

SAFETY DATA SHEET

HALLIBURTON WELD A RESIN

Revision Date: 16-May-2013

Revision Number: 16

1. Product and Company Identification

Product Name

Product Trade Name: HALLIBURTON WELD A RESIN

Other Names

Synonyms: None
Product Code: HM000844

Recommended Use

Recommended Use Resin
Uses Advised Against No information available

Company Name, Address and Contact Details

Manufacturer/Supplier Halliburton New Zealand
1 Paraite Rd,
Bell Block, New Plymouth
New Zealand Registration No.: 824207

E-Mail address: fdunexchem@halliburton.com

Emergency Telephone Number +64-6-7559274

New Zealand National Poisons Centre 0800 764 766 (24 hours)

2. Hazard(s) Identification

Statement of Hazardous Nature

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulation 2001; Not Classified as dangerous good according to NZS 5433:2012, UN, IMDG or IATA

Classification

6.3B Mildly irritating to the skin
6.4A Irritating to the eye
6.5B Contact sensitisers
6.6B Human mutagens
6.7A Known or presumed human carcinogens
6.8B Human reproductive or developmental toxicants
6.9B Harmful to human target organs or systems
9.1B Ecotoxic in the aquatic environment

Hazard and Precautionary Statements

2. Hazard(s) Identification

Hazard Pictograms



Signal Word

Danger

Hazard Statements

H350 - May cause cancer by inhalation
 H373 - May cause damage to organs through prolonged or repeated exposure if inhaled
 H341 - Suspected of causing genetic defects
 H316 - Causes mild skin irritation
 H317 - May cause an allergic skin reaction
 H319 - Causes serious eye irritation
 H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention

P102 - Keep out of reach of children
 P103 - Read label before use
 P104 - Read Safety Data Sheet before use.
 P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P272 - Contaminated work clothing should not be allowed out of the workplace
 P280 - Wear eye protection/face protection
 P281 - Use personal protective equipment as required

Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P337 + P313 - If eye irritation persists: Get medical advice/attention
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
 P363 - Wash contaminated clothing before reuse
 P308 + P313 - IF exposed or concerned: Get medical advice/attention
 P314 - Get medical attention/advice if you feel unwell
 P391 - Collect spillage

Storage

P405 - Store locked up

Disposal

P501 - Dispose of contents/container to an approved waste disposal plant

Contains

Substances	CAS Number	Substance HSNO Classification
Aluminum	7429-90-5	4.11B 6.9B 9.1D
Bisphenol A / Epichlorohydrin resin	25068-38-6	6.3B 6.4A 6.5B (Contact) 6.9B (Dermal) 9.1B (Algae, Crustacean, Fish)
Calcium carbonate	471-34-1	6.4A

2. Hazard(s) Identification

Butyl glycidyl ether	2426-08-6	3.1C 6.1D (Oral) 6.1D (Inhalation) 6.3A 6.4A 6.5B (Contact) 6.6B 6.8B 9.1C (Algae, Crustacean, Fish) 9.3C
Crystalline silica, quartz	14808-60-7	6.7A 6.9A

Other Hazards

None known

3. Composition and Information on Ingredients

Substances	CAS Number	PERCENT
Aluminum	7429-90-5	30 - 60%
Bisphenol A / Epichlorohydrin resin	25068-38-6	30 - 60%
Calcium carbonate	471-34-1	10 - 30%
Butyl glycidyl ether	2426-08-6	1 - 5%
Crystalline silica, quartz	14808-60-7	0 - 1%

4. First-Aid Measures

Requirements for First Aid or Medical Care

Inhalation	If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
Eyes	In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
Skin	Wash with soap and water. Get medical attention if irritation persists.
Ingestion	Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Workplace Facilities Required

None

Relation to Health Effect

Most Important Symptoms/Effects

May cause eye and skin irritation. May cause allergic skin reaction. Breathing crystalline silica can cause lung disease, including silicosis and lung cancer. Crystalline silica has also been associated with scleroderma and kidney disease.

Medical Attention and Special Treatment

Notes to Physician

Treat symptomatically

5. Fire-Fighting Measures

Type of Hazard

5. Fire-Fighting Measures

Flammability Hazard

Non-flammable

Extinguishing media**Suitable Extinguishing Media**

Carbon dioxide, dry chemical, foam.

