MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name	**WaterWeld**
CAS #	Mixture
Product use	Repairs and seals
Manufacturer	J-B Weld Company P.O. Box 483 Sulphur Springs, TX 75482 US Phone: 903-885-7696

2. Hazards Identification

Emergency overview	CAUTION MAY CAUSE SKIN IRRITATION. MAY CAUSE EYE IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION.
Potential short term health effects	
Routes of exposure	Eye, Skin contact, Ingestion.
Eyes	May cause irritation.
Skin	Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals.
Inhalation	Not a normal route of exposure.
Ingestion	May cause stomach distress, nausea or vomiting.
Target organs	Eyes. Skin.
Chronic effects	Prolonged or repeated exposure can cause drying, defatting and dermatitis.
Signs and symptoms	Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
OSHA Regulatory Status	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
Potential environmental effects	See section 12.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Hydrous magnesium silicate	14807-96-6	30 - 60
Oxirane, 2,2-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis, homopolymer	25085-99-8	10 - 30
Titanium oxide	13463-67-7	10 - 30
Bisphenol A diglycidyl ether - bisphenol A copolymer	25036-25-3	1 - 5
Chlorite-group minerals	1318-59-8	1 - 5
Phenol, 2,4,6-tris[(dimethylamino)methyl]-	90-72-2	1 - 5
Silica, amorphous, fumed	7631-86-9	1 - 5
Silica-crystalline, quartz	14808-60-7	0.1 - 1

4. First Aid Measures

First aid procedures	
Eye contact	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
Skin contact	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
Inhalation	Not a normal route of exposure.
Ingestion	Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

General advice	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Not flammable by WHMIS/OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Dry chemical. Foam. Carbon dioxide.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of sulphur.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas.
Methods for containment	Stop the flow of material, if this is without risk.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Dampen material with water and use shovel or scoop to collect material in clean container for proper disposal. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Cured material can be scraped up and disposed of.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated skin contact with this material. Wash thoroughly after handling.
Storage	Keep out of reach of children. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
Bisphenol A diglycidyl ether - bisphenol A copolymer	**ACGIH-TLV** Not established **OSHA-PEL** Not established
Chlorite-group minerals	**ACGIH-TLV** Not established **OSHA-PEL** Not established
Hydrous magnesium silicate	**ACGIH-TLV** TWA: 2 mg/m3 **OSHA-PEL** Not established
Oxirane, 2,2-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] homopolymer	**ACGIH-TLV** Not established **OSHA-PEL** Not established
Phenol, 2,4,6-tris[(dimethylamino)methyl]-	**ACGIH-TLV** Not established **OSHA-PEL** Not established
Silica, amorphous, fumed	**ACGIH-TLV** Not established **OSHA-PEL** Not established
Silica-crystalline, quartz	**ACGIH-TLV** TWA: 0.1 mg/m3 **OSHA-PEL** TWA: 0.1 mg/m3
Titanium oxide	**ACGIH-TLV** TWA: 10 mg/m3 **OSHA-PEL** TWA: 15 mg/m3

Engineering controls	General ventilation normally adequate.
Personal protective equipment	
Eye / face protection	Safety glasses if eye contact is possible.
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Skin and body protection	As required by employer code.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Pliable
Color	Off white
Form	Putty

Odor	Not available
Odor threshold	Not available
Physical state	Solid
pH	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	Not available
Flash point	> 140 °F (> 60.00 °C)
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not applicable
Flammability limits in air, upper, % by volume	Not applicable
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	Not available
Octanol/water coefficient	Not available
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	None known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Acids. Oxidizers. Caustics.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of sulphur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Bisphenol A diglycidyl ether - bisphenol A copolymer	Not available
Chlorite-group minerals	Not available
Hydrous magnesium silicate	Not available
Oxirane, 2,2-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] homopolymer	Not available
Phenol, 2,4,6-tris[(dimethylamino)methyl]-	Not available
Silica, amorphous, fumed	Not available
Silica-crystalline, quartz	Not available
Titanium oxide	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
Bisphenol A diglycidyl ether - bisphenol A copolymer	Not available
Chlorite-group minerals	Not available
Hydrous magnesium silicate	Not available
Oxirane, 2,2-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] homopolymer	30000 mg/kg rat
Phenol, 2,4,6-tris[(dimethylamino)methyl]-	1200 mg/kg rat
Silica, amorphous, fumed	5000 mg/kg rat
Silica-crystalline, quartz	500 mg/kg rat
Titanium oxide	24000 mg/kg rat

