According to the Australian Work Health and Safety Regulations

Initial preparation date: 10.02.2019

J-B Weld Perm-O-Seal

SECTION 1: Identification

Product identifier

Product name: Windshield Repair Adhesive **Product code:** 2100

Recommended use of the product and restriction on use Relevant identified uses: Glass repair resin Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: United States J-B Weld Company, LLC 400 CMH Road Sulphur Springs, TX 75482 903-885-7696 info@jbweld.com

Emergency telephone number:

Australia InfoTrac Transportation Emergencies (24 hour): 1300-366-961

SECTION 2: Hazard(s) identification

GHS classification:

Skin corrosion, category 1A Serious eye damage, category 1 Skin sensitization, category 1 Specific target organ toxicity - single exposure, category 3, respiratory irritation

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

Precautionary statements:

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



Supplier: Australia HPP Lunds 1/195 Jackson Rd Sunnybank Hills, Qld 4109 1300-306-781 Page 1 of 12

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P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P363 Wash contaminated clothing before reuse P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 Immediately call a POISON CENTER or doctor/physician. 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. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313 If skin irritation or a rash occurs: Get medical advice/attention P312 Call a POISON CENTER or doctor/physician if you feel unwell. P403+P233 Store in a well ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container in accordance with local regulations. Hazards not otherwise classified: None

SECTION 3: Composition and information on ingredients

Identification	Name	Weight %
CAS number: 5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	65
CAS number: 868-77-9	2-Hydroxyethyl methacrylate	20
CAS number: 79-10-7	Acrylic acid	7
CAS number: 2530-85-0	3-trimethoxysilylpropyl methacrylate	5
CAS number: 947-19-3	Methanone, (1-hydroxycyclohexyl)phenyl-	3

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

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

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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)

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention

After skin contact:

Treatment is urgent. Seek emergency medical treatment. Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse

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

After eye contact:

Immediately rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. Seek immediate medical attention, preferably from an ophthalmologist

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

After swallowing:

Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel. If vomiting spontaneously occurs, place victim on side in the recovery position to prevent aspiration into the lungs. Never give anything by mouth to an unconscious person. If experiencing symptoms or concerned: Contact a POISON CENTER or doctor/physician

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)

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Exposure to skin may result in redness, pain, burning, inflammation and tissue damage. Exposure to eyes may result in irritation, redness, pain, inflammation, itching, burning and tearing. Exposure via inhalation may result in cough, sore throat, burning sensation and shortness of breath. Exposure via ingestion may result in burns of the mouth and throat, abdominal pain, burning sensation in the throat and chest, nausea, vomiting, shock or collapse

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

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Treat symptomatically

SECTION 5: Fire fighting measures

Extinguishing media

Suitable extinguishing media:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam **Unsuitable extinguishing media**:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

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

Special precautions:

Not determined or not applicable.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing Wear recommended personal protective equipment (see Section 8)

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing Absorb with non-combustible liquid-binding material (sand, diatomaceus earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

Reference to other sections:

Section 8: Personal Protective Equipment

SECTION 7: Handling and storage precautions

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. Prevent formation of aerosols.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

Protect from exposure to the light. Avoid loss of dissolved air, loss of inhibitor, and contamination with incompatible materials.

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SECTION 8: Exposure controls and personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Australia	Acrylic acid	79-10-7	Time weighted average: 2 ppm (5.9 mg/m ³)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

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.

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.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Fluid
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	214° F (101° C)
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.

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Lower flammability/explosive limit	Not determined or not available.	
Vapor pressure	Not determined or not available.	
Vapor density	Not determined or not available.	
Density	Not determined or not available.	
Relative density	Not determined or not available.	
Solubilities	Not miscible or difficult to mix in water.	
Partition coefficient (n-octanol/water)	Not determined or not available.	
Auto/Self-ignition temperature	Product is not self-igniting	
Decomposition temperature	Not determined or not available.	
Dynamic viscosity	Not determined or not available.	
Kinematic viscosity	Not determined or not available.	
Explosive properties	Not an explosive	
Oxidizing properties	Not determined or not available.	

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Oxidizers, amines, strong, Lewis acids, mineral acids, and thiosulfates.

Incompatible materials:

Oxidizers, amines, strong Lewis acids, mineral acids, and thiosulfates.

Hazardous decomposition products:

None known.

SECTION 11: Hazard information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Acrylic acid	oral	LD50 Rat: 340 mg/kg
	inhalation	LC50 Rat: 3.6 mg/L (4 hr)
3-trimethoxysilylpropyl methacrylate	oral	LD50 - Rat - 2000 mg/kg
	dermal	LD50 - Rabbit - 2000 mg/kg
	inhalation	LC50 - Rat - 2280 mg/m ³
Methanone, (1- hydroxycyclohexyl)phenyl-	dermal	LD50 - Rabbit - 5000 mg/kg
	oral	LD50 - Rat - 2500 mg/kg
	inhalation	LC50 - Rat - 1000 mg/m ³

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Skin corrosion/irritation

Assessment:

Causes severe skin burns and eye damage

Product data:

No data available.

Substance data:

Name	Result
Exo-1,7,7- trimethylbicyclo[2.2.1]hept-2-yl acrylate	Irritating to the skin.
2-Hydroxyethyl methacrylate	Causes skin irritation.
Acrylic acid	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
Exo-1,7,7- trimethylbicyclo[2.2.1]hept-2-yl acrylate	Irritating effect on the eyes.
2-Hydroxyethyl methacrylate	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment:

May cause an allergic skin reaction

Product data:

No data available.

