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Steel Reinforced Epoxy Resin - Twin Tube - Part A

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product Name: Steel Reinforced Epoxy Resin - Twin Tube - Part A **Product code:** 8265, 82655, 8265H, 80165, 8280, 8281, 8272, 8276,

80176, 8270, 8271

1.2 Relevant identified uses of the substance or mixture and uses advised against

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.

1.3 Details of the manufacturer/supplier of the safety data sheet

Manufacturer: United States

J-B Weld Company, LLC 1130 COMO ST. SULPHUR SPRINGS, TX 75482 903-885-7696 info@jbweld.com

1.4 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

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 (CLP):

Eye irritation, category 2A Skin irritation, category 2 Skin sensitization, category 1 Chronic aquatic hazard, category 2

Hazard-determining components of labeling:

Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol 1,4-bis(2,3 epoxypropoxy)butane (3-Glycidoxypropyl)trimethoxysilane

2.2 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.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P264 Wash skin thoroughly after handling.



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Steel Reinforced Epoxy Resin - Twin Tube - Part A

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.

P273 Avoid release to the environment.

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

P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse

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

P391 Collect spillage

P501 Dispose of contents and container as instructed in Section 13.

2,3 Other hazards: None known

SECTION 3: Composition/information on ingredients

3.1 Substance: Not applicable.

3.2 Mixture:

Identification	Name	Classification according to Regulation (EC) No. 1272/2008 (CLP)	Weight %
CAS number: 1317-65-3 EC number: 215-279-6	Limestone	Not classified	41.95
CAS number: 25068-38-6 EC number: 500-033-5	Phenol, 4,4'-(1- methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Skin Sens. 1; H317 Skin Irrit. 2 ; H315 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	26.5
CAS number: 7439-89-6 EC number: 231-096-4	Iron	Not classified	11.1
CAS number: 14807-96-6 EC number: 238-877-9	Talc	Not classified	8.15
CAS number: 9003-36-5 EC number: 500-006-8	Formaldehyde, polymer with 2- (chloromethyl)oxirane and phenol	Skin Sens. 1; H317 Skin Irrit. 2 ; H315 Aquatic Chronic 2; H411	4.65
CAS number: 2425-79-8 EC number: 219-371-7	1,4-bis(2,3 epoxypropoxy)butane	Acute Tox. 4; H312 Acute Tox. 4; H332 Skin Sens. 1; H317 Skin Irrit. 2; H315 Eye Irrit. 2; H319	3.85

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Steel Reinforced Epoxy Resin - Twin Tube - Part A

CAS number: 65997-17-3 EC number: 266-046-0	Glass, oxide, chemicals	Carc. 1B; H350	2
CAS number: 2530-83-8 EC number: 219-784-2	(3- Glycidoxypropyl)trimethoxysilane	Eye Dam. 1; H318	0.75
CAS number: 1302-78-9 EC number: 215-108-5	Bentonite	Not classified	0.7
CAS number: 67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica	Not classified	0.35

Additional information:

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.

Full Text of H and EUH statements: See section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes:

Not determined or not available.

Following inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

Following skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

Take off all contaminated clothing

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

Following 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

Following ingestion:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

4.2 Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not available.

Delayed symptoms and effects:

Not determined or not available.

4.3 Indication of any immediate medical attention and special treatment needed

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Steel Reinforced Epoxy Resin - Twin Tube - Part A

Specific treatment:

Not determined or not available.

Notes for the doctor:

Not determined or not available

SECTION 5: Firefighting measures

5.1 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.

5.2 Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for firefighters

Personal protection equipment:

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

6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Ensure air handling systems are operational.

Wear protective eye wear, gloves and clothing.

6.2 Environmental precautions:

Should not be released into the environment.

Prevent from reaching drains, sewer or waterway.

6.3 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.

6.4 Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

7.1 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.

7.2 Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Keep container dry.

Store in a cool, well-ventilated area.

7.3 Specific end use(s):

Not determined or not applicable.

SECTION 8: Exposure controls/personal protection

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Steel Reinforced Epoxy Resin - Twin Tube - Part A







