



# SAFETY DATA SHEET

Issuing Date 11-Nov- 2014

Revision Date 11-Nov-2014

Revision Number 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product SDS Name Steel Reinforced Epoxy Hardener – Slow Cure – Twin Tubes - Part B

### J-B Weld FG SKU Part Numbers Covered

8265, 8265F, 8265S, 8265A, 8265H, 8272, 8272F, 8280, 8280F, 8281, 80165, 7265S, 7280

### J-B Weld Product Names Covered

J-B Weld™ (Twin Tubes), MarineWeld™ (Twin Tubes Only)

### J-B Weld Product Type

Steel Reinforced Epoxy

### Recommended use of the chemical and restrictions on use

Recommended Use General Purpose Adhesive

Uses advised against No information available

### Details of the supplier of the safety data sheet

Supplier Name J-B WELD COMPANY,LLC

Supplier Address 1130 COMO ST  
SULPHUR SPRINGS, TX 75482  
USA

### **Emergency Telephone Numbers**

Transportation Emergencies: Chemtrec (24 hour transportation emergency response info):  
800-424-9300 or 703-527-3887

Poison/Medical Emergencies: Poison Control Centers (24 hour emergency poison / medical  
response info): 800-222-1222

Supplier Email

[info@jbweld.com](mailto:info@jbweld.com)

Supplier Phone Number

903-885-7696

## 2. HAZARDS IDENTIFICATION

### **OSHA/HCS status**

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

### **Classification of the substance or mixture** **GHS label elements**

ACUTE TOXICITY: ORAL - Category 4  
ACUTE TOXICITY: INHALATION – Category 4



### **Hazard pictograms**

#### **Signal word**

Warning!

#### **Hazard statements**

Harmful if swallowed or if inhaled.

## Precautionary statements

### **Prevention**

Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

### **Response**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.

### **Storage**

Not applicable.

### **Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

### **Hazards not otherwise classified**

None known.

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

### **Substance/mixture**

Mixture

<b>Ingredient name</b>	<b>% by weight</b>	<b>CAS number</b>
benzyl alcohol	1-5	100-51-6
titanium dioxide	1-5	13463-67-7
2,4,6-tris(dimethylaminomethyl)phenol	1-5	90-72-2

Occupational exposure limits, if available, are listed in Section 8.

## **4. FIRST AID MEASURES**

### Description of necessary first aid measures

#### **Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

#### **Skin contact**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

#### **Eye contact**

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

#### **Ingestion**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

### Potential acute health effects

#### **Inhalation**

Harmful if inhaled. Exposure to decomposition products may cause a health hazard.  
Serious effects may be delayed following exposure.

#### **Skin contact**

No known significant effects or critical hazards.

#### **Eye contact**

No known significant effects or critical hazards.

#### **Ingestion**

Harmful if swallowed.



### Over-exposure signs/symptoms

<b>Inhalation</b>	No specific data.
<b>Skin contact</b>	No specific data.
<b>Eye contact</b>	No specific data.
<b>Ingestion</b>	No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

<b>Notes to physician</b>	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
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<b>Specific treatments</b>	No specific treatment.
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See toxicological information (Section 11)

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

<b>Suitable extinguishing media</b>	Use an extinguishing agent suitable for the surrounding fire.
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<b>Unsuitable extinguishing media</b>	None known.
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<b>Specific hazards arising from the chemical</b>	In a fire or if heated, a pressure increase will occur and the container may burst
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### National Fire Protection Association (U.S.A.)