Substance data:

Name	Result
Exo-1,7,7- trimethylbicyclo[2.2.1]hept-2-yl acrylate	Sensitization possible through skin contact.
2-Hydroxyethyl methacrylate	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
Acrylic acid	Group 3 - Not classifiable as to its carcinogenicity to humans

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

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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:

May cause respiratory irritation

Product data:

No data available.

Substance data:

Name	Result
Exo-1,7,7- trimethylbicyclo[2.2.1]hept-2-yl	Component affects the respiratory system.
acrylate	

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

Acute (short-term) toxicity

Assessment:

Toxic to aquatic life **Product data:** No data available.

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Substance data:

Name	Result
2-Hydroxyethyl methacrylate	LC50 - Oryzias latipes - 96H - >100mg/L
	LC50 - Oryzias latipes - 14d - >100mg/L
	LC50 - fish - Pimephales promelas - 96H - 227 mg/L
	EC50 - Daphina magna (Water flea) - 380 mg/L - 48 hr
	LC50 - Oryzias latipes - 96 hr - >100mg/L
	LC50 - fish - Pimephales promelas - 96 hr - 227 mg/L
	EC50 - Selenastrum - 72 hr - 345 mg/L
	NOEC - Capricornutum - 72 hr - 160 mg/L
Acrylic acid	EC50 Desmodesmus subspicatus: 0.13 mg/L (72 h)
3-trimethoxysilylpropyl	LC50 - Freshwater fish - < 1042 mg/l
methacrylate	LC50 - Daphnia magna - < 879 mg/l (48 h)
	EC50 - Algae - < 536 mg/l (72 h)

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
2-Hydroxyethyl methacrylate	EC50 - Daphina magna (Water flea) - 21d - 90.1mg/L
	EC50 - Daphina magna (Water flea) - 21d - 24.1 mg/L
	EC50 - Daphina magna (Water flea) - 21d - 90.1 mg/L

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
2-Hydroxyethyl methacrylate	Readily biodegradable
Acrylic acid	Readily biodegradable in water.
Methanone, (1- hydroxycyclohexyl)phenyl-	Readily biodegradable.
3-trimethoxysilylpropyl methacrylate	Readily biodegradable in water.
3-trimethoxysilylpropyl methacrylate	Testing is waived on the basis that the chemical safety assessment according to Annex I indicates that it is not necessary to conduct the soil simulation test. Simulation test (soil) is not considered necessary because: The risk characterization ratios (RCRs) for the terrestrial compartment, based on the assumption that the silanol hydrolysis product is not biodegradable, are <1. As well as, the silanol hydrolysis product has a low log Kow value and, therefore, exposure of the soil compartment is expected to be low.

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Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
2-Hydroxyethyl methacrylate	None
Acrylic acid	BCF: 3.162
Methanone, (1- hydroxycyclohexyl)phenyl-	Bioaccumulation is not expected in aquatic organisms.
3-trimethoxysilylpropyl methacrylate	The substance hydrolyses rapidly to substances which have low log Kow values (<3) and thus have low potential for bioaccumulation, and the requirement for testing is waived.

Mobility in soil

Product data: No data available.

Substance data:		
Name	Result	
Acrylic acid	Mobile (Log Koc: 0.78 - 2.14)	

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

Australian Dangerous Goods (ADG)

UN number	UN1760	
UN proper shipping name	Corrosive liquid, N.O.S. (Acrylic Acid), MP, Limited Quantity	
UN transport hazard class(es)	Limited Quantity	
Packing group	II	
Environmental hazards	Yes	
Special precautions for user	None	
Hazchem/Emergency Action Code	2X	

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International Maritime Dangerous Goods (IMDG)

UN number	UN1760
UN proper shipping name	Corrosive liquid, n.o.s. (Acrylic Acid), MP, Limited Quantity
UN transport hazard class(es)	Limited Quantity
Packing group	П
Environmental hazards	Yes
Special precautions for user	None
EmS number	F-A, S-B
Stowage category	В
Excepted quantities	E2
Limited quantity	1 L

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

UN number	UN1760	
UN proper shipping name	Corrosive liquid, n.o.s. (Acrylic Acid), MP, Limited Quantity	
UN transport hazard class(es)	Limited Quantity	
Packing group	11	
Environmental hazards	Yes	
Special precautions for user	None	
ERG code	8L	
Excepted quantities	E2	
Passenger and cargo	1 L	
Cargo aircraft only	30 L	
Limited quantity	0.5 L	

SECTION 15: Regulatory information

Australia regulations

Australian Inventory of Chemical Substances (AICS):

5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Listed
868-77-9	2-Hydroxyethyl methacrylate	Listed
79-10-7	Acrylic acid	Listed
947-19-3	Methanone, (1-hydroxycyclohexyl)phenyl-	Listed
2530-85-0	3-trimethoxysilylpropyl methacrylate	Listed

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Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP):

5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Not Listed
868-77-9	2-Hydroxyethyl methacrylate	Schedule 5
79-10-7	Acrylic acid	Not Listed
947-19-3	Methanone, (1-hydroxycyclohexyl)phenyl-	Not Listed
2530-85-0	3-trimethoxysilylpropyl methacrylate	Not Listed

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This SDS was authored in accordance with the Australian Work Health and Safety Regulations and supplemented by the Australian Code of Practice on the Preparation of Safety Data Sheets for Hazardous Chemicals. 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.

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End of Safety Data Sheet