

**SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

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

**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**

**Acute toxicity: ORAL-** Category 4

**Acute toxicity: Inhalation-** Category 4



**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 vapour. 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 centre or doctor if you feel unwell.

IF SWALLOWED: call a poison centre or doctor 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

**SECTION 3: COMPOSITION/INFORMATION OF THE INGREDIENTS**

<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

**SECTION 4: FIRST AID AND 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 re-use. 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 rinsing 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 necessary, call a poison centre or doctor. 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**

**Inhalation:** No specific data

**Skin Contact:** No specific data

**Eye Contact:** No specific data



## SAFETY DATA SHEET

**Ingestion:** No specific data

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

**Notes to physician:** 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

**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:** If in a fire or if heated, a pressure increase will occur and the container may burst

**Hazardous Thermal Decomposition Products:** Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides, sulphur 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 firefighters:** Firefighters wear appropriate protective equipment and self-contained breathing apparatus, with a full face-piece operated in a 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:**

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 eg sand, earth, vermiculite or diatomaceous earth and place in container for disposal

according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose some hazard as the spilled product.

**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
Benzyl alcohol	100-51-6	AIHA WEEL TWA: 10ppm 8 hours
Titanium dioxide	13463-67-7	ACGIH TLV TWA: 10mg/m <sup>3</sup> 8 hours OSHA PEL TWA: 10mg/m <sup>3</sup> 8 hours. Form: total dust OSHA PEL TWA: 15mg/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 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, mist, gases or dust. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields

<b>SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES</b>
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### **Physical and chemical properties**

<b>Physical State:</b>	Liquid
<b>Colour:</b>	White
<b>Odour:</b>	Amine-like
<b>Odour 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 <sup>0</sup> C (>199.9 <sup>0</sup> F) Product does not sustain combustion
<b>Evaporation Rate:</b>	Not available

**Flammability (solid, gas)** Flammable in the presence of the following materials or conditions:  
open flames, sparks and static discharge

**Lower and upper explosive (flammable) limits:** Not available

**Vapour pressure:** Not available

**Vapour density:** Not available

**Relative density:** 1.955

**Solubility:** Not available

**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
Benzyl alcohol	LD50 Oral	Rat	1230mg/kg	-
2, 4, 6-tris (Dimethylaminomethyl)phenol	LD50 Dermal LD50 Oral	Rat Rat	1280mg/kg 1200mg/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 Millilitres	-
	Skin- Severe irritant	Rat	-	0.25 Millilitres	-
	Skin- Severe irritant	Rabbit	-	24 hours 2 milligrams	-



**SAFETY DATA SHEET**

**Sensitisation:** 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 date  
**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	1969.5mg/kg
Dermal	8745 mg/kg
Inhalation	3.551 mg/l

**SECTION 12: ECOLOGICAL INFORMATION**

## TOXICITY

Product/Ingredient Name	Result	Species	Exposure
<b>Benzyl alcohol</b>	Acute LC50 460000ug/l Fresh water	Fish- Pimephales, promelas-juvenile (Fledgling, Hatching, Weaning)	96 hours
<b>Titanium alcohol</b>	Acute LC50 1000000ug/l Marine water	Fish- Fundulus heteroclitus	96 hours

## PERSISTENCE AND DEGRADABILITY

No specific data

**Bio accumulative potential**

Product/Ingredient name	LogP <sup>ow</sup>	BCF	Potential
<b>Benzyl alcohol</b>	0.87	-	Low
<b>Titanium alcohol</b>	-	352	Low
<b>2, 4, 6-tris (Dimethylaminomethyl)phenol</b>	0.219	-	Low

## MOBILITY TO SOIL

**Soil/water partition coefficient (K<sub>oc</sub>)** 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**

	<b>TDG Classification (Road and Rail)</b>	<b>IMDG (Maritime)</b>	<b>IATA (Air)</b>
<b>UN Number</b>	Not regulated	Not regulated	Not regulated
<b>UN Proper Shipping Name</b>	-	-	-
<b>Transport Hazard Class(es)</b>	-	-	-
<b>Packing Group</b>	-	-	-
<b>Environmental Hazards</b>	No	No	No
<b>Additional Information</b>	-	-	-

**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
<b>Benzyl alcohol</b>	1-5	No	No	No	Yes	No
<b>Titanium dioxide</b>	1-5	No	No	No	No	Yes
<b>2, 4, 6-tris (Dimethylaminomethyl) phenol</b>	1-5	No	No	No	Yes	No

**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:**

<b>ATE</b>	Acute toxicity estimate
<b>BCF</b>	Bio concentration factor
<b>GHS</b>	Globally harmonised system of classification and labelling of chemicals
<b>IATA</b>	International air transport association
<b>IBC</b>	Immediate bulk container
<b>IMDG</b>	International maritime dangerous goods
<b>LogPow</b>	logarithm of the octanol/water partition coefficient
<b>MARPOL 73/78</b>	International convention for the prevention of pollution from ships
<b>UN</b>	United Nations



## SAFETY DATA SHEET

**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.