According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Resin - Twin Tube - Part A

SECTION 1: Identification

Product identifier

Product name: Steel Reinforced Epoxy Resin - Twin Tube - Part A **Product code:** 8265, 82655, 8265H, 8280, 8281, 8272, 8276, 8270, 8271, 8276H

Recommended use of the product and restriction on use Relevant identified uses: Not determined or not applicable. Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: United States J-B Weld Company, LLC 400 CMH Road Sulphur Springs, TX 75482 903-885-7696 info@jbweld.com

Emergency telephone number:

United States CHEMTREC Transportation Emergencies (24 hour): 800-424-9300 or 703-527-3887 Poison Control Centers (24 hour): medical emergencies 800-222-1222

SECTION 2: Hazard(s) identification

GHS classification:

Eye irritation, category 2A Skin irritation, category 2 Skin sensitization, category 1

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

Precautionary statements:

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.



According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Resin - Twin Tube - Part A

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 advice/attention

P321 Specific treatment (see supplemental first aid instructions on this label).

P362 Take off contaminated clothing and wash before reuse

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P332+P313 If skin irritation occurs: Get medical advice/attention

P363 Wash contaminated clothing before reuse

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention

P501 Dispose of contents and container in accordance with local regulations.

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 1317-65-3	Calcium Carbonate	<50
CAS number: 25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	<30
CAS number: 14807-96-6	Talc Powder	<10
CAS number: 9003-36-5	Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol	<5
CAS number: 2425-79-8	1,4-bis(2,3 epoxypropoxy)butane	<5
CAS number: 65997-17-3	Glass, oxide, chemicals	<5

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR \$1910.1200).

Fiberglass powder (CAS # 65997-17-3) is classified as a carcinogen in its inhalable form. Since the fiberglass powder in this product is not inhalable, the product itself is not classified as a carcinogen in the form presented.

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Get medical advice/attention if you feel unwell

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention Take off all contaminated clothing

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Resin - Twin Tube - Part A

Gently blot or brush away excess product		
Wash with plenty of lukewarm, gently flowing water		
Get medical advice if skin irritation occurs or you feel unwell		
After eye contact:		
Rinse/flush exposed eye(s) gently using water for 15-20 minutes		
If symptoms develop or persist, seek medical attention		
Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open		
Remove contact lenses, if present and easy to do so		
Continue rinsing for 15-20 minutes		
Get medical advice if eye irritation persists		
After swallowing:		
Rinse mouth thoroughly		
Seek medical attention if irritation, discomfort, or vomiting persists		
Most important symptoms and effects, both acute and delayed		
Acute symptoms and effects:		
Not determined or not applicable.		
Delayed symptoms and effects:		
Not determined or not applicable.		
Immediate medical attention and special treatment		
Specific treatment:		
Not determined or not applicable.		
Notes for the doctor:		
Not determined or not applicable.		
SECTION 5: Firefighting measures		
Extinguishing media		

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Carbon monoxide and carbon dioxide may form upon combustion Heating causes a rise in pressure, risk of bursting and combustion

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Resin - Twin Tube - Part A

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Sweep or scoop up solid material while minimizing dust generation

Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing dust.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed. Keep container dry.

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
United States (OSHA)	Talc Powder	14807-96-6	OSHA PEL Ceiling 20 mppcf
	Calcium Carbonate	1317-65-3	OSHA PEL TWA 15 mg/m ³ (Total dust)
	Calcium Carbonate	1317-65-3	OSHA PEL TWA 5 mg/m ³ (Respirable fraction)
ACGIH	Talc Powder	14807-96-6	ACGIH TLV TWA 2 mg/m ³ ; (Inhalable particulate matter containing no asbestos and < 1% crystalline silica)
	Calcium Carbonate	1317-65-3	ACGIH TLV TWA 10.0 mg/m ³ ((Inhalable particulate matter containing no asbestos and < 1% crystalline silica)
	Glass, oxide, chemicals	65997-17-3	8-Hour Exposure Limit (TLV-TWA): 1 fibers/cm ³
NIOSH	Talc Powder	14807-96-6	NIOSH REL TWA 2.0 mg/m ³
	Calcium Carbonate	1317-65-3	REL: 10 mg/m ³ (Total dust); 5 mg/m ³ (Respirable dust)
	Glass, oxide, chemicals	65997-17-3	NIOSH Recommended exposure limit (REL) [for up to a 10-hour workday during a 40-hour workweek] is: 3 fibers/cm3

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Resin - Twin Tube - Part A

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of work. Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Off White - Paste
Odor	Ethereal (slight)
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Closed cup: >93.3°C (>199.9°F) [Setaflash.] [Product does not sustain combustion.]
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	1.927
Solubilities	Insoluble in the following materials: cold water and hot water.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	>220 °C (>428 °F)
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Page 6 of 11

Steel Reinforced Epoxy Resin - Twin Tube - Part A

Flammability	Non-flammable in the presence of the following materials or conditions: heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.
VOC Content	<1%

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

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

Product data: No data available.

Substance data:

Name	Route	Result
1,4-bis(2,3	dermal	LD50 - Rabbit - 1,130 mg/kg
epoxypropoxy)butane		

Skin corrosion/irritation

Assessment:

Causes skin irritation

Product data:

No data available.

Substance data:

Name	Result
Formaldehyde, polymer with 2- (chloromethyl)oxirane and phenol	Causes skin irritation.
Phenol, 4,4'-(1- methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Causes skin irritation.
1,4-bis(2,3 epoxypropoxy)butane	Causes skin irritation.

Serious eye damage/irritation

Assessment:

Causes serious eye irritation

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Page 7 of 11

Steel Reinforced Epoxy Resin - Twin Tube - Part A

Product data:

No data available.

Substance data:

Name	Result
Phenol, 4,4'-(1- methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Causes serious eye irritation.
1,4-bis(2,3 epoxypropoxy)butane	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment:

May cause an allergic skin reaction

Product data:

No data available.

Substance data:

Name	Result
Phenol, 4,4'-(1- methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	May cause an allergic skin reaction.
Formaldehyde, polymer with 2- (chloromethyl)oxirane and phenol	May cause an allergic skin reaction.
1,4-bis(2,3 epoxypropoxy)butane	May cause an allergic skin reaction.

Carcinogenicity

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

Product data: No data available.

Substance data:

Name	Species	Result
Glass, oxide, chemicals	Not applicable	May cause cancer via inhalation.

International Agency for Research on Cancer (IARC):

Name	Classification
Glass, oxide, chemicals	Group 2B
Talc Powder	Group 3 - Not classifiable as to its carcinogenicity to humans

National Toxicology Program (NTP):

Name	Classification
Glass, oxide, chemicals	Reasonably anticipated to be human carcinogens

Germ cell mutagenicity

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

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

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

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Resin - Twin Tube - Part A

No data available.
Substance data: No data available.
Specific target organ toxicity (single exposure)
Assessment: Based on available data, the classification criteria are not met.
Product data:
No data available.
Substance data: No data available.
Specific target organ toxicity (repeated exposure)
Assessment: Based on available data, the classification criteria are not met.
Product data:
No data available.
Substance data: No data available.
Aspiration toxicity
Assessment: Based on available data, the classification criteria are not met.
Product data:
No data available.
Substance data: No data available.
Information on likely routes of exposure:
No data available.
Symptoms related to the physical, chemical and toxicological characteristics:
No data available.
Other information:
No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

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

Product data: No data available.

Substance data:

Name	Result
Phenol, 4,4'-(1- methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	EC50 - Scenedesmus capricornutum - 9 mg/L - 48 h

Chronic (long-term) toxicity

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

Product data: No data available.

Substance data:

Name	Result
Formaldehyde, polymer with 2- (chloromethyl)oxirane and phenol	NOEC Daphnia magna: 0.3 mg/L (21 d)

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Resin - Twin Tube - Part A

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

Transport in bulk according to Annex II	of MARPOL73/78 and the IBC Code
Bulk Name	None
Ship type	None
Pollution category	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

Page 9 of 11

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Resin - Twin Tube - Part A

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2- (chloromethyl)oxiran	Listed
9003-36-5	Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol	Listed
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane	Listed
65997-17-3	Glass, oxide, chemicals	Listed
14807-96-6	Talc Powder	Listed
1317-65-3	Calcium Carbonate	Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2- (chloromethyl)oxiran	Not Listed
9003-36-5	Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol	Not Listed
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane	Not Listed
65997-17-3	Glass, oxide, chemicals	Not Listed
14807-96-6	Talc Powder	Not Listed
1317-65-3	Calcium Carbonate	Not Listed

CERCLA: Not determined.