8.1 Control parameters

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Czech Republic	Iron	7439-89-6	8-hour TWA: 10 mg/m ³
	Bentonite	1302-78-9	8-hour TWA: 6.0 mg/m ³
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 5.0 mg/m³ (glass laminate dusts)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1.0 fibers/cm³ (respirable fibers)
	Limestone	1317-65-3	TWA 8-hr: 10 mg/m ³
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 4 mg/m³ (synthetic mineral fibers - all sizes)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1.0 fibers/cm³ (synthetic mineral respirable fibers)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 0.3 fibers/cm³ (ceramic respirable fibers)
	Talc	14807-96-6	8-hour TWA: 2.0 mg/m 3 (dust, respirable fraction, Fr \leq 5%)
	Talc	14807-96-6	8-hour TWA: 10 mg/m³ (dust, respirable fraction, Fr > 5%)
	Talc	14807-96-6	8-hour TWA: 10 mg/m³ (dust, total concentration)
	Talc	14807-96-6	8-hour TWA: 5.0 mg/m³ (polymeric material dust)
Slovakia	Iron	7439-89-6	8-hour TWA: 6 mg/m ³
	Bentonite	1302-78-9	8-hour TWA (NPEL): 6 mg/m ³
	Limestone	1317-65-3	NPEL TWA 8-hr: 10 mg/m ³
	Glass, oxide, chemicals	65997-17-3	8-hour TWA (NPEL): 2 fibers/cm ³ (4 mg/m ³)
	Talc	14807-96-6	8-hour TWA (NPEL): 2 mg/m ³ (respirable fraction, Fr \leq 5%)
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (respirable fraction, Fr > 5 %)
Bulgaria	Iron	7439-89-6	TWA: 6 mg/m³
	Glass, oxide, chemicals	65997-17-3	TWA: 6.0 mg/m³ (inhalable fraction)
	Bentonite	1302-78-9	TWA: 6.0 mg/m³ (inhalable fraction)
	Glass, oxide, chemicals	65997-17-3	TWA: 1.0 fibres/cm³ (respirable fraction)
	Bentonite	1302-78-9	TWA: 3.0 mg/m³ (respirable fraction)
	Limestone	1317-65-3	TWA: 10 mg/m³

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Steel Reinforced Epoxy Resin - Twin Tube - Part A

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Talc	14807-96-6	TWA: 6.0 mg/m³ (inhalable fraction)
	Talc	14807-96-6	TWA: 3.0 mg/m³ (respirable fraction)
Cyprus	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 10 mg/m ³
	Talc	14807-96-6	8-hour TWA: 706 particles/cm ³
Croatia	Limestone	1317-65-3	TWA 8-hr: 10 mg/m³ (Total dust); 4 mg/m³ (Respirable dust)
	Talc	14807-96-6	Maximum (8 hr) allowable concentration: 1 mg/m³ (respirable dust)
Estonia	Limestone	1317-65-3	TWA 8-hr: 10 mg/m³; 5 mg/m³ (Fine dust)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm ³
	Talc	14807-96-6	8-hour TWA: 10 mg/m³ (total dust)
	Talc	14807-96-6	8-hour TWA: 5 mg/m³ (fine dust)
	Talc	14807-96-6	8-hour TWA: 3 mg/m³ (plastic)
	Talc	14807-96-6	8-hour TWA: 1 mg/m³ (textile)
	Talc	14807-96-6	8-hour TWA: 5 mg/m³ (organic dust, total dust)
Hungary	Limestone	1317-65-3	ÁK Value TWA 8-hr: 221 mg/m³; CK Value STEL 60-min 442 mg/m³
	Glass, oxide, chemicals	65997-17-3	8-Hour TWA (ÁK Value): 1.0 fibers/cm³
	Talc	14807-96-6	8-hour TWA (ÁK Value): 2 mg/m³ (respirable)
	Talc	14807-96-6	8-hour TWA (ÁK Value): 10 mg/m³ (total, inhalable)
Romania	Limestone	1317-65-3	TWA 8-hr: 10 mg/m ³
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (glass wool fibers - respirable fraction)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (rock wool fibers - respirable fraction)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (slag wool fibers - respirable fraction)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (special purpose glass fibers - respirable fraction)
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (inhalable fraction)
Latvia	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 2 mg/m ³
	Talc	14807-96-6	8-hour TWA: 4 mg/m³ (tuff, pumice, perlite)
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (natural and synthetic)
	Talc	14807-96-6	8-hour TWA: 5 mg/m³ (polymers)
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (abrasive dusts)

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Steel Reinforced Epoxy Resin - Twin Tube - Part A

