

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 1 of 15

## Steel Reinforced Epoxy Resin - Syringe - Part A

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

#### 1.1 Product identifier

**Product Name:** Steel Reinforced Epoxy Resin - Syringe - Part A

**Product code:** 50165, 50176



#### 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:**

**North America**

JB Weld Company, LLC  
400 CMH Road  
Sulpher Springs, TX 75482  
903-885-7696  
info@jbweld.com

**Supplier:**

**European Union**

JRP Distribution Ltd.  
Unit 3 New Wharf Brighton Road  
Shoreham by Sea, BN43 6RN

#### 1.4 Emergency telephone number:

**United Kingdom**

CHEMTREC

1-703-527-3887

+(44)-870-8200418 (London)

### 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

Skin irritation, category 2

Eye irritation, category 2A

Chronic aquatic hazard, category 2

**Hazard-determining components of labeling:**

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

Poly[(phenyl glycidyl ether)-co-formaldehyde]

1,4-bis(2,3 epoxypropoxy)butane

(3-Glycidoxypropyl)trimethoxysilane

#### 2.2 Label elements

**Hazard pictograms:**



**Signal word:** Warning

**Hazard statements:**

H317 May cause an allergic skin reaction.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H411 Toxic 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.

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 2 of 15

## Steel Reinforced Epoxy Resin - Syringe - Part A

P264 Wash skin and eyes thoroughly after handling.  
P273 Avoid release to the environment.  
P302+P352 IF ON SKIN: Wash with plenty of water/soap.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention  
P321 Specific treatment (see supplemental first aid instructions on this label).  
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  
P391 Collect spillage  
P501 Dispose of contents/container in accordance with local regulations.

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: 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	<50
CAS number: 28064-14-4	Poly[(phenyl glycidyl ether)-co-formaldehyde]	Skin Sens. 1; H317 Skin Irrit. 2 ; H315 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	<35
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	<15
CAS number: 67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica	Not classified	<10
CAS number: 14807-96-6 EC number: 238-877-9	Talc Powder	Not classified	<5
CAS number: 2530-83-8 EC number: 219-784-2	(3-Glycidoxypropyl)trimethoxysilane	Eye Dam. 1; H318	<2
CAS number: 26139-75-3	Formaldehyde, polymer with 1,3-dimethylbenzene	Not classified	<2
CAS number: 1333-86-4 EC number: 215-609-9	Bounded Carbon Black	Not classified	<1

Additional information: None

Full Text of H and EUH statements: See section 16

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 3 of 15

## Steel Reinforced Epoxy Resin - Syringe - Part A

### 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

##### 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.

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 4 of 15

## Steel Reinforced Epoxy Resin - Syringe - Part A

### 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.  
Absorb with non-combustible liquid-binding material (sand, diatomaceous 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	Talc Powder	14807-96-6	TWA: 6.0 mg/m <sup>3</sup> (inhalable fraction)
	Talc Powder	14807-96-6	TWA: 3.0 mg/m <sup>3</sup> (respirable fraction)
Croatia	Bounded Carbon Black	1333-86-4	Dangerous Substances Exposure Limit Values in the Workplace: 3.5 mg/m <sup>3</sup> (8hr); 7.0 mg/m <sup>3</sup> (15 min)

## Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 5 of 15

### Steel Reinforced Epoxy Resin - Syringe - Part A

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Talc Powder	14807-96-6	Maximum (8 hr) allowable concentration: 1 mg/m <sup>3</sup> (respirable dust)
Cyprus	Bounded Carbon Black	1333-86-4	Control of factory atmosphere and dangerous substances in factories regulation: TWA 3.5 mg/m <sup>3</sup> (8 hr)
	Talc Powder	14807-96-6	8-hour TWA: 706 particles/cm <sup>3</sup>
Czech Republic	Bounded Carbon Black	1333-86-4	Government Decree 361/2007 Sb.: TWA 2.0 mg/m <sup>3</sup> (8 hr)
	Talc Powder	14807-96-6	8-hour TWA: 2.0 mg/m <sup>3</sup> (dust, respirable fraction, Fr ≤ 5%)
	Talc Powder	14807-96-6	8-hour TWA: 10 mg/m <sup>3</sup> (dust, respirable fraction, Fr > 5%)
	Talc Powder	14807-96-6	8-hour TWA: 10 mg/m <sup>3</sup> (dust, total concentration)
	Talc Powder	14807-96-6	8-hour TWA: 5.0 mg/m <sup>3</sup> (polymeric material dust)
Poland	Bounded Carbon Black	1333-86-4	Dz.U.Poz. 817/2014, Annex 1: TWA (NDS) 4.0 mg/m <sup>3</sup> (8 hr)
	Talc Powder	14807-96-6	8-hour TWA (NDS): 4 mg/m <sup>3</sup> (inhalable fraction)
	Talc Powder	14807-96-6	8-hour TWA (NDS): 1 mg/m <sup>3</sup> (respirable fraction)
Slovakia	Bounded Carbon Black	1333-86-4	Regulation No. 355.2006 concerning protection of workers exposed to chemical agents, Annex 1: TWA (NPEL) 2.0 mg/m <sup>3</sup>
	Talc Powder	14807-96-6	8-hour TWA (NPEL): 2 mg/m <sup>3</sup> (respirable fraction, Fr ≤ 5%)
	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (respirable fraction, Fr > 5%)
Belgium	Bounded Carbon Black	1333-86-4	Exposure Limit Value: TWA 3.5 mg/m <sup>3</sup> (8 hr)
	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup>
	Talc Powder	14807-96-6	8-hour TWA: 10 mg/m <sup>3</sup> (inhalable fraction)
	Talc Powder	14807-96-6	8-hour TWA: 3 mg/m <sup>3</sup> (respirable fraction)
Denmark	Bounded Carbon Black	1333-86-4	Exposure Limits for Substances & Materials: TWA 3.5 mg/m <sup>3</sup>
Finland	Bounded Carbon Black	1333-86-4	Workplace Exposure Limits: 3.5 mg/m <sup>3</sup> (8 hr); 7.0 mg/m <sup>3</sup> (15 min)
	Talc Powder	14807-96-6	15-minute limit: 2 ppm (inhalable)
	Talc Powder	14807-96-6	15-minute limit: 1 ppm (respirable)
Estonia	Talc Powder	14807-96-6	8-hour TWA: 10 mg/m <sup>3</sup> (total dust)
	Talc Powder	14807-96-6	8-hour TWA: 5 mg/m <sup>3</sup> (fine dust)
	Talc Powder	14807-96-6	8-hour TWA: 3 mg/m <sup>3</sup> (plastic)
	Talc Powder	14807-96-6	8-hour TWA: 1 mg/m <sup>3</sup> (textile)

## Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 6 of 15

### Steel Reinforced Epoxy Resin - Syringe - Part A

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Talc Powder	14807-96-6	8-hour TWA: 5 mg/m <sup>3</sup> (organic dust, total dust)
France	Bounded Carbon Black	1333-86-4	Threshold Limit Values (VLEP): Time weighted average (VME) 3.5 mg/m <sup>3</sup>
	Talc Powder	14807-96-6	Time weighted average (VME): 10 mg/m <sup>3</sup> (inhalable fraction)
	Talc Powder	14807-96-6	Time weighted average (VME): 5 mg/m <sup>3</sup> (respirable fraction)
Greece	Bounded Carbon Black	1333-86-4	Decree 307/1986: TWA 3.5mg/m <sup>3</sup> (8 hr); STEL 7.0 mg/m <sup>3</sup> (15 min)
	Talc Powder	14807-96-6	8-hour TWA: 10 mg/m <sup>3</sup> (inhalable)
	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (respirable)
Ireland	Bounded Carbon Black	1333-86-4	2016 Code of Practice for Chemical Agents Regulations 2001: TWA 3.0 mg/m <sup>3</sup> (8 hr) OEL
	Talc Powder	14807-96-6	8-hour OEL (TWA): 10 mg/m <sup>3</sup> (total inhalable dust)
	Talc Powder	14807-96-6	8-hour OEL (TWA): 0.8 mg/m <sup>3</sup> (respirable fraction)
Italy	Bounded Carbon Black	1333-86-4	Legislative Decree n.81: TWA 3.0 mg/m <sup>3</sup> (8 hr)
	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (respirable fraction)
Portugal	Bounded Carbon Black	1333-86-4	VLE: 3.5 mg/m <sup>3</sup> (8 hr)
	Talc Powder	14807-96-6	NP 1796-2007 8-hour exposure limit: 2 mg/m <sup>3</sup> (respirable fraction)
Hungary	Talc Powder	14807-96-6	8-hour TWA (ÁK Value): 2 mg/m <sup>3</sup> (respirable)
	Talc Powder	14807-96-6	8-hour TWA (ÁK Value): 10 mg/m <sup>3</sup> (total, inhalable)
Spain	Bounded Carbon Black	1333-86-4	VLA: VLA_ED 3.5 mg/m <sup>3</sup> (8 hr)
	Talc Powder	14807-96-6	8-hour daily exposure limit (VLA_ED): 2 mg/m <sup>3</sup> (respirable fraction)
United Kingdom	Bounded Carbon Black	1333-86-4	WEL: TWA 3.5 mg/m <sup>3</sup> ; STEL 7.0 mg/m <sup>3</sup>
	Talc Powder	14807-96-6	TWA: 1 mg/m <sup>3</sup> (respirable dust)
Latvia	Talc Powder	14807-96-6	8-hour TWA: 4 mg/m <sup>3</sup> (tuff, pumice, perlite)
	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (natural and synthetic)
	Talc Powder	14807-96-6	8-hour TWA: 5 mg/m <sup>3</sup> (polymers)
	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (abrasive dusts)
	Talc Powder	14807-96-6	8-hour TWA: 4 mg/m <sup>3</sup> (tal-like dust)
Lithuania	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (inhalable fraction)