Effects of acute exposure

Eye May cause irritation.

Skin Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals.

Inhalation Not a normal route of exposure.

Ingestion May cause stomach distress, nausea or vomiting.

Sensitization Contains a potential skin sensitizer.

Chronic effects Fibrosis was observed in rats exposed to 6 mg/m3 of hydrous magnesium silicate (talc) for 113 or 122 weeks. Chronic respiratory disease has been observed in workers exposed to up to 3.0 mg/m3 of airborne talc ore free of asbestos and silica. Prolonged or repeated exposure to fine airborne crystalline silica dust may cause severe scarring of the lungs, a disease called silicosis. Early symptoms of silicosis include cough, mucous production and shortness of breath upon exertion. Product is a non respirable form.

Carcinogenicity High concentrations of pigment-grade (powdered) and ultrafine titanium dioxide (titanium oxide) dust have caused respiratory tract cancer in rats exposed by inhalation and intratracheal instillation. Product is a non respirable form.

ACGIH - Threshold Limit Values - Carcinogens

Hydrous magnesium silicate	14807-96-6	A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers)
Silica-crystalline, quartz	14808-60-7	A2 - Suspected Human Carcinogen
Titanium oxide	13463-67-7	A4 - Not Classifiable as a Human Carcinogen

IARC - Group 1 (Carcinogenic to Humans)

Silica-crystalline, quartz	14808-60-7	Monograph 100C [in preparation] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources); Monograph 68 [1997]

IARC - Group 2B (Possibly Carcinogenic to Humans)

Titanium oxide	13463-67-7	Monograph 93 [2010]; Monograph 47 [1989]

IARC - Group 3 (Not Classifiable)

Hydrous magnesium silicate	14807-96-6	Monograph 93 [2010] (inhaled); Supplement 7 [1987]; Monograph 42 [1987]
Silica, amorphous, fumed	7631-86-9	Monograph 68 [1997]; Supplement 7 [1987]

NTP (National Toxicology Program) - Report on Carcinogens - Known Human Carcinogens

Silica-crystalline, quartz	14808-60-7	Known Human Carcinogen (respirable size)

U.S. - California - Proposition 65 - Carcinogens List

Silica-crystalline, quartz	14808-60-7	carcinogen, initial date 10/1/88 (airborne particles of respirable size)
Titanium oxide	13463-67-7	carcinogen, initial date 9/2/11 (airborne, unbound particles of respirable size)

Mutagenicity Non-hazardous by WHMIS/OSHA criteria.

Reproductive effects Non-hazardous by WHMIS/OSHA criteria.

Teratogenicity Non-hazardous by WHMIS/OSHA criteria.

Name of Toxicologically Synergistic Products Not available

12. Ecological Information

Ecotoxicity See below

Ecotoxicity - Freshwater Algae - Acute Toxicity Data

Silica, amorphous, fumed	7631-86-9	72 Hr EC50 Pseudokirchneriella subcapitata: 440 mg/L

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

Hydrous magnesium silicate	14807-96-6	96 Hr LC50 Brachydanio rerio: >100 g/L [semi-static]
Silica, amorphous, fumed	7631-86-9	96 Hr LC50 Brachydanio rerio: 5000 mg/L [static]

Ecotoxicity - Water Flea - Acute Toxicity Data

Silica, amorphous, fumed	7631-86-9	48 Hr EC50 Ceriodaphnia dubia: 7600 mg/L

Persistence / degradability Not available

Bioaccumulation / accumulation Not available

Mobility in environmental media Not available

Environmental effects Not available

Aquatic toxicity Not available

Partition coefficient Not available

Chemical fate information Not available

Other adverse effects Not available

13. Disposal Considerations

Disposal instructions Review federal, state/provincial, and local government requirements prior to disposal.