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Talc	14807-96-6	8-hour TWA: 4 mg/m³ (tal-like dust)
Belgium	Limestone	1317-65-3	TWA 8-hr: 10 mg/m³
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 10 mg/m³ (glass - fibers or dusts of)
	Talc	14807-96-6	8-hour TWA: 2 mg/m ³
	Talc	14807-96-6	8-hour TWA: 10 mg/m³ (inhalable fraction)
	Talc	14807-96-6	8-hour TWA: 3 mg/m³ (respirable fraction)
Lithuania	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (glass fiber)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 0.2 fibers/cm³ (synthetic inorganic, crystal fibers)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (synthetic inorganic, amorphous fibers)
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (inhalable fraction)
	Talc	14807-96-6	8-hour TWA: 1 mg/m³ (respirable fraction)
Finland	Limestone	1317-65-3	TWA 8-hr: 10 mg/m ³
	Glass, oxide, chemicals	65997-17-3	8-hour limit: 5 mg/m³
	Talc	14807-96-6	15-minute limit: 2 ppm (inhalable)
	Talc	14807-96-6	15-minute limit: 1 ppm (respirable)
France	Limestone	1317-65-3	VME TWA: 10 mg/m ³
	Talc	14807-96-6	Time weighted average (VME): 10 mg/m³ (inhalable fraction)
	Talc	14807-96-6	Time weighted average (VME): 5 mg/m³ (respirable fraction)
Greece	Limestone	1317-65-3	TWA 8-hr: 10 mg/m³ (Inhalable dust); 5 mg/m³ (Respirable dust)
	Talc	14807-96-6	8-hour TWA: 10 mg/m³ (inhalable)
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (respirable)
Poland	Glass, oxide, chemicals	65997-17-3	8-hour TWA(NDS): 2.0 mg/m³ (inhalable fraction)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA (NDS): 1.0 fibers/cm ³ (respirable fibers)
	Talc	14807-96-6	8-hour TWA (NDS): 4 mg/m³ (inhalable fraction)
	Talc	14807-96-6	8-hour TWA (NDS): 1 mg/m³ (respirable fraction)
Ireland	Limestone	1317-65-3	TWA 8-hr: 10 mg/m³ (Total dust); 4 mg/m³ (Respirable dust)
	Glass, oxide, chemicals	65997-17-3	8-hour OEL (TWA): 2 fibers/cm ³ of air (5 mg/m ³)

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Steel Reinforced Epoxy Resin - Twin Tube - Part A

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Talc	14807-96-6	8-hour OEL (TWA): 10 mg/m³ (total inhalable dust)
	Talc	14807-96-6	8-hour OEL (TWA): 0.8 mg/m³ (respirable fraction)
United Kingdom	Limestone	1317-65-3	TWA 8-hr: 10 mg/m³ (Total dust); 4 mg/m³ (Respirable dust)
	Glass, oxide, chemicals	65997-17-3	TWA: 1 fibre/mL (5 mg/m³)
	Talc	14807-96-6	TWA: 1 mg/m³ (respirable dust)
Slovenia	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 500000 fibers/m ³
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (Respirable fraction)
Denmark	Glass, oxide, chemicals	65997-17-3	TWA: 1 fibers/cm³
Italy	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibres/cm ³
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (respirable fraction)
Netherlands	Glass, oxide, chemicals	65997-17-3	Binding 8-hour TWA: 0.5 fibre/cm ³
	Talc	14807-96-6	8-hour TWA: 0.25 mg/m³ (respirable)
Portugal	Glass, oxide, chemicals	65997-17-3	NP 1796-2007 8-hour exposure limit: 1 fibres/cm³
	Talc	14807-96-6	NP 1796-2007 8-hour exposure limit: 2 mg/m³ (respirable fraction)
Spain	Glass, oxide, chemicals	65997-17-3	8-hour daily exposure limit (VLA_ED): 0.5 fibres/cm³
	Talc	14807-96-6	8-hour daily exposure limit (VLA_ED): 2 mg/m³ (respirable fraction)
Sweden	Glass, oxide, chemicals	65997-17-3	Level Limit Value (NGV): 1 fiber/mL
	Talc	14807-96-6	Level Limit Value (NGV): 2 mg/m³ (total dust)
	Talc	14807-96-6	Level Limit Value (NGV): 1 mg/m³ (respirable dust)
Germany	Talc	14807-96-6	AGW Limit value: 1.25 mg/m³ (respirable fraction)
	Talc	14807-96-6	AGW limit value: 10 mg/m³ (inhalable fraction)
	Talc	14807-96-6	AGW Short term (15 min) exposure limit: 20 mg/m³ (inhalable fraction)

Biological limit values:

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

Derived No Effect Level (DNEL):

Not determined or not applicable.

Predicted No Effect Concentration (PNEC):

Not determined or not applicable.

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general

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workplace may be required to confirm compliance with an OEL and adequacy of exposure controls Biological monitoring may also be appropriate for some substances

8.2 Exposure controls

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.

Environmental exposure controls:

Select controls based on a risk assessment of local conditions.

See section 6 for information on accidental release measures.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Dark black solid
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)	Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
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.

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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.

9.2 Other information

·	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

10.1 Reactivity:

Does not react under normal conditions of use and storage.

10.2 Chemical stability:

Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions:

None under normal conditions of use and storage.

10.4 Conditions to avoid:

None known.

10.5 Incompatible materials:

None known.

10.6 Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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	Causes skin irritation.
phenol	

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Name	Result
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

Product data:
No data available.
Substance data:

Name	Result
(3- Glycidoxypropyl)trimethoxysil ane	Causes serious eye damage.
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	Group 3 - Not classifiable as to its carcinogenicity to humans

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Steel Reinforced Epoxy Resin - Twin Tube - Part A

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: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

12.1 Toxicity

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

Product data: No data available.

Substance data:

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Steel Reinforced Epoxy Resin - Twin Tube - Part A

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

12.2 Persistence and degradability

Product data: No data available.