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 7 of 15

## Steel Reinforced Epoxy Resin - Syringe - Part A

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Talc Powder	14807-96-6	8-hour TWA: 1 mg/m <sup>3</sup> (respirable fraction)
Romania	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (inhalable fraction)
Slovenia	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (Respirable fraction)
Germany	Talc Powder	14807-96-6	AGW Limit value: 1.25 mg/m <sup>3</sup> (respirable fraction)
	Talc Powder	14807-96-6	AGW limit value: 10 mg/m <sup>3</sup> (inhalable fraction)
	Talc Powder	14807-96-6	AGW Short term (15 min) exposure limit: 20 mg/m <sup>3</sup> (inhalable fraction)
Netherlands	Talc Powder	14807-96-6	8-hour TWA: 0.25 mg/m <sup>3</sup> (respirable)
Sweden	Talc Powder	14807-96-6	Level Limit Value (NGV): 2 mg/m <sup>3</sup> (total dust)
	Talc Powder	14807-96-6	Level Limit Value (NGV): 1 mg/m <sup>3</sup> (respirable dust)

### 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.

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 8 of 15

## Steel Reinforced Epoxy Resin - Syringe - Part A

### 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

<b>Appearance</b>	Blue liquid
<b>Odor</b>	Not available
<b>Odor threshold</b>	Not available
<b>pH</b>	Not available
<b>Melting point/freezing point</b>	Not available
<b>Initial boiling point/range</b>	Not available
<b>Flash point (closed cup)</b>	93.3°C (200°F)
<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available
<b>Upper flammability/explosive limit</b>	Not available
<b>Lower flammability/explosive limit</b>	Not available
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Density</b>	1.2 g/cm <sup>3</sup>
<b>Relative density</b>	Not available
<b>Solubilities</b>	Not determined or not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Auto/Self-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	Not available
<b>Dynamic viscosity</b>	Not available
<b>Kinematic viscosity</b>	Not available
<b>Explosive properties</b>	Not available
<b>Oxidizing properties</b>	Not available

### 9.2 Other information

## 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.



# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 9 of 15

## Steel Reinforced Epoxy Resin - Syringe - Part A

### 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 epoxypropoxy)butane	dermal	LD50 - Rabbit - 1,130 mg/kg

##### Skin corrosion/irritation

**Assessment:** Causes skin irritation

##### Product data:

No data available.

##### Substance data:

Name	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Causes skin irritation.
Poly[(phenyl glycidyl ether)-co-formaldehyde]	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)trimethoxysilane	Causes serious eye damage.
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Causes serious eye irritation.
Poly[(phenyl glycidyl ether)-co-formaldehyde]	Causes 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:

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 10 of 15

## Steel Reinforced Epoxy Resin - Syringe - Part A

Name	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	May cause an allergic skin reaction.
Poly[(phenyl glycidyl ether)-co-formaldehyde]	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals
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
Bounded Carbon Black	Not applicable.	The carcinogenic classification only applies to airborne, unbound particles of respirable size.