Waste from residues / unused products Not available

Contaminated packaging Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - CEPA - High Priority Chemicals as Identified by DSL Categorization

Silica-crystalline, quartz	14808-60-7	Batch 12, published December 26, 2009

Canada - WHMIS - Ingredient Disclosure List

Silica, amorphous, fumed	7631-86-9	1 %
Silica-crystalline, quartz	14808-60-7	1 %

WHMIS status Controlled

WHMIS classification Class D - Division 2A, 2B

WHMIS labeling

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

US Federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA (Superfund) reportable quantity

Acetic acid: 5000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Hazardous substance

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Hydrous magnesium silicate	14807-96-6	Present (exempt except when inhalable dust is present or can be generated by use)
Silica, amorphous, fumed	7631-86-9	Present (exempt except when inhalable particulates are present or can be generated. Applies to Silica sand and flour, but not to naturally occurring dirt and sand which have not gone through beneficiation)

U.S. - California - Proposition 65 - Carcinogens List

Silica-crystalline, quartz	14808-60-7	carcinogen, initial date 10/1/88 (airborne particles of respirable size)
Titanium oxide	13463-67-7	carcinogen, initial date 9/2/11 (airborne, unbound particles of respirable size)

U.S. - Illinois - Toxic Air Contaminant Carcinogens

Silica-crystalline, quartz	14808-60-7	ACGIH Carcinogen; NTP Known Carcinogen
Titanium oxide	13463-67-7	IARC 2B Carcinogen

U.S. - Massachusetts - Right To Know List

Hydrous magnesium silicate	14807-96-6	Present (exempt when encapsulated or if particulates are not present and cannot be substantially generated through use of the product)
Silica, amorphous, fumed	7631-86-9	Present (exempt when encapsulated or if particulates are not present and cannot be substantially generated through use of the product)
Silica-crystalline, quartz	14808-60-7	Carcinogen; Extraordinarily hazardous
Titanium oxide	13463-67-7	Present

U.S. - Minnesota - Hazardous Substance List

Hydrous magnesium silicate	14807-96-6	Present (fibrous, nonasbestiform, dust and fume)
Silica, amorphous, fumed	7631-86-9	Carcinogen
Silica-crystalline, quartz	14808-60-7	Carcinogen
Titanium oxide	13463-67-7	Present (dust)

U.S. - New Jersey - Right to Know Hazardous Substance List

Hydrous magnesium silicate	14807-96-6	sn 1773
Silica, amorphous, fumed	7631-86-9	sn 1655 (fume)
Silica-crystalline, quartz	14808-60-7	sn 1660
Titanium oxide	13463-67-7	sn 1861

U.S. - Pennsylvania - RTK (Right to Know) List

Hydrous magnesium silicate	14807-96-6	Present
Silica, amorphous, fumed	7631-86-9	Present
Silica-crystalline, quartz	14808-60-7	Present (dust)
Titanium oxide	13463-67-7	Present

U.S. - Rhode Island - Hazardous Substance List

Hydrous magnesium silicate	14807-96-6	Toxic (powder or fibrous)
Silica-crystalline, quartz	14808-60-7	Toxic (dust and fiber)
Titanium oxide	13463-67-7	Toxic

Inventory name

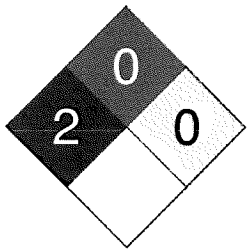
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	*	2
Flammability		0
Physical Hazard		0
Personal Protection		X



Disclaimer

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Other information For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.