Substance data: No data available.

12.3 Bioaccumulative potential

Product data: No data available. **Substance data:** No data available.

12.4 Mobility in soil

Product data: No data available.

Substance data: No data available.

12.5 Results of PBT and vPvB assessment

PBT assessment: This product does not contain any substances that are assessed to be a PBT. **vPvB assessment:** This product does not contain any substances that are assessed to be a vPvB.

12.6 Other adverse effects: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Relevant information:

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

SECTION 14: Transport information

International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

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 Carriage of Dangerous Goods by Inland Waterways (ADN)

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	UN 3077

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Steel Reinforced Epoxy Resin - Twin Tube - Part A

UN proper shipping name	Environmentally Hazardous Substance, Solid, N.O.S., (Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol)
UN transport hazard class(es)	9
Packing group	III
Environmental hazards	Marine Pollutant Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2- (chloromethyl)oxiran, Formaldehyde, polymer with 2- (chloromethyl)oxirane and phenol
Special precautions for user	None

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

UN number	UN 3077
UN proper shipping name	Environmentally Hazardous Substance, Solid, N.O.S., (Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol)
UN transport hazard class(es)	9
Packing group	III
Environmental hazards	Marine Pollutant Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2- (chloromethyl)oxiran, Formaldehyde, polymer with 2- (chloromethyl)oxirane and phenol
Special precautions for user	None

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. European regulations

Inventory listing (EINECS):

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	
9003-36-5	Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol	Listed
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane	Listed
2530-83-8	(3-Glycidoxypropyl)trimethoxysilane	Listed
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica	Not Listed
7439-89-6	Iron	Listed
65997-17-3	Glass, oxide, chemicals	Listed
14807-96-6	Talc	Listed
1317-65-3	Limestone	Listed
1302-78-9	Bentonite	Listed

REACH SVHC candidate list: Not determined. **REACH SVHC Authorizations:** Not determined.

REACH Restriction: Not determined.

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Steel Reinforced Epoxy Resin - Twin Tube - Part A

Water hazard class (WGK) (Product): Not determined.

Water hazard class (WGK) (Substance):

Ingredient Name	CAS	Class
Phenol, 4,4'-(1- methylethylidene)bis-, polymer with 2- (chloromethyl)oxiran	25068-38-6	2
Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol	9003-36-5	2
1,4-bis(2,3 epoxypropoxy)butane	2425-79-8	1
(3- Glycidoxypropyl)trimethoxysi lane	2530-83-8	2
Siloxanes and Silicones, di- Me, reaction products with silica	67762-90-7	Non-hazardous to water.
Iron	7439-89-6	Non-hazardous to water.
Talc	14807-96-6	Non-hazardous to water.
Limestone	1317-65-3	Non-hazardous to water.

Other regulations

Germany MAK: 8-hour TWA: 0.3 mg/m³ (respirable fraction), 8-hour TWA: 4 mg/m³ (inhalable fraction)

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

Indication of changes:

Not applicable.

Abbreviations and Acronyms: None

Classification procedure:

Classification according to Regulation (EC) No. 1272/2008 (CLP)	Method Used
Eye irritation, category 2A	Calculation method
Skin irritation, category 2	Calculation method
Skin sensitization, category 1	Calculation method
Chronic aquatic hazard, category 2	Calculation method

Summary of classification in section 3:

Skin Sens. 1; H317	Skin sensitization, category 1
Skin Irrit. 2; H315	Skin irritation, category 2
Eye Irrit. 2; H319	Eye irritation, category 2A
Aquatic Chronic 2; H411	Chronic aquatic hazard, category 2
Acute Tox. 4; H312	Acute toxicity (dermal), category 4
Acute Tox. 4; H332	Acute toxicity (inhalation), category 4
Carc. 1B; H350	Carcinogenicity, category 1B
Eye Dam. 1; H318	Serious eye damage, category 1

Summary of hazard statements in section 3:

H317	May cause an allergic skin reaction
H315	Causes skin irritation

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Steel Reinforced Epoxy Resin - Twin Tube - Part A

H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects
H312	Harmful in contact with skin
H332	Harmful if inhaled
H350	May cause cancer
H318	Causes serious eye damage

Disclaimer:

This product has been classified in accordance with EC No. 1272/2008 (CLP) and EC No. 1907/2006 (REACH). 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.

HMIS: 3-0-0

Initial preparation date: 06.15.2018

End of Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product Name: Steel Reinforced Epoxy Hardener - Fast Cure - Twin Tube

- Part B

Product code: 8276, 80176, 8270, 8271

1.2 Relevant identified uses of the substance or mixture and uses advised against

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.