### International Agency for Research on Cancer (IARC):

Name	Classification
Talc Powder	Group 3 - Not classifiable as to its carcinogenicity to humans
Bounded Carbon Black	Group 2B - Possibly carcinogenic to humans

**National Toxicology Program (NTP):** None of the ingredients are listed.

### 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:

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 11 of 15

## Steel Reinforced Epoxy Resin - Syringe - Part A

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:** No data available.

### 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	UN 3082
UN proper shipping name	Environmentally hazardous substance, liquid, N.O.S. (Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, Poly[(phenyl glycidyl ether)-co-formaldehyde])
UN transport hazard class(es)	9 
Packing group	III

## Safety Data Sheet

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


Initial preparation date: 01.18.2019

Page 12 of 15


### Steel Reinforced Epoxy Resin - Syringe - Part A

<b>Environmental hazards</b>	Marine Pollutant (Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, Poly[(phenyl glycidyl ether)-co-formaldehyde])
<b>Special precautions for user</b>	None


#### International Carriage of Dangerous Goods by Inland Waterways (ADN)

<b>UN number</b>	UN 3082
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, N.O.S. (Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, Poly[(phenyl glycidyl ether)-co-formaldehyde])
<b>UN transport hazard class(es)</b>	9 
<b>Packing group</b>	III
<b>Environmental hazards</b>	Marine Pollutant (Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, Poly[(phenyl glycidyl ether)-co-formaldehyde])
<b>Special precautions for user</b>	None

#### International Maritime Dangerous Goods (IMDG)

<b>UN number</b>	UN 3082
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, N.O.S. (Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, Poly[(phenyl glycidyl ether)-co-formaldehyde])
<b>UN transport hazard class(es)</b>	9 
<b>Packing group</b>	III
<b>Environmental hazards</b>	Marine Pollutant (Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, Poly[(phenyl glycidyl ether)-co-formaldehyde])
<b>Special precautions for user</b>	None
<b>EmS number</b>	F-A, S-F
<b>Stowage category</b>	A
<b>Excepted quantities</b>	E1
<b>Limited quantity</b>	5L

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

<b>UN number</b>	UN 3082
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, N.O.S. (Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, Poly[(phenyl glycidyl ether)-co-formaldehyde])
<b>UN transport hazard class(es)</b>	9 
<b>Packing group</b>	III

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 13 of 15

## Steel Reinforced Epoxy Resin - Syringe - Part A

<b>Environmental hazards</b>	Marine Pollutant (Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, Poly[(phenyl glycidyl ether)-co-formaldehyde])
<b>Special precautions for user</b>	None
<b>ERG code</b>	9L
<b>Excepted quantities</b>	E1
<b>Passenger and cargo</b>	450L
<b>Cargo aircraft only</b>	450L
<b>Limited quantity</b>	30 Kg G

### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

<b>Bulk Name</b>	None
<b>Ship type</b>	None
<b>Pollution category</b>	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	Listed
1333-86-4	Bounded Carbon Black	Listed
28064-14-4	Poly[(phenyl glycidyl ether)-co-formaldehyde]	Not Listed
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane	Listed
2530-83-8	(3-Glycidoxypropyl)trimethoxysilane	Listed
26139-75-3	Formaldehyde, polymer with 1,3-dimethylbenzene	Not Listed
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica	Not Listed
14807-96-6	Talc Powder	Listed

**REACH SVHC candidate list:** None of the ingredients are listed.

**REACH SVHC Authorizations:** None of the ingredients are listed.

**REACH Restriction:** None of the ingredients are listed.

**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
Poly[(phenyl glycidyl ether)-co-formaldehyde]	28064-14-4	Class 2
1,4-bis(2,3 epoxypropoxy)butane	2425-79-8	1

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 14 of 15

## Steel Reinforced Epoxy Resin - Syringe - Part A

Ingredient Name	CAS	Class
(3-Glycidoxypropyl)trimethoxysilane	2530-83-8	2
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	Non-hazardous to water.
Talc Powder	14807-96-6	Non-hazardous to water.
Bounded Carbon Black	1333-86-4	Non-hazardous to water.

### Other regulations

**Germany MAK:** Talc: 8-hour TWA: 4 mg/m<sup>3</sup> (inhalable fraction), Talc: 8-hour TWA: 0.3 mg/m<sup>3</sup> (respirable 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
Skin sensitization, category 1	Calculation method
Skin irritation, category 2	Calculation method
Eye irritation, category 2A	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
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
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects
H312	Harmful in contact with skin
H332	Harmful if inhaled
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

## Safety Data Sheet

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

**Initial preparation date:** 01.18.2019

Page 15 of 15

### Steel Reinforced Epoxy Resin - Syringe - Part A

workplace remains with the user.

**Initial preparation date:** 01.18.2019

**End of Safety Data Sheet**

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 1 of 14

## Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - 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 - Syringe - Part B

**Product code:** 50176



#### 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:**

**North America**

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

**Supplier:**

**European Union**

JRP Distribution Ltd.  
Unit 3 New Wharf Brighton Road  
Shoreham by Sea, BN43 6RN

#### 1.4 Emergency telephone number:

**United Kingdom**

CHEMTREC

1-703-527-3887

+(44)-870-8200418 (London)

### SECTION 2: Hazard(s) identification

#### 2.1 Classification of the substance or mixture:

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

Skin corrosion, category 1B

Skin sensitization, category 1

Serious eye damage, category 1

Chronic aquatic hazard, category 2

**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

Amines, polyethylenepoly-; HEP

3,6,9,12-tetra-azatetradecamethylenediamine; pentactylenhexamine

1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl)amino]ethyl]-

#### 2.2 Label elements

**Hazard pictograms:**



**Signal word:** Danger

**Hazard statements:**

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements:**

P260 Do not breathe dust/fume/gas/mist/vapors/spray.



# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 2 of 14

## Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

P264 Wash skin and eyes thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P302+P352 IF ON SKIN: Wash with plenty of water/soap.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P310 Immediately call a POISON CENTER/doctor/physician.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 Specific treatment (see supplemental first aid instructions on this label).  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention  
P391 Collect spillage  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local regulations.

**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	<70
CAS number: 26139-75-3	Formaldehyde, polymer with 1,3-dimethylbenzene	Not classified	<15
CAS number: 90-72-2 EC number: 202-013-9	Amine 2,4,6-tris(dimethylaminomethyl)phenol	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319	<10
CAS number: 67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica	Not classified	<6
CAS number: 68131-73-7 EC number: 268-626-9	Amines, polyethylenepoly-; HEP	Aquatic Acute 1; H400 Acute Tox. 4; H312 Acute Tox. 4; H302 Aquatic Chronic 1; H410 Skin Corr. 1B; H314 Skin Sens. 1; H317	<5
CAS number: 4067-16-7 EC number: 223-775-9	3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenhexamine	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Skin Corr. 1B; H314 Skin Sens. 1; H317	<5
CAS number: 14807-96-6 EC number: 238-877-9	Talc Powder	Not classified	<2

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 3 of 14

## Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

CAS number: 112-57-2 EC number: 203-986-2	1,2-Ethanediamine, N1-(2-aminoethyl)- N2-[2-[(2-aminoethyl)amino]ethyl]-	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Sens. 1; H317 Skin Corr. 1B; H314 Aquatic Chronic 2; H411	<1
--	---	--	----

**Additional information:** None

**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  
Take precautions to ensure your own safety  
Remove source of exposure or move person to fresh air and keep comfortable for breathing  
Immediately call a POISON CONTROL CENTER or seek medical attention  
If breathing has stopped, trained personnel should begin rescue breathing  
Avoid mouth-to-mouth contact by using a barrier device  
If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR)

#### Following skin contact:

Rinse affected area with soap and water  
If symptoms develop or persist, seek medical attention  
Avoid direct contact and wear chemical protective clothing, if necessary  
Immediately take off all contaminated clothing  
Gently blot or brush away excess product  
Rinse skin with lukewarm, gently flowing water until medical aid is available  
Immediately call a POISON CONTROL CENTER or seek medical attention  
Wash contaminated clothing before re-use or discard

#### Following eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes  
If symptoms develop or persist, seek medical attention  
Avoid direct contact and wear chemical protective gloves, if necessary  
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 until medical aid is available  
Immediately call a POISON CONTROL CENTER or seek medical attention

#### Following ingestion:

Rinse mouth thoroughly  
Seek medical attention if irritation, discomfort, or vomiting persists  
Immediately call a POISON CONTROL CENTER or seek medical attention  
Do not induce vomiting and rinse mouth  
If vomiting occurs naturally, lie on your side, in the recovery position  
If breathing has stopped, trained personnel should begin rescue breathing  
Avoid mouth-to-mouth contact by using a barrier device  
If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR)

### 4.2 Most important symptoms and effects, both acute and delayed

#### Acute symptoms and effects:

Not determined or not available.

#### Delayed symptoms and effects:

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 4 of 14

## Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

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.

### 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, diatomaceous 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.

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 5 of 14

## Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

### 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	Talc Powder	14807-96-6	TWA: 6.0 mg/m <sup>3</sup> (inhalable fraction)
	Talc Powder	14807-96-6	TWA: 3.0 mg/m <sup>3</sup> (respirable fraction)
Croatia	Talc Powder	14807-96-6	Maximum (8 hr) allowable concentration: 1 mg/m <sup>3</sup> (respirable dust)
Cyprus	Talc Powder	14807-96-6	8-hour TWA: 706 particles/cm <sup>3</sup>
Czech Republic	Talc Powder	14807-96-6	8-hour TWA: 2.0 mg/m <sup>3</sup> (dust, respirable fraction, Fr ≤ 5%)
	Talc Powder	14807-96-6	8-hour TWA: 10 mg/m <sup>3</sup> (dust, respirable fraction, Fr > 5%)
	Talc Powder	14807-96-6	8-hour TWA: 10 mg/m <sup>3</sup> (dust, total concentration)
	Talc Powder	14807-96-6	8-hour TWA: 5.0 mg/m <sup>3</sup> (polymeric material dust)
Estonia	Talc Powder	14807-96-6	8-hour TWA: 10 mg/m <sup>3</sup> (total dust)
	Talc Powder	14807-96-6	8-hour TWA: 5 mg/m <sup>3</sup> (fine dust)
	Talc Powder	14807-96-6	8-hour TWA: 3 mg/m <sup>3</sup> (plastic)
	Talc Powder	14807-96-6	8-hour TWA: 1 mg/m <sup>3</sup> (textile)
	Talc Powder	14807-96-6	8-hour TWA: 5 mg/m <sup>3</sup> (organic dust, total dust)
Hungary	Talc Powder	14807-96-6	8-hour TWA (ÁK Value): 2 mg/m <sup>3</sup> (respirable)
	Talc Powder	14807-96-6	8-hour TWA (ÁK Value): 10 mg/m <sup>3</sup> (total, inhalable)
Latvia	Talc Powder	14807-96-6	8-hour TWA: 4 mg/m <sup>3</sup> (tuff, pumice, perlite)
	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (natural and synthetic)
	Talc Powder	14807-96-6	8-hour TWA: 5 mg/m <sup>3</sup> (polymers)
	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (abrasive dusts)
	Talc Powder	14807-96-6	8-hour TWA: 4 mg/m <sup>3</sup> (tal-like dust)
Lithuania	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (inhalable fraction)
	Talc Powder	14807-96-6	8-hour TWA: 1 mg/m <sup>3</sup> (respirable fraction)

## Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 6 of 14

### Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Poland	Talc Powder	14807-96-6	8-hour TWA (NDS): 4 mg/m <sup>3</sup> (inhalable fraction)
	Talc Powder	14807-96-6	8-hour TWA (NDS): 1 mg/m <sup>3</sup> (respirable fraction)
Romania	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (inhalable fraction)
Slovakia	Talc Powder	14807-96-6	8-hour TWA (NPEL): 2 mg/m <sup>3</sup> (respirable fraction, Fr ≤ 5%)
	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (respirable fraction, Fr > 5 %)
Slovenia	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (Respirable fraction)
Belgium	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup>
	Talc Powder	14807-96-6	8-hour TWA: 10 mg/m <sup>3</sup> (inhalable fraction)
	Talc Powder	14807-96-6	8-hour TWA: 3 mg/m <sup>3</sup> (respirable fraction)
Finland	Talc Powder	14807-96-6	15-minute limit: 2 ppm (inhalable)
	Talc Powder	14807-96-6	15-minute limit: 1 ppm (respirable)
France	Talc Powder	14807-96-6	Time weighted average (VME): 10 mg/m <sup>3</sup> (inhalable fraction)
	Talc Powder	14807-96-6	Time weighted average (VME): 5 mg/m <sup>3</sup> (respirable fraction)
Germany	Talc Powder	14807-96-6	AGW Limit value: 1.25 mg/m <sup>3</sup> (respirable fraction)
	Talc Powder	14807-96-6	AGW limit value: 10 mg/m <sup>3</sup> (inhalable fraction)
	Talc Powder	14807-96-6	AGW Short term (15 min) exposure limit: 20 mg/m <sup>3</sup> (inhalable fraction)
Greece	Talc Powder	14807-96-6	8-hour TWA: 10 mg/m <sup>3</sup> (inhalable)
	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (respirable)
Ireland	Talc Powder	14807-96-6	8-hour OEL (TWA): 10 mg/m <sup>3</sup> (total inhalable dust)
	Talc Powder	14807-96-6	8-hour OEL (TWA): 0.8 mg/m <sup>3</sup> (respirable fraction)
Italy	Talc Powder	14807-96-6	8-hour TWA: 2 mg/m <sup>3</sup> (respirable fraction)
Netherlands	Talc Powder	14807-96-6	8-hour TWA: 0.25 mg/m <sup>3</sup> (respirable)
Spain	Talc Powder	14807-96-6	8-hour daily exposure limit (VLA_ED): 2 mg/m <sup>3</sup> (respirable fraction)
Sweden	Talc Powder	14807-96-6	Level Limit Value (NGV): 2 mg/m <sup>3</sup> (total dust)
	Talc Powder	14807-96-6	Level Limit Value (NGV): 1 mg/m <sup>3</sup> (respirable dust)
United Kingdom	Talc Powder	14807-96-6	TWA: 1 mg/m <sup>3</sup> (respirable dust)

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 7 of 14

## Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Portugal	Talc Powder	14807-96-6	NP 1796-2007 8-hour exposure limit: 2 mg/m <sup>3</sup> (respirable 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 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	Not available
Odor threshold	Not available
pH	Not available
Melting point/freezing point	Not available
Initial boiling point/range	Not available
Flash point (closed cup)	148.89°C (300°F)
Evaporation rate	Not available

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 8 of 14

## Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

<b>Flammability (solid, gas)</b>	Not available
<b>Upper flammability/explosive limit</b>	Not available
<b>Lower flammability/explosive limit</b>	Not available
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Density</b>	1.1 g/cm <sup>3</sup>
<b>Relative density</b>	Not available
<b>Solubilities</b>	Not determined or not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Auto/Self-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	Not available
<b>Dynamic viscosity</b>	Not available
<b>Kinematic viscosity</b>	Not available
<b>Explosive properties</b>	Not available
<b>Oxidizing properties</b>	Not available

### 9.2 Other information

## 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
Amine2,4,6-tris(dimethylaminomethyl)phe nol	oral	LD50 - Rat - 1,200 mg/kg

#### Skin corrosion/irritation

**Assessment:** Causes severe skin burns and eye damage

#### Product data:

No data available.

#### Substance data:

## Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 9 of 14

### Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

Name	Result
1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl)amino]ethyl]-	Causes severe skin burns and eye damage.
Amine 2,4,6-tris(dimethylaminomethyl)phenol	Causes skin irritation.
Amines, polyethylenepoly-; HEP	Causes severe skin burns and eye damage.
3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenehexamine	Causes severe skin burns and eye damage.

#### Serious eye damage/irritation

**Assessment:** Causes serious eye damage

**Product data:**

No data available.

**Substance data:**

Name	Result
Amine 2,4,6-tris(dimethylaminomethyl)phenol	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.
Amines, polyethylenepoly-; HEP	May cause an allergic skin reaction.
1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl)amino]ethyl]-	May cause an allergic skin reaction.
3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenehexamine	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:** No data available.

