

## SAFETY DATA SHEET

### BARACARB® 5

Revision Date: 22-Jun-2015

Revision Number: 25

#### 1. Product and Company Identification

**Product Name**

Product Trade Name: BARACARB® 5

**Other Names**

Synonyms: None

Product Code: HM003487

**Recommended Use**

Recommended Use: Bridging Agent

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**

6.4A Irritating to the eye

6.7A Known or presumed human carcinogens

6.9A Toxic to human target organs or systems

**Hazard and Precautionary Statements**

**Hazard Pictograms**



Signal Word: Danger

Hazard Statements: H319 - Causes serious eye irritation  
H350 - May cause cancer by inhalation

**Precautionary Statements**

Prevention: 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  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P280 - Wear protective gloves/protective clothing/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  
 P308 + P313 - IF exposed or concerned: Get medical advice/attention

**Storage** P405 - Store locked up

**Disposal** P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

**Contains**

Substances	CAS Number	Substance HSNO Classification
Calcium carbonate	471-34-1	6.4A
Crystalline silica, quartz	14808-60-7	6.7A 6.9A

**2.3. Other Hazards**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).  
 This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

**3. Composition and Information on Ingredients**

Substances	CAS Number	PERCENT (w/w)
Calcium carbonate	471-34-1	60 - 100%
Crystalline silica, quartz	14808-60-7	0.1 - 1%

**4. First-Aid Measures**

**Requirements for First Aid or Medical Care**

**Inhalation** If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.  
**Eyes** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.  
**Skin** Wash with soap and water. Get medical attention if irritation persists.  
**Ingestion** Under normal conditions, first aid procedures are not required.

**Workplace Facilities Required**

None

**Relation to Health Effect**

**Most Important Symptoms/Effects**

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**

**Flammability Hazard**

Non-flammable

**5.1. Extinguishing media**

**Suitable Extinguishing Media**

All standard fire fighting media

**Extinguishing media which must not be used for safety reasons**

None known.

**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**

Not applicable.

## 6. Spillage, Accidental Release Measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Use appropriate protective equipment. Avoid creating and breathing dust.

See Section 8 for additional information

**6.2. Environmental precautions**

Prevent from entering sewers, waterways, or low areas.

**6.3. 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.

**6.4. Reference to other sections**

See Section 8 and 13 for additional information.

## 7. Handling and storage

**7.1. Precautions for Safe Handling****Handling Precautions**

Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust. 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.

**7.2. Conditions for safe storage, including any incompatibilities**

Store away from acids. Store in a cool, dry location. Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container. Product has a shelf life of 60 months.

**Store Site Requirements**

No special controls required

**Packaging**

No special packaging required

## 8. Exposure Controls and Personal Protection

**Workplace Exposure Standards****Exposure Limits**

Substances	CAS Number	New Zealand WES	ACGIH TLV-TWA
Calcium carbonate	471-34-1	TWA: 10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Crystalline silica, quartz	14808-60-7	TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>

**Engineering Controls****Engineering Controls**

Use in a well ventilated area. Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits.

**Personal Protective Equipment (PPE)**

<b>Respiratory Protection</b>	Wear a NIOSH certified, European Standard EN 149 (FFP2/FFP3), AS/NZS 1715, or equivalent respirator when using this product.
<b>Hand Protection</b>	Normal work gloves.
<b>Skin Protection</b>	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.
<b>Eye Protection</b>	Wear safety glasses or goggles to protect against exposure.
<b>Other Precautions</b>	None known.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

<b>9. Physical and Chemical Properties</b>
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**9.1. Information on basic physical and chemical properties**

<b>Physical State:</b> Solid Powder	<b>Color:</b> White
<b>Odor:</b> Odorless	<b>Odor Threshold:</b> No information available

<u>Property</u>	<u>Values</u>
<u>Remarks/ - Method</u>	
<b>pH:</b>	8-9
<b>Freezing Point/Range</b>	No data available
<b>Melting Point/Range</b>	No data available
<b>Boiling Point/Range</b>	No data available
<b>Flash Point</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available
<b>Specific Gravity</b>	2.7
<b>Water Solubility</b>	Insoluble in water
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available

**9.2. Other information**

<b>VOC Content (%)</b>	No data available
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<b>10. Stability and Reactivity</b>
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**10.2. Chemical Stability**

Stable

**10.4. Conditions to Avoid**

None anticipated

**10.5. Incompatible Materials**

Strong acids.