Extinguishing media which must not be used for safety reasons

Water must not be used with open containers.

HAZCHEM Code

Hazchem Code:

None Allocated

Special Protective Equipment and Precautions for Fire Fighters**Special Protective Equipment for Fire-Fighters**

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

Special Exposure Hazards

Decomposition in fire may produce toxic gases. Contact with strong oxidizers may produce explosive mixtures. Hydrogen gas may be released on contact with moisture, acids or alkalis.

6. Spillage, Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Avoid creating and breathing dust.

See Section 12 for additional information

Environmental precautions

Prevent from entering sewers, waterways, or low areas.

Methods and material for containment and cleaning up

Collect using dustless method and hold for appropriate disposal. Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage and disposal.

Reference to other sections

See Section 12 for additional information.

7. Handling and Storage

Precautions for Safe Handling**Handling Precautions**

Avoid contact with eyes, skin, or clothing. Wash hands after use. Launder contaminated clothing before reuse. This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH certified, European Standard En 149, or equivalent respirator when using this product. Material is slippery when wet.

Handling Practices**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

Approved Handlers

If more than 10 kg (Class 6) is present, then an approved handler must be present when the substance is being handled and when not in use, the substance must be locked away.

Conditions for safe storage, including any incompatibilities

Store away from acids. Store away from alkalis. Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use. Store locked up. Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use.

7. Handling and Storage

Store Site Requirements

No special controls required

Packaging

No special packaging required

8. Exposure Controls and Personal Protection

Workplace Exposure Standards

Substances	CAS Number	New Zealand WES	ACGIH TLV-TWA
Aluminum	7429-90-5	TWA: 10 mg/m ³	TWA: 1 mg/m ³
Bisphenol A / Epichlorohydrin resin	25068-38-6	Not applicable	Not applicable
Calcium carbonate	471-34-1	TWA: 10 mg/m ³	10 mg/m ³
Butyl glycidyl ether	2426-08-6	TWA: 25 ppm TWA: 133 mg/m ³	TWA: 3 ppm
Crystalline silica, quartz	14808-60-7	TWA: 0.2 mg/m ³	TWA: 0.025 mg/m ³

Engineering Controls

Engineering Controls

Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits.

Personal Protective Equipment (PPE)

Respiratory Protection

Wear a NIOSH certified, European Standard EN 149 (FFP2/FFP3), or equivalent respirator when using this product.

Hand Protection

Skin Protection

Impervious rubber gloves. Nitrile gloves. Neoprene gloves. Butyl rubber gloves. Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.

Eye Protection

Other Precautions

Hygiene Measures

Chemical goggles; also wear a face shield if splashing hazard exists. Eyewash fountains and safety showers must be easily accessible. Handle in accordance with good industrial hygiene and safety practice

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State: Solid

Color: Gray

Odor: Aromatic hydrocarbon

Odor Threshold: No information available

Property

Values

Remarks/ Method

pH:

No data available

Melting Point/Range

No data available

Freezing Point/Range (C):

No data available

Boiling Point/Range

No data available

Flash Point

93°C

PMCC

Evaporation rate

No data available

Vapor Pressure

> 1

Vapor Density

No data available

Specific Gravity

1.81

Water Solubility

Insoluble in water

Solubility in other solvents

No data available

Partition coefficient: n-octanol/water

No data available

Autoignition Temperature

No data available

Decomposition Temperature

No data available

9. Physical and Chemical Properties

Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available

Other information

VOC Content (%)	No data available
-----------------	-------------------

10. Stability and Reactivity

Chemical Stability

Stable

Conditions to Avoid

None anticipated

Incompatible Materials

Strong oxidizers. Strong acids. Strong alkalis.

Hazardous Decomposition Products

Hydrogen chloride. Aldehydes. Aluminum fumes. Butyl glycidyl ether. Carbon monoxide and carbon dioxide. Amorphous silica may transform at elevated temperatures to tridymite (870 C) or cristobalite (1470 C).

Hazardous Reactions

Hazardous Polymerization: Will Not Occur

11. Toxicological Information

Health Effect from Likely Routes of Exposure

Acute Toxicity

Inhalation

May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. Inhaled crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC, Group 1). There is sufficient evidence in experimental animals for the carcinogenicity of tridymite (IARC, Group 2A).