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2- (chloromethyl)oxiran	Not Listed
9003-36-5	Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol	Not Listed
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane	Not Listed
65997-17-3	Glass, oxide, chemicals	Listed
14807-96-6	Talc Powder	Listed
1317-65-3	Calcium Carbonate	Listed

New Jersey Right to Know:

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2- (chloromethyl)oxiran	Not Listed
9003-36-5	Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol	Not Listed
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane	Not Listed
65997-17-3	Glass, oxide, chemicals	Listed
14807-96-6	Talc Powder	Listed
1317-65-3	Calcium Carbonate	Listed

New York Right to Know:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Resin - Twin Tube - Part A

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2- (chloromethyl)oxiran	Not Listed
9003-36-5	Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol	Not Listed
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane	Not Listed
65997-17-3	Glass, oxide, chemicals	Not Listed
14807-96-6	Talc Powder	Not Listed
1317-65-3	Calcium Carbonate	Not Listed

Pennsylvania Right to Know:

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2- (chloromethyl)oxiran	Not Listed
9003-36-5	Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol	Not Listed
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane	Not Listed
65997-17-3	Glass, oxide, chemicals	Listed
14807-96-6	Talc Powder	Listed
1317-65-3	Calcium Carbonate	Listed

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-0-0

HMIS: 3-0-0 Initial preparation date: 06.07.2023

End of Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube - Part B

SECTION 1: Identification

Product identifier

Product name: Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube - Part B

Product code: 8276, 8270, 8271, 8276H

Recommended use of the product and restriction on use Relevant identified uses: Not determined or not applicable.

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: United States

J-B Weld Company, LLC 400 CMH Road Sulphur Springs, TX 75482 903-885-7696 info@jbweld.com

Emergency telephone number:

United States CHEMTREC Transportation Emergencies (24 hour): 800-424-9300 or 703-527-3887 Poison Control Centers (24 hour): medical emergencies 800-222-1222

SECTION 2: Hazard(s) identification

GHS classification:

Skin sensitization, category 1 Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H317 May cause an allergic skin reaction.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention

P501 Dispose of contents and container in accordance with local regulations.



According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Page 2 of 11

Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube - Part B

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 72244-98-5	Curing Agent	<40
CAS number: 7727-43-7	Barium Sulphate	<30
CAS number: 1317-65-3	Calcium Carbonate	<30
CAS number: 14807-96-6	Talc Powder	<10
CAS number: 90-72-2	Amine Mix	<5
CAS number: 65997-17-3	Fiberglass Powder	<5
CAS number: 13463-67-7	Titanium Dioxide	<1

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

Fiberglass powder (CAS # 65997-17-3) is classified as a carcinogen in its inhalable form. Since the fiberglass powder in this product is not inhalable, the product itself is not classified as a carcinogen in the form presented.

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

After skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention

After swallowing:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed Acute symptoms and effects:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube - Part B

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition **Unsuitable extinguishing media:**

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Not determined or not applicable.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Absorb with non-combustible liquid-binding material (sand, diatomaceus earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing mist or vapor.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Protect from freezing and physical damage.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube - Part B

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	ldentifier	Permissible concentration
United States (OSHA)	Talc Powder	14807-96-6	OSHA PEL Ceiling 20 mppcf
	Calcium Carbonate	1317-65-3	OSHA PEL TWA 15 mg/m ³ (Total dust)
	Titanium Dioxide	13463-67-7	OSHA PEL TWA 15 mg/m ³ (Total dust)
	Calcium Carbonate	1317-65-3	OSHA PEL TWA 5 mg/m ³ (Respirable fraction)
	Barium Sulphate	7727-43-7	OSHA PEL TWA 15 mg/m ³ (Total dust)
	Barium Sulphate	7727-43-7	OSHA PEL TWA 5 mg/m ³ (Respirable fraction)
ACGIH	Barium Sulphate	7727-43-7	ACGIH TLV TWA 5.0 mg/m ³ (inhalable fraction, particulate containing no asbestos and <1% crystalline silica)
	Talc Powder	14807-96-6	ACGIH TLV TWA 2 mg/m ³ ; (Inhalable particulate matter containing no asbestos and < 1% crystalline silica)
	Titanium Dioxide	13463-67-7	ACGIH TLV TWA 10 mg/m ³
	Calcium Carbonate	1317-65-3	ACGIH TLV TWA 10.0 mg/m ³ ((Inhalable particulate matter containing no asbestos and < 1% crystalline silica)
	Fiberglass Powder	65997-17-3	8-Hour Exposure Limit (TLV-TWA): 1 fibers/cm ³
NIOSH	Barium Sulphate	7727-43-7	NIOSH TWA 5.0 mg/m ³ (Respirable fraction)
	Talc Powder	14807-96-6	NIOSH REL TWA 2.0 mg/m ³
	Barium Sulphate	7727-43-7	NIOSH TWA 10.0 mg/m ³ (Total dust)
	Calcium Carbonate	1317-65-3	REL: 10 mg/m ³ (Total dust); 5 mg/m ³ (Respirable dust)
	Titanium Dioxide	13463-67-7	IDLH: 5,000 mg/m ³
	Fiberglass Powder	65997-17-3	NIOSH Recommended exposure limit (REL) [for up to a 10-hour workday during a 40-hour workweek] is: 3 fibers/cm3

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Biological monitoring may also be appropriate for some substances.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of work. Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Dark grey - Paste
Odor	Pungent. [Strong]
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Closed cup: >93.3°C (>199.9°F) [Setaflash.] [Product does not sustain combustion.]
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	1.902
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	>220 °C (>392 °F)
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Page 6 of 11

Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube - Part B

Other information	
VOC Content	<1%

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

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

Product data: No data available.