1.3 Details of the manufacturer/supplier of the safety data sheet

Manufacturer: United States

J-B Weld Company, LLC 1130 COMO ST. SULPHUR SPRINGS, TX 75482 903-885-7696 info@jbweld.com

1.4 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

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 (CLP):

Skin sensitization, category 1

Chronic aquatic hazard, category 3

Hazard-determining components of labeling:

Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether

2,4,6-tris(dimethylaminomethyl)phenol

Bis[(dimethylamino)methyl]phenol

2.2 Label elements

Hazard pictograms:



Signal word: Warning **Hazard statements:**

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

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.

P273 Avoid release to the environment.

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



According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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

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

P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents and container as instructed in Section 13.

2.3 Other hazards: None known

SECTION 3: Composition/information on ingredients

3.1 Substance: Not applicable.

3.2 Mixture:

Identification	Name	Classification according to Regulation (EC) No. 1272/2008 (CLP)	Weight %
CAS number: 72244-98-5	Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3- propanediol (4:1), 2-hydroxy-3- mercaptopropyl ether	Skin Sens. 1; H317 Aquatic Chronic 3; H412	36.75
CAS number: 1317-65-3 EC number: 215-279-6	Limestone	Not classified	22.52
CAS number: 14807-96-6 EC number: 238-877-9	Talc	Not classified	7.38
CAS number: 90-72-2 EC number: 202-013-9	2,4,6- tris(dimethylaminomethyl)phenol	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319	2.28
CAS number: 65997-17-3 EC number: 266-046-0	Glass, oxide, chemicals	Carc. 1B; H350	1.75
CAS number: 67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica	Not classified	0.8
CAS number: 1302-78-9 EC number: 215-108-5	Bentonite	Not classified	0.4
CAS number: 13463-67-7 EC number: 236-675-5	Titanium Dioxide	Not classified	0.34
CAS number: 71074-89-0 EC number: 275-162-0	Bis[(dimethylamino)methyl]phenol	Skin Corr. 1B; H314	0.28

Additional information:

Fiberglass powder (CAS # 65997-17-3) is classified as a carcinogen in its inhalable form. Since the fiberglass

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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

powder in this product is not inhalable, the product itself is not classified as a carcinogen in the form presented.

Full Text of H and EUH statements: See section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes:

Not determined or not available.

Following inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

Following skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

Following eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

If symptoms develop or persist, seek medical attention

Following ingestion:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

4.2 Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not available.

Delayed symptoms and effects:

Not determined or not available.

4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment:

Not determined or not available.

Notes for the doctor:

Not determined or not available

SECTION 5: Firefighting measures

5.1 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.

5.2 Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for firefighters

Personal protection equipment:

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

Special precautions:

Not determined or not applicable.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Ensure air handling systems are operational.

Wear protective eye wear, gloves and clothing.

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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

6.2 Environmental precautions:

Should not be released into the environment.

Prevent from reaching drains, sewer or waterway.

6.3 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.

6.4 Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

7.1 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.

7.2 Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

7.3 Specific end use(s):

Not determined or not applicable.

SECTION 8: Exposure controls/personal protection







8.1 Control parameters

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Bulgaria	Glass, oxide, chemicals	65997-17-3	TWA: 6.0 mg/m³ (inhalable fraction)
	Bentonite	1302-78-9	TWA: 6.0 mg/m³ (inhalable fraction)
	Glass, oxide, chemicals	65997-17-3	TWA: 1.0 fibres/cm³ (respirable fraction)
	Bentonite	1302-78-9	TWA: 3.0 mg/m³ (respirable fraction)
	Limestone	1317-65-3	TWA: 10 mg/m³
	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m³ (Respirable dust)
	Talc	14807-96-6	TWA: 6.0 mg/m³ (inhalable fraction)
	Talc	14807-96-6	TWA: 3.0 mg/m³ (respirable fraction)
Cyprus	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 10 mg/m ³

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m ³ 8-hr
	Talc	14807-96-6	8-hour TWA: 706 particles/cm ³
Czech Republic	Bentonite	1302-78-9	8-hour TWA: 6.0 mg/m ³
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 5.0 mg/m³ (glass laminate dusts)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1.0 fibers/cm³ (respirable fibers)
	Limestone	1317-65-3	TWA 8-hr: 10 mg/m ³
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 4 mg/m³ (synthetic mineral fibers - all sizes)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1.0 fibers/cm³ (synthetic mineral respirable fibers)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 0.3 fibers/cm³ (ceramic respirable fibers)
	Talc	14807-96-6	8-hour TWA: 2.0 mg/m ³ (dust, respirable fraction, Fr \leq 5%)
	Talc	14807-96-6	8-hour TWA: 10 mg/m³ (dust, respirable fraction, Fr > 5%)
	Talc	14807-96-6	8-hour TWA: 10 mg/m³ (dust, total concentration)
	Talc	14807-96-6	8-hour TWA: 5.0 mg/m³ (polymeric material dust)
Slovakia	Bentonite	1302-78-9	8-hour TWA (NPEL): 6 mg/m ³
	Limestone	1317-65-3	NPEL TWA 8-hr: 10 mg/m ³
	Titanium Dioxide	13463-67-7	OEL: TWA (NPEL) 5 mg/m ³ 8-hr
	Glass, oxide, chemicals	65997-17-3	8-hour TWA (NPEL): 2 fibers/cm ³ (4 mg/m ³)
	Talc	14807-96-6	8-hour TWA (NPEL): 2 mg/m ³ (respirable fraction, Fr \leq 5%)
	Talc	14807-96-6	8-hour TWA: 2 mg/m 3 (respirable fraction, Fr > 5 %)
Croatia	Limestone	1317-65-3	TWA 8-hr: 10 mg/m³ (Total dust); 4 mg/m³ (Respirable dust)
	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m³ (Total dust) 15-min
	Titanium Dioxide	13463-67-7	OEL: TWA 4.0 mg/m³ (Respirable dust) 15-min
	Talc	14807-96-6	Maximum (8 hr) allowable concentration: 1 mg/m³ (respirable dust)
Estonia	Limestone	1317-65-3	TWA 8-hr: 10 mg/m³; 5 mg/m³ (Fine dust)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³
	Titanium Dioxide	13463-67-7	OEL: TWA 5 mg/m³ 8-hr
	Talc	14807-96-6	8-hour TWA: 10 mg/m³ (total dust)
	Talc	14807-96-6	8-hour TWA: 5 mg/m³ (fine dust)
	Talc	14807-96-6	8-hour TWA: 3 mg/m³ (plastic)
	Talc	14807-96-6	8-hour TWA: 1 mg/m³ (textile)

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Talc	14807-96-6	8-hour TWA: 5 mg/m³ (organic dust, total dust)
Hungary	Limestone	1317-65-3	ÁK Value TWA 8-hr: 221 mg/m³; CK Value STEL 60-min 442 mg/m³
	Glass, oxide, chemicals	65997-17-3	8-Hour TWA (ÁK Value): 1.0 fibers/cm³
	Talc	14807-96-6	8-hour TWA (ÁK Value): 2 mg/m³ (respirable)
	Talc	14807-96-6	8-hour TWA (ÁK Value): 10 mg/m³ (total, inhalable)
Romania	Limestone	1317-65-3	TWA 8-hr: 10 mg/m ³
	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m ³ 8-hr
	Titanium Dioxide	13463-67-7	OEL: STEL 15 mg/m³ 15-min
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (glass wool fibers - respirable fraction)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (rock wool fibers - respirable fraction)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (slag wool fibers - respirable fraction)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (special purpose glass fibers - respirable fraction)
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (inhalable fraction)
Latvia	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m ³ 8-hr
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 2 mg/m³
	Talc	14807-96-6	8-hour TWA: 4 mg/m³ (tuff, pumice, perlite)
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (natural and synthetic)
	Talc	14807-96-6	8-hour TWA: 5 mg/m³ (polymers)
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (abrasive dusts)
	Talc	14807-96-6	8-hour TWA: 4 mg/m³ (tal-like dust)
Belgium	Limestone	1317-65-3	TWA 8-hr: 10 mg/m ³
	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m ³ 8-hr
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 10 mg/m³ (glass - fibers or dusts of)
	Talc	14807-96-6	8-hour TWA: 2 mg/m ³
	Talc	14807-96-6	8-hour TWA: 10 mg/m³ (inhalable fraction)
	Talc	14807-96-6	8-hour TWA: 3 mg/m³ (respirable fraction)
Lithuania	Titanium Dioxide	13463-67-7	OEL: TWA 5 mg/m³ 8-hr
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (glass fiber)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 0.2 fibers/cm³ (synthetic inorganic, crystal fibers)