Breathing silica dust may cause irritation of the nose, throat, and respiratory passages. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may also have serious chronic health effects (See "Chronic Effects/Carcinogenicity" subsection below).

Eye Contact Skin Contact Ingestion

May cause eye irritation.
May cause skin irritation. May cause an allergic skin reaction.
Irritation of the mouth, throat, and stomach.

11. Toxicological Information

Chronic Effects/Carcinogenicity

Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis.

Cancer Status: The International Agency for Research on Cancer (IARC) has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources can cause lung cancer in humans (Group 1 - carcinogenic to humans) and has determined that there is sufficient evidence in experimental animals for the carcinogenicity of tridymite (Group 2A - possible carcinogen to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997) in conjunction with the use of these minerals. The National Toxicology Program classifies respirable crystalline silica as "Known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as scleroderma (an immune system disorder manifested by scarring of the lungs, skin, and other internal organs) and kidney disease.

Toxicity Data

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Aluminum	No data available	No data available	No data available
Bisphenol A / Epichlorohydrin resin	11400 mg/kg (Rat)	No data available	No data available
Calcium carbonate	6450 mg/kg (Rat)	No data available	No data available
Butyl glycidyl ether	1660 mg/kg (Rat) 2000 mg/kg (Rat)	2520 µL/kg (Rabbit) 2150 mg/kg (Rat)	LC50: 1030 ppm (Rat) 8 h LC50" > 670 ppm (Rat) 8 h
Crystalline silica, quartz	500 mg/kg (Rat)	No data available	No data available

12. Ecological Information

Toxicity

Ecotoxicity Effects

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Aluminum	EC50: 6919.83 mg/L (Skeletonema costatum)	LC50: >10000 mg/L (Scophthalmus maximus)	No information available	LC50: 190 mg/L (Arcatia tonsa)
Bisphenol A / Epichlorohydrin resin	No information available	No information available	No information available	No information available
Calcium carbonate	No information available	No information available	No information available	No information available
Butyl glycidyl ether	No information available	No information available	No information available	No information available
Crystalline silica, quartz	No information available	No information available	No information available	No information available

Persistence and degradability

Not readily biodegradable

Bioaccumulative potential

No information available

Mobility in soil

No information available

Ecotoxicity Hazard Statements

Toxic to aquatic life

Other adverse effects**Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

13. Disposal Considerations**Waste treatment methods****Disposal Method**

Disposal should be made in accordance with federal, state, and local regulations. Incineration recommended in approved incinerator according to federal, state, and local regulations. Substance should NOT be deposited into a sewage facility.

Contaminated Packaging

Follow all applicable national or local regulations. Contaminated packaging may be disposed of by: rendering packaging incapable of containing any substance, or treating packaging to remove residual contents, or treating packaging to make sure the residual contents are no longer hazardous, or by disposing of packaging into commercial waste collection.

14. Transport Information**IMDG/IMO**

UN Number: Not restricted.
 UN Proper Shipping Name: Not restricted
 Transport Hazard Class(es): Not applicable

NZ 5433.1999

UN Number: Not restricted.
 UN Proper Shipping Name: Not restricted
 Transport Hazard Class(es): Not applicable

IATA/ICAO

UN Number: Not restricted.
 UN Proper Shipping Name: Not restricted
 Transport Hazard Class(es): Not applicable

Special Precautions for User

None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. Regulatory Information

New Zealand Inventory of Chemicals All components listed on inventory or are exempt.

HSNO Approval Number

HSR002616

Group Name

Metal Industry Product (Toxic [6.7], HSR002616)

HSNO ControlsRefer to the NZ EPA website for more information: <http://www.epa.govt.nz>**Approved Handlers**

If more than 10 kg (Class 6) is present, then an approved handler must be present when the substance is being handled and when not in use, the substance must be locked away.

15. Regulatory Information

Poisons Schedule: S5

16. Other Information

The following sections have been revised since the last issue of this SDS

Not applicable

Additional Information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

Key literature references and sources for data

www.ChemADVISOR.com/
NZ CCID

Revision Date: 16-May-2013

Revision Note: Not applicable

Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet