, if present, are shortness of breath and cough. Complicated silicosis or PMF may be associated with decreased lung function and may be disabling. Advanced complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease (cor pulmonale).

Accelerated Silicosis can occur with prolonged repeated inhalation of high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five (5) years of initial exposure. Progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that lung lesions appear earlier and progression is more rapid.

Acute Silicosis can occur after the repeated inhalation of very high concentrations of respirable crystalline silica over a short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough, weakness and weight loss. Acute silicosis is fatal.

B. CANCER

IARC - The International Agency for Research on Cancer ("IARC") concluded that "crystalline silica in the form of quartz or cristobalite dust is *carcinogenic to humans (Group 1)*". For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 100C, "A Review of Human Carcinogens: Arsenic, Metals, Fibres and Dusts" (2011).

NTP classifies "Silica, Crystalline (respirable size)" as Known to be a human carcinogen.

C. AUTOIMMUNE DISEASES

Several studies have reported excess cases of several autoimmune disorders -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. TUBERCULOSIS

Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to tuberculosis bacteria.

Individuals with chronic silicosis have a three-fold higher risk of contracting tuberculosis than similar individuals without silicosis.

E. KIDNEY DISEASE

Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica exposed workers. For additional information on the subject, the following may be consulted: "Kidney Disease and Silicosis", Nephron, Volume 85, pp. 14-19 (2000).

F. NON-MALIGNANT RESPIRATORY DISEASES

The reader is referred to Section 3.5 of the NIOSH Special Hazard Review cited below for information concerning the association between exposure to crystalline silica and chronic bronchitis, emphysema and small airways disease. There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases, particularly among smokers. It is unclear whether the observed associations exist only with underlying silicosis, only among smokers, or result from exposure to mineral dusts generally (independent of the presence or absence of crystalline silica, or the level of crystalline silica in the dust).

Sources of information:

The **NIOSH Hazard Review - Occupational Effects of Occupational Exposure to Respirable**

Crystalline Silica published in April 2002 summarizes and discusses the medical and epidemiological literature on the health risks and diseases associated with occupational exposures to respirable crystalline silica. The *NIOSH Hazard Review* is available from NIOSH - Publications Dissemination, 4676 Columbia Parkway, Cincinnati, OH 45226, or through the NIOSH

web site, www.cdc.gov/niosh/topics/silica, then click on the link "NIOSH Hazard Review: Health Effects of Occupational Exposure to Respirable Crystalline Silica".

For a more recent review of the health effects of respirable crystalline silica, the reader may consult *Fishman's Pulmonary Diseases and Disorders*, Fourth Edition, Chapter 57. "Coal Workers' Lung Diseases and Silicosis".

Finally, the US Occupational Safety and Health Administration (OSHA) published a summary of respirable crystalline silica health effects in connection with OSHA's Proposed Rule regarding occupational exposure to respirable crystalline silica. The summary was published in the September 12, 2013 Federal Register, which can be found at www.federalregister.gov/articles/2013/09/12/2013-20997/occupational-exposure-to-respirable-crystalline-silica.

Numerical measures of toxicity:

Ingestion: LD50 oral rat >22,500 mg/kg

Section 12 Ecological Information

Ecotoxicity: No ecotoxicity data was found for the product.
Environmental Fate: No environmental information found for this product.

Persistence and degradability: Not degradable.

Bioaccumulative potential: Not bioaccumulative.

Mobility in soil: Not mobile in soil.
Other adverse effects: No data available

Section 13 Disposal Considerations

Waste Disposal: Discard any product, residue, disposable container or liner in full compliance with national regulations.

Section 14 Transport Information

DOT Shipping Name: Not regulated as hazardous material for transportation
DOT UN Number: Not regulated as hazardous material for transportation

IATA Shipping Name: Not regulated as hazardous material for transportation
IATA UN Number: None
IATA Hazard Class: None
IATA Packing Group: None

IMDG UN Number: None
IMDG Shipping Name: Not regulated as hazardous material for transportation
IMDG Hazard Class: None
IMDG Packing Group: None

Marine Pollutant: None

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not determined

Special precautions: None known.

Section 15 Regulatory Information

Section 311/312 Hazard

Categories:

Crystalline silica (quartz):

UNITED STATES (FEDERAL AND STATE)

TSCA Inventory Status: Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No.14808-60-7.

RCRA: This product is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40CFR §261 et seq.

CERCLA: Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40CFR §302.