Health		Flammability
		Instability/Reactivity
		Special

### **Hazardous thermal decomposition products**

Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
sulfur oxides  
metal oxide/oxides

### **Special protective actions for fire-fighters**

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

### **Special protective equipment for fire-fighters**

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

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

#### **For non-emergency personnel**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

#### **For emergency responders**

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

#### **Environmental precautions**

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

#### **Small spill**

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

#### **Large spill**

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose some hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 7. HANDLING AND STORAGE

### Conditions for safe storage, including any incompatibilities

Do not store below the following temperature: 35°C (95°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

### Precautions for safe handling

#### Protective measures

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Occupational exposure limits

Ingredient name	CAS #	Exposure limits
benzyl alcohol	100-51-6	<b>AIHA WEEL (United States, 10/2011).</b> TWA: 10 ppm 8 hours.
titanium dioxide	13463-67-7	<b>ACGIH TLV (United States, 3/2012).</b> TWA: 10 mg/ m <sup>3</sup> 8 hours. <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 10 mg/ m <sup>3</sup> 8 hours. Form: Total dust. <b>OSHA PEL (United States, 6/2010).</b> TWA: 15 mg/ m <sup>3</sup> 8 hours. Form: Total dust.

#### Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Respiratory protection

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.



**Skin protection**  
**Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Eye/face protection**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	Liquid.
<b>Color</b>	White.
<b>Odor</b>	Amine-like.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point</b>	Not available.
<b>Boiling point</b>	Not available.
<b>Flash point</b>	Closed cup: >93.3°C (>199.9°F) [Setaflash.] [Product does not sustain combustion.]
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
<b>Lower and upper explosive (flammable) limits</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	1.955
<b>Solubility</b>	Not available.
<b>Solubility in water</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	>220°C (>392°F)
<b>Viscosity</b>	Not available.
<b>VOC (% content)</b>	<1%

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	The product is stable.



**Possibility of hazardous reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid**

No specific data

**Incompatible materials**

No specific data

**Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**11. TOXICOLOGICAL INFORMATION****Information on toxicological effects****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Benzyl alcohol	LD50 Oral	Rat	1230 mg/kg	-
2,4,6-tris (dimethylaminomethyl)phenol	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
benzyl alcohol	Skin – mild irritant	Man	-	48 hours 16 milligrams	-
	Skin – Moderate irritant	Pig	-	100 Percent	-
	Skin – Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
titanium dioxide	Skin – Mild Irritant	Human	-	72 hours 300 Micrograms Intermittent	-
2,4,6-tris (dimethylaminomethyl)phenol	Eyes – Severe irritant	Rabbit	-	24 hours 50 Micrograms	-
	Skin – mild irritant	Rat	-	0.025 Milliliters	-
	Skin – Severe irritant	Rat	-	0.25 Milliliters	-
	Skin – Severe irritant	Rabbit	-	24 hours 2 milligrams	-

**Sensitization**

No specific data.

**Mutagenicity**

No specific data.

**Carcinogenicity**

No specific data.

**Classification**

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-

**Reproductive toxicity**

No specific data.

**Teratogenicity**

No specific data.

**Specific target organ toxicity (single exposure)**

No specific data.

**Specific target organ toxicity (repeated exposure)**

No specific data.

**Aspiration hazard**

No specific data.

**Information on the likely routes of exposure**

Not available.

**Potential acute health effects**

**Eye contact**

No known significant effects or critical hazards.

**Inhalation**

Harmful if inhaled. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact**

No known significant effects or critical hazards.

**Ingestion**

Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact**

No specific data.

**Inhalation**

No specific data.

**Skin contact**

No specific data.

**Ingestion**

No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

**Potential immediate effects**

Not available.

**Potential delayed effects**

Not available.

**Long term exposure**

**Potential immediate effects**

Not available.

**Potential delayed effects**

Not available.

**Potential chronic health effects**

No specific data.

**General**

No known significant effects or critical hazards.

**Carcinogenicity**

No known significant effects or critical hazards.

**Mutagenicity**

No known significant effects or critical hazards.

**Teratogenicity**

No known significant effects or critical hazards.

**Developmental effects**

No known significant effects or critical hazards.