**10.6. Hazardous Decomposition Products**

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

<b>11. Toxicological Information</b>
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**Health Effect from Likely Routes of Exposure****Acute Toxicity**

<b>Inhalation</b>	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).
<b>Eye Contact</b> <b>Skin Contact</b> <b>Ingestion</b>	May cause mechanical irritation to eye. May cause mechanical skin irritation. None known.
<b>Chronic Effects/Carcinogenicity</b>	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****Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium carbonate	471-34-1	6450 mg/kg (Rat) > 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 3 mg/L (Rat) 4h
Crystalline silica, quartz	14808-60-7	>15,000 mg/kg (Human)	No data available	No data available

Substances	CAS Number	Skin corrosion/irritation
Calcium carbonate	471-34-1	Non-irritating to the skin (Rabbit)
Crystalline silica, quartz	14808-60-7	Non-irritating to the skin

Substances	CAS Number	Eye damage/irritation
Calcium carbonate	471-34-1	Non-irritating to the eye (Rabbit)
Crystalline silica, quartz	14808-60-7	Mechanical irritation of the eyes is possible.

Substances	CAS Number	Skin Sensitization
Calcium carbonate	471-34-1	Did not cause sensitization on laboratory animals (mouse)
Crystalline silica, quartz	14808-60-7	No information available.

Substances	CAS Number	Respiratory Sensitization
Calcium carbonate	471-34-1	No information available
Crystalline silica, quartz	14808-60-7	No information available

Substances	CAS Number	Mutagenic Effects
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Calcium carbonate	471-34-1	In vitro tests did not show mutagenic effects
Crystalline silica, quartz	14808-60-7	Not regarded as mutagenic.

Substances	CAS Number	Carcinogenic Effects
Calcium carbonate	471-34-1	No information available.
Crystalline silica, quartz	14808-60-7	Contains crystalline silica which may cause silicosis, a delayed and progressive lung disease. The IARC and NTP have determined there is sufficient evidence in humans of the carcinogenicity of crystalline silica with repeated respiratory exposure. Based on available scientific evidence, this substance is a threshold carcinogen with a mode of action involving indirect genotoxicity secondary to lung injury.

Substances	CAS Number	Reproductive toxicity
Calcium carbonate	471-34-1	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
Crystalline silica, quartz	14808-60-7	No information available

Substances	CAS Number	STOT - single exposure
Calcium carbonate	471-34-1	No significant toxicity observed in animal studies at concentration requiring classification.
Crystalline silica, quartz	14808-60-7	No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	STOT - repeated exposure
Calcium carbonate	471-34-1	No significant toxicity observed in animal studies at concentration requiring classification.
Crystalline silica, quartz	14808-60-7	Causes damage to organs through prolonged or repeated exposure if inhaled: (Lungs)

Substances	CAS Number	Aspiration hazard
Calcium carbonate	471-34-1	Not applicable
Crystalline silica, quartz	14808-60-7	Not applicable

## 12. Ecological Information

### 12.1. Toxicity Ecotoxicity Effects

#### Product Ecotoxicity Data

No data available

#### Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Calcium carbonate	471-34-1	EC50(72h): > 14 mg/L (growth rate) (Desmodesmus subspicatus)	LC50(96h): > 100 mg/L (saturated solution) (Oncorhynchus mykiss)	EC50(3h): > 1000 mg/L (Activated sludge)	EC50(48h): > 100 mg/L (saturated solution) (Daphnia magna)
Crystalline silica, quartz	14808-60-7	No information available	LL0 (96h) 10,000 mg/L (Danio rerio) (similar substance)	No information available	LL50 (24h) > 10,000 mg/L (Daphnia magna) (similar substance)

### 12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Calcium carbonate	471-34-1	The methods for determining biodegradability are not applicable to inorganic substances.
Crystalline silica, quartz	14808-60-7	No information available

### 12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Calcium carbonate	471-34-1	No data available
Crystalline silica, quartz	14808-60-7	No data available

### 12.4. Mobility in soil

Substances	CAS Number	Mobility
Calcium carbonate	471-34-1	No information available
Crystalline silica, quartz	14808-60-7	No information available

**Ecotoxicity Hazard Statements**

None known

**12.6. Other adverse effects****Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

**13. Disposal Considerations****13.1. Waste treatment methods****Disposal Method**

Bury in a licensed landfill according to federal, state, and local regulations.

**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**

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>Environmental Hazards:</b>	Not applicable

**NZ 5433.1999**

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	Not applicable

**IATA/ICAO**

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	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**

HSR002512

**Group Name**

Additives, Process Chemicals and Raw Materials (Toxic 6.7 HSR002512)

**HSNO Controls**Refer 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.

**Poisons Schedule:**

None Allocated

**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 Stewardship at 1-580-251-4335.

**Key literature references and sources for data**

[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)  
NZ CCID

**Revision Date:** 26-Jun-2015  
**Revision Note** Revision Note  
SDS sections updated:  
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**End of Safety Data Sheet**