Substance data:

Name	Route	Result
Amine Mix	oral	LD50 - Rat - 1,200 mg/kg

Skin corrosion/irritation

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

Product data:

No data available.

Substance data:

Name	Result
Amine Mix	Causes skin irritation.

Serious eye damage/irritation

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

Product data:

No data available.

Substance data:

Name	Result
Amine Mix	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment:

May cause an allergic skin reaction **Product data:** No data available. **Substance data:**

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube - Part B

Name	Result
Curing Agent	May cause an allergic skin reaction.

Carcinogenicity

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

Product data: No data available.

Substance data:

Name	Species	Result
Fiberglass Powder	Not applicable	May cause cancer via inhalation.
Titanium Dioxide	Not applicable.	Airborne, unbound particles of respirable size are known to
		cause cancer.

International Agency for Research on Cancer (IARC):

Name	Classification
Fiberglass Powder	Group 2B
Talc Powder	Group 3 - Not classifiable as to its carcinogenicity to humans
Titanium Dioxide	Group 2B

National Toxicology Program (NTP):

Name	Classification
Fiberglass Powder	Reasonably anticipated to be human carcinogens

Germ cell mutagenicity

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

No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met. **Product data:**

No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

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

No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

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

No data available.

Substance data: No data available.

Aspiration toxicity

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

Product data:

No data available.

Substance data: No data available. Information on likely routes of exposure:

No data available.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube - Part B

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

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

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

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

Product data: No data available.

Substance data:

Name	Result	
Curing Agent	NOEC - Daphnia magna (Water flea) - 3.5 mg/L - 21 d	

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube - Part B

Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code		
Bulk Name None		
Ship type None		
Pollution category None		

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

72244-98-5	Curing Agent	Listed
90-72-2	Amine Mix	Listed
65997-17-3	Fiberglass Powder	Listed
14807-96-6	Talc Powder	Listed
1317-65-3	Calcium Carbonate	Listed
13463-67-7	Titanium Dioxide	Listed
7727-43-7	Barium Sulphate	Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

72244-98-5	Curing Agent	Not Listed
90-72-2	Amine Mix	Not Listed
65997-17-3	Fiberglass Powder	Not Listed
14807-96-6	Talc Powder	Not Listed
1317-65-3	Calcium Carbonate	Not Listed
13463-67-7	Titanium Dioxide	Not Listed
7727-43-7	Barium Sulphate	Listed

CERCLA: Not determined.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Page 10 of 11

Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube - Part B

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

72244-98-5	Curing Agent	Not Listed
90-72-2	Amine Mix	Not Listed
65997-17-3	Fiberglass Powder	Listed
14807-96-6	Talc Powder	Listed
1317-65-3	Calcium Carbonate	Listed
13463-67-7	Titanium Dioxide	Listed
7727-43-7	Barium Sulphate	Listed

New Jersey Right to Know:

72244-98-5	Curing Agent	Not
		Listed
90-72-2	Amine Mix	Not
		Listed
65997-17-3	Fiberglass Powder	Listed
14807-96-6	Talc Powder	Listed
1317-65-3	Calcium Carbonate	Listed
13463-67-7	Titanium Dioxide	Listed
7727-43-7	Barium Sulphate	Listed

New York Right to Know:

72244-98-5	Curing Agent	Not
		Listed
90-72-2	Amine Mix	Not
		Listed
65997-17-3	Fiberglass Powder	Not
		Listed
14807-96-6	Talc Powder	Not
		Listed
1317-65-3	Calcium Carbonate	Not
		Listed
13463-67-7	Titanium Dioxide	Listed
7727-43-7	Barium Sulphate	Not
	·	Listed

Pennsylvania Right to Know:

72244-98-5	Curing Agent	Not
		Listed
90-72-2	Amine Mix	Not
		Listed
65997-17-3	Fiberglass Powder	Listed
14807-96-6	Talc Powder	Listed
1317-65-3	Calcium Carbonate	Listed
13463-67-7	Titanium Dioxide	Listed
7727-43-7	Barium Sulphate	Listed

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2023

Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube - Part B

California Proposition 65: AWARNING: Cancer – www.P65Warnings.ca.gov

SECTION 16: Other information

Abbreviations and Acronyms: None Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-0-0

HMIS: 3-0-0

Initial preparation date: 06.07.2023

End of Safety Data Sheet