**Fertility effects**

No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

Route	ATE value
Oral	1969.5 mg/kg
Dermal	8745 mg/kg
Inhalation (dusts and mists)	3.551 mg/l

## 12. ECOLOGICAL INFORMATION

### Toxicity

Product/ingredient name	Result	Species	Exposure
benzyl alcohol	Acute LC50 460000µg/l Fresh water	Fish – Pimephales, promelas – Juvenile (Fledgling, Hatchling, Weanling)	96 hours
titanium dioxide	Acute LC50 1000000µg/l Marine water	Fish – Fundulus heteroclitus	96 hours

### Persistence and degradability

No specific data.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
benzyl alcohol	0.87	-	low
titanium dioxide	-	352	low
2,4,6-tris (dimethylaminomethyl) phenol	0.219	-	low

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) Not available.

### Other adverse effects

No known significant effects or critical hazards.

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### RCRA classification

Not available.

## 14. TRANSPORT INFORMATION

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN Number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

### Special precautions for user

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## 15. REGULATORY INFORMATION

### U.S. Federal regulations

**TSCA 8(a) PAIR:** Siloxanes and Silicones, di-Me, reaction products with silica

**TSCA 9(a) CDR Exempt/partial exemption:** Not determined

**United States Inventory (TSCA 8b):** All components are listed or exempted.

### Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

Not listed

### Clean Air Act Section 602 Class I Substances

Not listed

### Clean Air Act Section 602 Class II Substances

Not listed

### SARA 302/304

### Composition/information on ingredients

No products were found.

### SARA 304 RQ

Not applicable

### SARA 311/312

### Classification

Immediate (acute) health hazard

### Composition / information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
benzyl alcohol	1-5	No.	No.	No.	Yes.	No.
titanium dioxide	1-5	No.	No.	No.	No.	Yes
2,4,6-tris (dimethylaminomethyl)phenol	1-5	No.	No.	No.	Yes.	No.



## State regulations

### **Massachusetts**

The following components are listed: BARIUM SULFATE; BENZYL ALCOHOL; TETRAETHYLENE PENTAMINE; CALCIUM CARBONATE; TITANIUM DIOXIDE

### **New York**

None of the components are listed.

### **New Jersey**

The following components are listed: BARIUM SULFATE; SULFURIC ACID; BARIUM SALT (1:1); PROPYLENE GLYCOL; 1,2-PROPANEDIOL; TETRAETHYLENEPENTAMINE; 1,2-ETHANEDIAMINE, N-(2-AMINOETHYL)-N'-[2-[(2-AMINOETHYL)AMINO]ETHYL]-; CALCIUM CARBONATE; LIMESTONE; TITANIUM DIOXIDE; TITANIUM OXIDE (TiO<sub>2</sub>)

### **Pennsylvania**

The following components are listed: BARIUM SULFATE; 1,2-PROPANEDIOL; BENZENEMETHANOL; 1,2-ETHANEDIAMINE, N-(2-AMINOETHYL)-N'-[2-[(2-AMINOETHYL)AMINO]ETHYL]-; LIMESTONE; TITANIUM OXIDE (TiO<sub>2</sub>)

### **Minnesota Hazardous Substances**

None of the components are listed.

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer.

<b>Ingredient Name</b>	<b>Cancer</b>	<b>Reproductive</b>	<b>No significant risk level</b>	<b>Maximum acceptable dosage level</b>
titanium dioxide	Yes.	No.	No.	No.
crystalline silica non-respirable	Yes.	No.	No.	No.

### **Canada inventory**

All components are listed or exempted.

### International regulations

### International lists

**Australia inventory (AICS):** All components are listed or exempted.

**China inventory (IECSC):** All components are listed or exempted.

**Japan inventory:** Not determined.

**Korea inventory:** All components are listed or exempted.

**Malaysia Inventory (EHS Register):** Not determined.

**New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.

**Phillipines inventory (PICCS):** All components are listed or exempted.

**Taiwan inventory (CSNN):** Not determined.

### Substances of very high concern

None of the components are listed.

## **16. OTHER INFORMATION**

### **Key to abbreviations**

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

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