

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 Resin - Twin Tubes - Part A

J-B Weld FG SKU Part Numbers Covered

8265, 8265F, 8276, 8276F, 8265S, 8265A, 8265H, 8272, 8272F, 8280, 8280F, 8281, 80165, 7265S, 7280, 8276A, 8273H, 8270, 8270F, 8271, 80176, 7276, 7270

J-B Weld Product Names Covered

J-B Weld™ (all Twin Tubes), KwikWeld™ (all 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

₃es 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

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

SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B

GHS label elements SKIN SENSITIZATION - Category 1



azard pictograms

Signal word

Warning!

Hazard statements

Causes skin and eye irritation.

May cause an allergic skin reaction.

Precautionary statements

Prevention Wear protective gloves. Wear eye or face protection. Avoid breathing dust. Wash

hands thoroughly after handling. Contaminated work clothing should not be allowed out

of the workplace.

Response IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing.

Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists:

Get medical attention.

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

Ingredient name	% by weight	CAS number
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	10 - 30	25068-38-6
crystalline silica non-respirable	0.1 - 1	14808-60-7
carbon black respirable	0.1 - 1	1333-86-4

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 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.

Skin contact Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. 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.

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 adverse health effects persist or are severe. 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 No known significant effects or critical hazards.

Skin contactCauses skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Ingestion Irritating to mouth, throat and stomach.



Over-exposure signs/symptoms

Inhalation

No specific data.

Skin contact

Adverse symptoms may include the following:

irritation

redness

ye contact

Adverse symptoms may include the following:

pain or irritation

watering redness

Ingestion

No specific data.

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

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments No specific treatment.

See toxicological information (Section 11)

5ARREAGHAING MEASURES

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

Use an extinguishing agent suitable for the surrounding fire.

None known.

Specific hazards arising from the chemical

No specific fire or explosion hazard.

ational 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 halogenated compounds 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

Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDEING AND STORACE

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

'ngredient name	CAS#	Exposure limits
crystalline silica non-respirable	14808-60-7	OSHA PEL Z3 (United States, 9/2005). Notes: 250/(%SiO2+5) TWA: 250 MPPCF / (%SiO2+5) 8 hours. Form: Respirable OSHA PEL Z3 (United States, 9/2005). Notes: 10/(SiO2+2) TWA: 10 MG/M3 / (%SiO2+2) 8 hours. Form: Respirable ACGIH TLV (United States, 3/2012). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 1/2013). TWA: 0.05 mg/m³ 10 hours. Form: respirable dust OSHA PEL Z3 (United States, 9/2005). Notes: 30/(%SiO2+2) TWA: 30 MG/M3 / (%SiO2+2) 8 hours. Form: Total dust.
carbon black respirable	1333-86-4	OSHA PEL 1989 (United States, 3/1989). TWA: 3.5 mg/m³ 8 hours. ACGIH TLV (United States, 6/2013). TWA: 3 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2013). TWA: 3.5 mg/m³ 10 hours. TWA: 0.1 mg of PAHs/cm³ 10 hours. OSHA PEL (United States, 2/2013). TWA: 3.5 mg/m³ 8 hours.

controls

Appropriate engineering No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

hvironmental 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: chemical splash goggles.

OR PHYSICALEAN DIGHEMICALE PROPERTIES

Physical state Solid.

Color Black. [Dark] Odor Ethereal. [Slight]

Odor threshold Not available.

pН Not available. **Melting point** Not available. **Boiling point** Not available.

Flash point Closed cup: >93.3°C (>199.9°F) [Setaflash.] [Product does not sustain combustion.]

Evaporation rate Not available.

Flammability (solid, gas) Extremely flammable in the presence of the following materials or conditions: open

flames, sparks and static discharge.

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.

Lower and upper explosive

(flammable) limits

Not available.

Not available. Vapor pressure Not available. Vapor density

Relative density

1.927

Solubility Insoluble in the following materials: cold water and hot water.

Not available. Solubility in water **Auto-ignition temperature** Not available. Decomposition temperature >220°C (>428°F) Not available.

Viscosity

VOC (% content) <1%

10 STABILLIYAAN DAREYA GALVATAY

Reactivity No specific test data related to reactivity available for this product or its ingredients.

Chemical stability 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
carbon black respirable	LD50 Oral	Rat	>15400 mg/kg	_

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
reaction product: bisphenol- A(epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	-	100 milligrams	**
	Skin - Moderate irritant	Rabbit	-	24 hours 500 microliters	-
	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
crystalline silica nonrespirable	-	1	Known to be a human carcinogen.
carbon black respirable	-	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

Not available.

routes of exposure

Potential acute health effects

Eye contact

Causes serious eye irritation.

Inhalation

No known significant effects or critical hazards.

Skin contact

Causes skin irritation. May cause an allergic skin reaction.

Ingestion

Irritating to mouth, throat and stomach.

mptoms related to the physical, chemical and toxicological characteristics



Eye contact

Adverse symptoms may include the following:

pain or irritation

watering

redness

Inhalation

No specific data.

Skin contact

Adverse symptoms may include the following:

irritation

redness

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

Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

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

No specific data.

12 ECOLOGICAL INFORMATION

Toxicity

No specific data.

Persistence and degradability

No specific data.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
reaction product: bisphenol-A(epichlorhydrin); epoxy resin	2.64 to 3.78	31	low

Mobility in soil

Soil/water partition coefficient (Koc)

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.	TRANSPOR	adineorna	ION -	
	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	-	-	-	-	-
nvironmental nazards	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



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
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin	10-30	No.	No.	No.	Yes.	No.
crystalline silica non-respirable	0.1-1	No.	No.	No.	No.	Yes
carbon black respirable	0.1-1	No.	No.	No.	No.	Yes.

State regulations

Massachusetts

The following components are listed: CALCIUM CARBONATE

New York

None of the components are listed.

New Jersey

The following components are listed: CALCIUM CARBONATE; LIMESTONE, SILICA,

QUARTZ; QUARTZ (SiO2); CARBON BLACK

Pennsylvania

The following components are listed: LIMESTONE; QUARTS (SiO2); CARBON BLACK

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.

Ingredient Name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
crystalline silica non-respirable	Yes.	No.	No.	No.
carbon black respirable	Yes.	No.	No.	No.

Canada inventory International regulations International lists All components are listed or exempted.

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): Not determined.

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 = International Air Transport Association
IBC = 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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