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibers/cm³ (synthetic inorganic, amorphous fibers)
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (inhalable fraction)
	Talc	14807-96-6	8-hour TWA: 1 mg/m³ (respirable fraction)
Finland	Limestone	1317-65-3	TWA 8-hr: 10 mg/m ³
	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m ³ 8-hr
	Glass, oxide, chemicals	65997-17-3	8-hour limit: 5 mg/m³
	Talc	14807-96-6	15-minute limit: 2 ppm (inhalable)
	Talc	14807-96-6	15-minute limit: 1 ppm (respirable)
Poland	Titanium Dioxide	13463-67-7	OEL: TWA (NDS) 10.0 mg/m ³ 8-hr
	Glass, oxide, chemicals	65997-17-3	8-hour TWA(NDS): 2.0 mg/m³ (inhalable fraction)
	Glass, oxide, chemicals	65997-17-3	8-hour TWA (NDS): 1.0 fibers/cm³ (respirable fibers)
	Talc	14807-96-6	8-hour TWA (NDS): 4 mg/m³ (inhalable fraction)
	Talc	14807-96-6	8-hour TWA (NDS): 1 mg/m³ (respirable fraction)
France	Limestone	1317-65-3	VME TWA: 10 mg/m ³
	Titanium Dioxide	13463-67-7	OEL: (VME) 10 mg/m ³
	Talc	14807-96-6	Time weighted average (VME): 10 mg/m³ (inhalable fraction)
	Talc	14807-96-6	Time weighted average (VME): 5 mg/m³ (respirable fraction)
Greece	Limestone	1317-65-3	TWA 8-hr: 10 mg/m³ (Inhalable dust); 5 mg/m³ (Respirable dust)
	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m³ (Inhalable) 8-hr
	Titanium Dioxide	13463-67-7	OEL: TWA 5.0 mg/m³ (Respirable dust) 8-hr
	Talc	14807-96-6	8-hour TWA: 10 mg/m³ (inhalable)
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (respirable)
Ireland	Limestone	1317-65-3	TWA 8-hr: 10 mg/m³ (Total dust); 4 mg/m³ (Respirable dust)
	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m³ (Inhalable dust) 8-hr
	Titanium Dioxide	13463-67-7	OEL: TWA 4.0 mg/m³ (Respirable dust) 8-hr
	Glass, oxide, chemicals	65997-17-3	8-hour OEL (TWA): 2 fibers/cm³ of air (5 mg/m³)
	Talc	14807-96-6	8-hour OEL (TWA): 10 mg/m³ (total inhalable dust)
	Talc	14807-96-6	8-hour OEL (TWA): 0.8 mg/m³ (respirable fraction)

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
United Kingdom	Limestone	1317-65-3	TWA 8-hr: 10 mg/m³ (Total dust); 4 mg/m³ (Respirable dust)
	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m³ (Total dust)
	Titanium Dioxide	13463-67-7	OEL: TWA 4.0 mg/m³ (Respirable dust)
	Glass, oxide, chemicals	65997-17-3	TWA: 1 fibre/mL (5 mg/m³)
	Talc	14807-96-6	TWA: 1 mg/m³ (respirable dust)
Austria	Titanium Dioxide	13463-67-7	OEL: TWA 5 mg/m³
	Titanium Dioxide	13463-67-7	OEL: STEL 10 mg/m ³
Denmark	Titanium Dioxide	13463-67-7	OEL: TWA 6.0 mg/m ³
	Glass, oxide, chemicals	65997-17-3	TWA: 1 fibers/cm³
Slovenia	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 500000 fibers/m ³
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (Respirable fraction)
Italy	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m ³ 8-hr
	Glass, oxide, chemicals	65997-17-3	8-hour TWA: 1 fibres/cm ³
	Talc	14807-96-6	8-hour TWA: 2 mg/m³ (respirable fraction)
Portugal	Titanium Dioxide	13463-67-7	OEL: TWA 10.0 mg/m ³ 8-hr
	Glass, oxide, chemicals	65997-17-3	NP 1796-2007 8-hour exposure limit: 1 fibres/cm³
	Talc	14807-96-6	NP 1796-2007 8-hour exposure limit: 2 mg/m³ (respirable fraction)
Netherlands	Glass, oxide, chemicals	65997-17-3	Binding 8-hour TWA: 0.5 fibre/cm³
	Talc	14807-96-6	8-hour TWA: 0.25 mg/m³ (respirable)
Spain	Titanium Dioxide	13463-67-7	OEL: (VLA_ED) 10.0 mg/m ³ 8-hr
	Glass, oxide, chemicals	65997-17-3	8-hour daily exposure limit (VLA_ED): 0.5 fibres/cm³
	Talc	14807-96-6	8-hour daily exposure limit (VLA_ED): 2 mg/m³ (respirable fraction)
Sweden	Titanium Dioxide	13463-67-7	OEL: (NGV) 5.0 (Total dust) mg/m ³
	Glass, oxide, chemicals	65997-17-3	Level Limit Value (NGV): 1 fiber/mL
	Talc	14807-96-6	Level Limit Value (NGV): 2 mg/m³ (total dust)
	Talc	14807-96-6	Level Limit Value (NGV): 1 mg/m³ (respirable dust)
Germany	Talc	14807-96-6	AGW Limit value: 1.25 mg/m³ (respirable fraction)
	Talc	14807-96-6	AGW limit value: 10 mg/m³ (inhalable fraction)
	Talc	14807-96-6	AGW Short term (15 min) exposure limit: 20 mg/m³ (inhalable fraction)

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Biological limit values:

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

Derived No Effect Level (DNEL):

Not determined or not applicable.

Predicted No Effect Concentration (PNEC):

Not determined or not applicable.

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

8.2 Exposure controls

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.

Environmental exposure controls:

Select controls based on a risk assessment of local conditions.

See section 6 for information on accidental release measures.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	White liquid
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)	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Not determined or not available.
Not determined or not available.
Not determined or not available.
1.902
Not determined or not available.
Not determined or not available.
Not determined or not available.
>220 °C (>392 °F)
Not determined or not available.

