

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: J-B Weld- Steel (8270, 8272, 8273, 8280)
Steel Reinforced Epoxy Twin Tubes- Part A

Use: General Purpose Adhesive
Metal, Wood, Plastic, Tile, PVC, Ceramic, Fibre Glass, Concrete

Supplier: Brilliant Group
11 Duigan Drive
Moorabbin Airport Vic 3194
Ph: (03) 9553 2522

SECTION 2: HAZARD IDENTIFICATION

GHS Classification: Hazardous

HEALTH

Skin Corrosion/Irritation: Category 2

Serious Eye Damage/Eye Irritation: Category 2B

Skin Sensitisation: Category 1

GHS LABEL ELEMENTS



Signal word: Warning

Hazard Statements

Causes skin and eye irritation

May cause 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

SECTION 3: COMPOSITION/INFORMATION OF THE INGREDIENTS

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

SECTION 4: FIRST AID AND 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 wristband.

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 persists 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 contact: Causes 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

Eye Contact: Adverse symptoms may include the following; pain or irritation, watering, redness

Ingestions: 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)

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire

Unsuitable Extinguishing Media: None known

Specific Hazards arising from the Chemical: No specific fire or explosion hazard

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 firefighters: Firefighters should wear appropriate equipment and self-contained breathing apparatus, with a full face-piece operated in positive pressure mode

SECTION 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 specialised 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 material 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, labelled 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, labelled waste container. Dispose of via a licensed waste disposal contractor.



SAFETY DATA SHEET

SECTION 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 unlabelled 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 sensitisation 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
Control Parameters
Occupational Exposure Limits

Ingredient Name	CAS #	Exposure Limits
Crystalline silica non-respirable	14808-60-7	OSHA PEL Z3 TWA: 250 MPPCF/(%SiO ₂ +5) 8 hours. Form: Respirable TWA: 10mg/m ³ /(%SiO ₂ +2) 8hours. Form: respirable ACGIH TLV TWA: 0.025mg/m ³ 8hours. Form: respirable fraction NIOSH REL TWA: 0.05mg/m ³ 10hours. Form: respirable dust OSHA PEL TWA: 30mg/m ³ /(%SiO ₂ +2) 8hours. Form: total dust
Carbon black respirable	1333-86-4	OSHA PEL TWA: 3.5mg/m ³ 8 hours ACGIH TLV TWA 3mg/m ³ 8 hours Form: inhalable Fraction NIOSH REL TWA: 3.5mg/m ³ 10 hours TWA: 0.1mg of PAHs/cm ³ 10 hours OSHA PEL TWA: 3.5mg/m ³ 8 hours

Appropriate Engineering Controls:

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

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 toilet 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 respiratory 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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
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Physical State:	Solid
Colour:	Black (dark)
Odour:	Ethereal (Slight)

Odour threshold:	Not available
pH:	Not available
Melting Point:	Not available
Boiling Point:	Not available
Flash Point:	Closed cup: >93.3°C (>199.9°F) 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, oxidising materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture
Lower and upper explosive (flammable) limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	1.927
Solubility:	Insoluble in the following materials; cold water and hot water
Solubility in water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	>220°C (>428°F)
Viscosity:	Not available
VOC (% content)	<1%

SECTION 10: STABILITY AND REACTIVITY

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

Chemical stability: This 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

SECTION 11: TOXICOLOGICAL INFORMATION

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 hrs 500 microliters	-
	Skin- Severe irritant	Rabbit	-	24 hrs 2 milligrams	-

Sensitisation: No specific data
Mutagenicity: No specific data
Carcinogenicity: No specific data

CLASSIFICATION

Product/ingredient name	OSHA	IARC	NTP
Crystalline silica non-respirable	-	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 routes of exposure: Not available

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

SYMPTOMS 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:

General: No specific data
 Once sensitised, 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

SECTION 12: ECOLOGICAL INFORMATION
TOXICITY

No specific data

PERSISTENCE AND DEGRADABILITY

No specific data

Bio accumulative potential

Product/Ingredient name	LogP ^{ow}	BCF	Potential
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	2.64 to 3.78	31	Low

MOBILITY TO SOIL
Soil/water partition coefficient (K_{oc}) Not available

Other adverse effects No known significant effects or critical hazards

SECTION 13: DISPOSAL CONSIDERATIONS
Disposal Methods:

The generation of waste should be avoided or minimised whenever 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.

SECTION 14: TRANSPORT INFORMATION

	TDG Classification (Road and Rail)	IMDG (Maritime)	IATA (Air)
UN Number	Not regulated	Not regulated	Not regulated
UN Proper Shipping Name	-	-	-
Transport Hazard Class(es)	-	-	-
Packing Group	-	-	-
Environmental Hazards	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

SECTION 15: REGULATORY INFORMATION

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

ASICS: All ingredients of this material are listed or exempt on the Australian Inventory of Chemical Substance

Substances of very high concern: None of the components are listed

SECTION 16: OTHER INFORMATION
Abbreviations:

ATE	Acute toxicity estimate
BCF	Bio concentration factor
GHS	Globally harmonised system of classification and labelling of chemicals
IATA	International air transport association
IBC	Immediate 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
UN	United Nations

Reason for issue:

Revision to GHS requirements

References:

Supplier Safety Data Sheets

Version Number:

2

Previous issue:

13 December 2018

* This SDS should be made available to anybody that handles the product. The information is based on our current knowledge and describes health and safety requirements only.