Emergency Planning and Community Right to Know Act (SARA Title III):

This product contains the following chemicals subject to SARA 302 or SARA 313 reporting: None above the de minimus concentrations.

Clean Air Act:

Crystalline silica (quartz) mined and processed by U.S. Silica Company is not processed with or does not contain any Class I or Class II ozone depleting substances. Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi).

FDA:

California Proposition 65:

Crystalline silica (airborne particles of respirable size) is classified as a substance known to the State of California to be a carcinogen.

California Inhalation Reference Exposure Level (REL):

California established a chronic non-cancer effect REL of 3 ug/m³ for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no non-cancer health effects are anticipated in individuals indefinitely exposed to the substance at that level.

Massachusetts Toxic Use Reduction Act:

Silica, crystalline (respirable size, <10 microns) is "toxic" for purposes of the Massachusetts Toxic Use Reduction Act.

Pennsylvania Worker and Community Right to Know Act:

Quartz is a hazardous substance under the Act, but it is not a special hazardous substance or an environmental hazardous substance.

Texas Commission on Environmental Quality:

The Texas CEQ has established chronic and acute Reference Values and short term and long term Effects Screening Levels for crystalline silica (quartz). The information can be accessed through www.tceq.texas.gov.

CANADA

Canada WHMIS:

WHMIS Hazard Class(es):
Controlled - Class: D2A

Domestic Substances List:

Quartz products, as naturally occurring substances, are on the Canadian DSL.

OTHER NATIONAL INVENTORIES

Australian Inventory of Chemical Substances (AICS):

All of the components of this product are listed on the AICS inventory or exempt from notification requirements.

China:

Silica is listed on the IECSC inventory or exempt from notification requirements.

Japan Ministry of International

Trade and Industry (MITI):

All of the components of this product are existing chemical substances as defined in the Chemical Substance Control Law Registry Number 1-548.

Korea Existing Chemicals Inventory (KECI) (set up under the Toxic Chemical Control Law):

Listed on the ECL with registry number 9212-5667.

New Zealand:

Silica is listed on the HSNO inventory or exempt from notification requirements.

Philippines Inventory of Chemicals and Chemical Substances (PICCS):

Listed for PICCS.

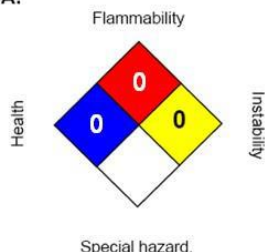
Taiwan:

Silica is listed on the CSNN inventory or exempt from notification requirements.

Section 16 Other Information

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

NFPA:



HMIS III:

HEALTH	*	0
FLAMMABILITY		0
PHYSICAL HAZARD		0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

HMIS Ratings:

HMIS Health Hazard: *

HMIS Fire Hazard: 0

HMIS Reactivity: 0

HMIS Personal Protection: E

NFPA Ratings:

NFPA Health: 0

NFPA Flammability: 0

NFPA Reactivity: 0

* For further information on health effects, see Sections 2, 8 and 11 of this SDS.

Web Sites with Information about Effects of Crystalline Silica Exposure:

The U.S. National Institute for Occupational Safety and Health (NIOSH) and Occupational Safety and Health Administration (OSHA) maintain sites with information about crystalline silica and its potential health effects. For NIOSH, <http://www.cdc.gov/niosh/topics/silica>; for OSHA, <https://www.osha.gov/dsg/topics/silicacrystalline/>.

The IARC Monograph that includes crystalline silica, Volume 100C, can be accessed in PDF form at the IARC web site, <http://monographs.iarc.fr/ENG/Monographs/vol100C/index.php>.

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Texrite makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH -American Conference of Governmental
Industrial Hygienists
CAS -Chemical Abstract Service Number
CERCLA -Comprehensive Environmental
Response,
Compensation, and Liability Act
DOT -U.S. Department of Transportation
IARC -International Agency for Research on
Cancer
N/A -Not Available
NFPA -National Fire Protection Association
NIOSH - U.S. National Institute for Occupational
Safety and Health

NTP -National Toxicology Program
OSHA -Occupational Safety and Health
Administration
PEL -Permissible Exposure Limit
ppm -Parts per million
RCRA -Resource Conservation and Recovery Act
SARA -Superfund Amendments and
Reauthorization
TLV -Threshold Limit Value
TSCA -Toxic Substances Control Act
IDLH -Immediately dangerous to life and
health