9.2 Other information

VOC Content	<1%

SECTION 10: Stability and reactivity

10.1 Reactivity:

Does not react under normal conditions of use and storage.

10.2 Chemical stability:

Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions:

None under normal conditions of use and storage.

10.4 Conditions to avoid:

None known.

10.5 Incompatible materials:

None known.

10.6 Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

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

Product data: No data available.

Substance data:

Name	Route	Result
2,4,6- tris(dimethylaminomethyl)phe nol		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:

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Name	Result
2,4,6- tris(dimethylaminomethyl)phe nol	Causes skin irritation.
Bis[(dimethylamino)methyl]ph enol	Causes severe skin burns and eye damage.

Serious eye damage/irritation

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

Product data: No data available. Substance data:

Name	Result
2,4,6- tris(dimethylaminomethyl)phe nol	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment: May cause an allergic skin reaction

Product data: No data available. Substance data:

Name	Result
Poly(oxy(methyl-1,2- ethanediyl)), alpha-hydro- omega-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3- propanediol (4:1), 2- hydroxy-3-mercaptopropyl ether	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.
Titanium Dioxide	. ' '	Airborne, unbound particles of respirable size are known to cause cancer.

International Agency for Research on Cancer (IARC):

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

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.

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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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.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available. **Other information:**No data available.

SECTION 12: Ecological information

12.1 Toxicity

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

Product data: No data available.

Substance data:

Name	Result
Poly(oxy(methyl-1,2- ethanediyl)), alpha-hydro- omega-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3- propanediol (4:1), 2- hydroxy-3-mercaptopropyl ether	NOEC - Daphnia magna (Water flea) - 3.5 mg/L - 21 d

12.2 Persistence and degradability

Product data: No data available.

Substance data: No data available.

12.3 Bioaccumulative potential

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Product data: No data available. **Substance data:** No data available.

12.4 Mobility in soil

Product data: No data available.

Substance data: No data available.

12.5 Results of PBT and vPvB assessment

PBT assessment: This product does not contain any substances that are assessed to be a PBT. **vPvB assessment:** This product does not contain any substances that are assessed to be a vPvB.

12.6 Other adverse effects: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Relevant information:

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

SECTION 14: Transport information

International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

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 Carriage of Dangerous Goods by Inland Waterways (ADN)

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

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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Packing group	None
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

European regulations

Inventory listing (EINECS):

72244-98-5	Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether	Not Listed
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	Listed
71074-89-0	Bis[(dimethylamino)methyl]phenol	Listed
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica	Not Listed
65997-17-3	Glass, oxide, chemicals	Listed
14807-96-6	Talc	Listed
1317-65-3	Limestone	Listed
13463-67-7	Titanium Dioxide	Listed
1302-78-9	Bentonite	Listed

REACH SVHC candidate list: Not determined. **REACH SVHC Authorizations:** Not determined.

REACH Restriction: Not determined.

Water hazard class (WGK) (Product): Not determined.

Water hazard class (WGK) (Substance):

Ingredient Name	CAS	Class
Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether	72244-98-5	1
2,4,6- tris(dimethylaminomethyl)ph enol	90-72-2	1
Siloxanes and Silicones, di- Me, reaction products with silica	67762-90-7	Non-hazardous to water.
Talc	14807-96-6	Non-hazardous to water.
Limestone	1317-65-3	Non-hazardous to water.
Titanium Dioxide	13463-67-7	Non-hazardous to water.

Other regulations

Germany MAK: 8-hour TWA: 0.3 mg/m³ (respirable fraction), TWA 8-hr: 0.3 mg/m³ (Respirable fraction); 4 mg/m³ (Inhalable fraction), 8-hour TWA: 4 mg/m³ (inhalable fraction)

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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SECTION 16: Other information

Indication of changes:

Not applicable.

Abbreviations and Acronyms: None

Classification procedure:

Classification according to Regulation (EC) No. 1272/2008 (CLP)	Method Used
Skin sensitization, category 1	Calculation method
Chronic aquatic hazard, category 3	Calculation method

Summary of classification in section 3:

Skin Sens. 1; H317	Skin sensitization, category 1
Aquatic Chronic 3; H412	Chronic aquatic hazard, category 3
Acute Tox. 4; H302	Acute toxicity (oral), category 4
Skin Irrit. 2; H315	Skin irritation, category 2
Eye Irrit. 2; H319	Eye irritation, category 2A
Carc. 1B; H350	Carcinogenicity, category 1B
Skin Corr. 1B; H314	Skin corrosion, category 1B

Summary of hazard statements in section 3:

H317	May cause an allergic skin reaction
H412	Harmful to aquatic life with long lasting effects
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H350	May cause cancer
H314	Causes severe skin burns and eye damage

Disclaimer:

This product has been classified in accordance with EC No. 1272/2008 (CLP) and EC No. 1907/2006 (REACH). 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.

Initial preparation date: 06.15.2018

End of Safety Data Sheet