**International Agency for Research on Cancer (IARC):**

Name	Classification
Talc Powder	Group 3 - Not classifiable as to its carcinogenicity to humans



# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 10 of 14

## Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

**National Toxicology Program (NTP):** None of the ingredients are listed.

### 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:** 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

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 11 of 14

## Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

**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)

<b>UN number</b>	UN 1760
<b>UN proper shipping name</b>	Corrosive Liquid, N.O.S. (Amines, polyethylenepoly-, 3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenhexamine)
<b>UN transport hazard class(es)</b>	8  
<b>Packing group</b>	I
<b>Environmental hazards</b>	Marine Pollutant (Amines, polyethylenepoly-; HEP, 3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenhexamine)
<b>Special precautions for user</b>	None

### International Carriage of Dangerous Goods by Inland Waterways (ADN)

<b>UN number</b>	UN 1760
<b>UN proper shipping name</b>	Corrosive Liquid, N.O.S. (Amines, polyethylenepoly-, 3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenhexamine)
<b>UN transport hazard class(es)</b>	8  
<b>Packing group</b>	I
<b>Environmental hazards</b>	Marine Pollutant (Amines, polyethylenepoly-; HEP, 3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenhexamine)
<b>Special precautions for user</b>	None

### International Maritime Dangerous Goods (IMDG)

<b>UN number</b>	UN 1760
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## Safety Data Sheet

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


Initial preparation date: 01.18.2019

Page 12 of 14

### Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

<b>UN proper shipping name</b>	Corrosive Liquid, N.O.S. (Amines, polyethylenepoly-, 3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenhexamine)
<b>UN transport hazard class(es)</b>	8 
<b>Packing group</b>	I
<b>Environmental hazards</b>	Marine Pollutant (Amines, polyethylenepoly-; HEP, 3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenhexamine)
<b>Special precautions for user</b>	None

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

<b>UN number</b>	UN 1760
<b>UN proper shipping name</b>	Corrosive Liquid, N.O.S. (Amines, polyethylenepoly-, 3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenhexamine)
<b>UN transport hazard class(es)</b>	8 
<b>Packing group</b>	I
<b>Environmental hazards</b>	Marine Pollutant (Amines, polyethylenepoly-; HEP, 3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenhexamine)
<b>Special precautions for user</b>	None

### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

<b>Bulk Name</b>	None
<b>Ship type</b>	None
<b>Pollution category</b>	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
26139-75-3	Formaldehyde, polymer with 1,3-dimethylbenzene	Not Listed
90-72-2	Amine 2,4,6-tris(dimethylaminomethyl)phenol	Listed
68131-73-7	Amines, polyethylenepoly-; HEP	Listed
4067-16-7	3,6,9,12-tetra-azatetradecamethylenediamine; pentachylenhexamine	Listed
112-57-2	1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl)amino]ethyl]-	Listed
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica	Not Listed
14807-96-6	Talc Powder	Listed

**REACH SVHC candidate list:** None of the ingredients are listed.

# Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 13 of 14

## Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

**REACH SVHC Authorizations:** None of the ingredients are listed.

**REACH Restriction:** None of the ingredients are listed.

**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
Amine 2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	1
3,6,9,12-tetra-azatetradecamethylenediamine; pentachthylenhexamine	4067-16-7	Class 2
1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl)amino]ethyl]-	112-57-2	2
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	Non-hazardous to water.
Talc Powder	14807-96-6	Non-hazardous to water.

### Other regulations

**Germany MAK:** Talc: 8-hour TWA: 0.3 mg/m<sup>3</sup> (respirable fraction), Talc: 8-hour TWA: 4 mg/m<sup>3</sup> (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
Skin corrosion, category 1B	Calculation method
Skin sensitization, category 1	Calculation method
Serious eye damage, 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
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
Aquatic Acute 1; H400	Acute aquatic hazard, category 1
Acute Tox. 4; H312	Acute toxicity (dermal), category 4
Aquatic Chronic 1; H410	Chronic aquatic hazard, category 1

## Safety Data Sheet

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

Initial preparation date: 01.18.2019

Page 14 of 14

### Steel Reinforced Epoxy Hardener - Fast Cure - Syringe - Part B

Skin Corr. 1B; H314	Skin corrosion, category 1B
Aquatic Chronic 2; H411	Chronic aquatic hazard, category 2

#### 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
H400	Very toxic to aquatic life
H312	Harmful in contact with skin
H410	Very toxic to aquatic life with long lasting effects
H314	Causes severe skin burns and eye damage
H411	Toxic to aquatic life with long lasting effects

#### 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: 01.18.2019

**End of Safety Data Sheet**