### HALLIBURTON

## **MATERIAL SAFETY DATA SHEET**

Product Trade Name: QUIK-GROUT®

05-Jan-2009

Revision Date:

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Statement of Hazardous Nature	Hazardous according to criteria of WorkSafe
Manufacturer/Supplier	Halliburton/Baroid Australia Pty. Ltd. 53-55 Bannister Road Canning Vale WA 6155 Australia
	ACN Number: 009 000 775 Telephone Number: 61 (08) 9455 8300 Fax Number: 61 (08) 9455 5300
	<b>Product Emergency Telephone</b> Australia: 08-64244950 Papua New Guinea: 05 1 281 575 5000 New Zealand: 06-7559274
	Fire, Police & Ambulance - Emergency Telephone Australia: 000 Papua New Guinea: 000 New Zealand: 111

#### Identification of Substance or Preparation

Product Trade Name:	QUIK-GROUT®
Synonyms:	None
Chemical Family:	Mineral
UN Number:	None
Dangerous Goods Class:	None
Subsidiary Risk:	None
Hazchem Code:	None
Poisons Schedule:	None
Application:	Grouting Material
Prepared By	Chemical Compliance Telephone: 1-580-251-4335 e-mail: fdunexchem@halliburton.com

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance	CAS Number	Percent	Australia NOHSC	ACGIH TLV-TWA
Ammonium bisulfate	7783-20-2	1 - 5%	Not determined	Not applicable

2. COMPOSITION/INF	ORMATION O	N INGREDIENTS		
Crystalline silica, tridymite	15468-32-3	0 - 1%	0.1 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>
Crystalline silica, cristobalite	14464-46-1	0 - 1%	0.1 mg/m <sup>3</sup>	0.025 mg/m <sup>3</sup>
Crystalline silica, quartz	14808-60-7	1 - 5%	0.1 mg/m <sup>3</sup>	0.025 mg/m <sup>3</sup>
Bentonite	1302-78-9	60 - 100%	Not determined	Not applicable

#### Total to 100%

#### 3. HAZARDS IDENTIFICATION

CAUTION! - ACUTE HEALTH HAZARD

May cause eye and respiratory irritation.

#### DANGER! - CHRONIC HEALTH HAZARD

Breathing crystalline silica can cause lung disease, including silicosis and lung cancer. Crystalline silica has also been associated with scleroderma and kidney disease.

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 exposures below recommended exposure limits. Wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Review the Material Safety Data Sheet (MSDS) for this product, which has been provided to your employer.

#### **Hazard Ratings**

**Hazard Overview** 

Flammability:	0
Toxicity:	0
Body Contact:	0
Reactivity:	0
Chronic:	4

Scale: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4

#### 4. FIRST AID MEASURES

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

### 5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media All standard fire fighting media

Unsuitable Extinguishing Media None known

Special Exposure Hazards Not applicable.

Special Protective Equipment for Not applicable. Fire-Fighters

### 6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use Appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary Measures	None known.
Procedure for Cleaning/Absorption	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.

### 7. HANDLING AND STORAGE

Handling Precautions	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.
Storage Information	Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits listed in Section 2.
Respiratory Protection	Wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product.
Hand Protection	Normal work gloves.
Skin Protection	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	Wear safety glasses or goggles to protect against exposure.
Other Precautions	None known.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Colour: Odour: pH: Specific Gravity @ 20 C (Water=1): Density @ 20 C (kg/l): Bulk Density @ 20 C (kg/l): Boiling Point/Range (C): Freezing Point/Range (C):	Solid Beige to Tan Odourless 8-10 2.5 Not Determined Not Determined Not Determined Not Determined
Pour Point/Range (C):	Not Determined
Flash Point/Range (C):	Not Determined
Flash Point Method:	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (g/m <sup>3</sup> ):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (g/m³):	Not Determined

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Flammability Limits in Air - Upper (%):	Not Determined
Vapour Pressure @ 20 C (mmHg):	Not Determined
Vapour Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate = 1):	Not determined.
Solubility in Water (g/100ml):	Insoluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (g/l):	Not Determined
Viscosity, Dynamic @ 20 C	Not Determined
(centipoise):	
Viscosity, Kinematic @ 20 C	Not Determined
(centistrokes):	
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined
Decomposition Temperature (C):	Not Determined

### **10. STABILITY AND REACTIVITY**

Stability Data:	Stable
Hazardous Polymerisation:	Will Not Occur
Conditions to Avoid	None anticipated
Incompatibility (Materials to Avoid)	Copper and copper alloys. Zinc.
Hazardous Decomposition Products	Oxides of sulphur. Oxides of nitrogen. Ammonia. Amorphous silica may transform at elevated temperatures to tridymite (870 C) or cristobalite (1470 C).
Additional Guidelines	Not Applicable

### **11. TOXICOLOGICAL INFORMATION**

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	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).
Skin Contact	May cause mechanical injury.
Eye Contact	May cause eye irritation.
Ingestion	None known
Aggravated Medical Conditions	Individuals with respiratory disease, including but not limited to asthma and bronchitis, or subject to eye irritation, should not be exposed to quartz dust.

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).
Other Information	For further information consult Adverse Effects of Crystalline Silica Exposure" published by the American Thoracic Society Medical Section of the American Lung Association, American Journal of Respiratory and Critical Care Medicine, Volume 155, pages 761-768 (1997)."
Toxicity Tests	
Oral Toxicity:	Not determined
Dermal Toxicity:	Not determined.
Inhalation Toxicity:	Not determined
Primary Irritation Effect:	Not determined
Carcinogenicity:	Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997).
Genotoxicity:	Not determined
Reproductive/Developmer al Toxicity:	t Not determined

### 12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	Not determined
Bio-accumulation	Not Determined

### **Ecotoxicological Information**

Acute Fish Toxicity:Not determinedAcute Crustaceans Toxicity:Not determinedAcute Algae Toxicity:Not determined

Chemical Fate Information	Not determined
Other Information	Not applicable

### 13. DISPOSAL CONSIDERATIONS

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

**Contaminated Packaging** Follow all applicable national or local regulations.

### 14. TRANSPORT INFORMATION

#### Land Transportation

ADR Not restricted

#### **Air Transportation**

ICAO/IATA Not restricted

### Sea Transportation

IMDG Not restricted

#### **Other Shipping Information**

EPG:	Not determined
IERG:	Not determined
Labels:	None

### 15. REGULATORY INFORMATION

#### **Chemical Inventories**

Australian AICS Inventory US TSCA Inventory EINECS Inventory	Not Determined All components listed. All components are listed on the inventory.
Classification	Crystalline silica is not classified as a carcinogen in EU Council Directives 67/548/EEC and 88/379/EEC.
Risk Phrases	None
Safety Phrases	S22 Do not breathe dust.

### 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS: Not applicable

### Contact

**Australian Poisons Information Centre** 

24 Hour Service: - 13 11 26 Police or Fire Brigade: - 000 (exchange): - 1100

# New Zealand Poisons Information System Deunedin: -(03) 479 1200 (Normal Hours)

Additional Information	For additional information on the use of this product, contact your local Halliburton representative.	
	For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Product Stewardship at 1-580-251-4335.	
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 MSDS***		