Material Safety Data Sheet

SIBELCO GRADED SAND & GRAVEL PRODUCTS

Infosafe No.: LPVEG
Issued Date: 02/12/2011
Issued by: SIBELCO AUSTRALIA LIMITED

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name
SIBELCO GRADED SAND & GRAVEL PRODUCTS

Company Name
SIBELCO AUSTRALIA LIMITED

Address
49-55 Woodlands Drive Braeside
Vic 3195 Australia

Emergency Tel.
1800 638 556

Telephone/Fax Number
Tel: (03)9586 5400
Fax: (03)9586 5413

Recommended Use
Used in filtration and drilling applications.
This product is not to be used for abrasive blasting applications.

Other Names

Name	Product Code
FILTERSIL SERIES	6, 8/16, 12/20, 18/40, 20/40, 30/60, 40/70, 45/200, 8/16FG, 16/30FG, 18/40FG, 30/60FG
UNIFRAC SERIES	16/30, 20/40, 40/70, 45/200
GRAVEL SERIES	3/2, 5/2, 6/3
ACCUPACK SERIES	40/60

2. HAZARD IDENTIFICATION

Hazard Classification
NON-HAZARDOUS SUBSTANCE.
NON-DANGEROUS GOODS.

Not Classified as Hazardous according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC).
Not Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Risk Phrase(s)
Not classified as hazardous according to criteria of NOHSC

Safety Phrase(s)
S22 Do not breathe dust.
S38 If insufficient ventilation, wear suitable respiratory equipment.

Other Information
Undertake health and safety risk assessment on safe methods of handling and use appropriate to your workplace.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Quartz	14808- 60- 7	99 %

Other Information
Contains <1% respirable crystalline silica in the form of quartz.

4. FIRST-AID MEASURES

Inhalation
If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms persist seek medical attention.

Ingestion
Do not induce vomiting. Wash out mouth thoroughly with water. If symptoms develop seek medical attention.

Skin
Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye
If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and persist seek medical attention.

First Aid Facilities
Eye wash and normal washroom facilities.

Advice to Doctor
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing media that are suitable for the surrounding combustible materials.

Hazards from Combustion Products
Under fire conditions this product may emit toxic and/or irritating fumes and gases including carbon monoxide and carbon dioxide.

Specific Hazards
The product is not combustible, however the packaging may burn under fire conditions. At 825°C calcium carbonate (calcite) decomposes and gives off carbon dioxide and corrosive fumes of calcium oxide.

Decomposition Temperature
Not available

Precautions in connection with Fire
Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures
Increase ventilation. Evacuate all unprotected personnel. Wear sufficient respiratory protection and full protective clothing to prevent exposure. Sweep up material avoiding dust generation or dampen spilled material with water to

avoid airborne dust, then transfer material to a suitable container. Wash surfaces well with soap and water. Seal all wastes in labelled plastic containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of dust in the work atmosphere. Avoid inhalation of dust, and skin or eye contact. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.

Conditions for Safe Storage
Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Protect containers/bags from damage. Avoid generation of dust. Keep containers tightly closed. Store away from bases, water and other incompatible materials. Have appropriate fire extinguishers available in and near the storage area. Ensure that storage conditions comply with applicable local and national regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards
No exposure value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC), Australia. However, over-exposure to any chemical may result in enhancement of pre-existing adverse medical conditions and/or allergic reactions and should be kept to the least possible levels. The available exposure limits for ingredients are listed below:

National Occupational Health And Safety Commission (NOHSC), Australia Exposure Standards:

Substance	TWA		STEL		NOTICES
	ppm	mg/m³	ppm	mg/m³	
Quartz	-	0.1	-	-	-
Dust (inspirable fraction)	-	10	-	-	-

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.
STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Biological Limit Values
No biological limits allocated.

Engineering Controls
Good ventilation adequate to maintain the concentration below exposure standards is required. The use of a local exhaust ventilation system (drawing dusts away from workers breathing zone) is recommended. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable particulate filter should be used. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection
Safety glasses with side shields or chemical goggles should be worn. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection
Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by appropriate risk assessments.

Body Protection

Suitable protective workwear should be worn when working with this material, e.g. cotton overalls buttoned at neck and wrist.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Off white to light brown crystals

Odour
Not available

Decomposition Temperature
Not available

Melting Point
Not available

Boiling Point
Not applicable

Solubility in Water
Insoluble

Specific Gravity
2.65

pH Value
Not available

Vapour Pressure
Not applicable

Vapour Density (Air=1)
Not available

Flash Point
Not applicable

Flammability
Non-combustible

Auto-Ignition Temperature
Not applicable

Flammable Limits - Lower
Not applicable

Flammable Limits - Upper
Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability
Stable under normal conditions of storage and handling. At 825°C calcium carbonate (calcite) decomposes and emits carbon dioxide and corrosive fumes of calcium oxide.

Conditions to Avoid
Dust accumulation.

Incompatible materials
Stong oxidising agents, strong acids, ammonium salts and fluorine.

Hazardous Decomposition Products
Thermal decomposition may result in the release of toxic and/or irritating fumes.

Hazardous Polymerization
Will not occur.

11. TOXICOLOGICAL INFORMATION

Inhalation
Inhalation may cause the drying and irritation of the respiratory tract.

Ingestion
Ingestion of large amounts may irritate the gastric tract causing nausea and vomiting.

Skin
Skin contact may cause irritation and dryness.

Eye
Eye contact may cause mechanical irritation.

Chronic Effects
Repeated, prolonged or concentrated inhalation may cause delayed lung injury. Breathing of dust may cause shortness of breath, and aggravate asthma and inflammatory or fibrotic pulmonary disease. Prolonged or repeated contact with the skin in the absence of proper hygiene, may cause dryness and dermatitis.

Carcinogenicity
The product contains a small proportion of respirable crystalline silica as quartz (<1%). Crystalline silica has been classified by International Agency for Research on Cancer (IARC) as carcinogenic to humans by inhalation (Group 1) Furthermore, crystalline silica can cause silicosis or other lung diseases on prolonged exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Not available

Persistence / Degradability
Not available

Mobility
Not available

Environmental Protection
Prevent this material entering waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Waste Disposal
Dispose of waste according to applicable local and national regulations.

14. TRANSPORT INFORMATION

Transport Information
Road and Rail Transport (ADG Code):
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).

Marine Transport (IMO/IMDG):
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

U.N. Number
None Allocated

Proper Shipping Name
None Allocated

DG Class
None Allocated

Packing Group
None Allocated

15. REGULATORY INFORMATION

Regulatory information

Not classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

Not Scheduled

16. OTHER INFORMATION

Date of preparation or last revision of MSDS

MSDS Amendment: May 2013
Section 14: Transport Information
SDS Amendment: March 2013
1. Identification of the Material and Supplier
Minor Amendment: May 2012
MSDS Reviewed: December 2011
MSDS Amended: December 2006
MSDS Created: April 2006

Contact Person/Point

Emergency Advice: ACOHS ERS - 1800 638 556 (24 Hours)

PLEASE NOTE:

The information contained herein is based on data available to Sibelco Australia Limited from both our own technical sources and from recognised published references and is believed to be both accurate and reliable. Sibelco Australia Limited has made no effort to censor nor to conceal deleterious aspects of this product. Since we cannot anticipate or control the many different conditions under which this information and our products may be used, each user should review these recommendations in the specific context of the intended application and confirm whether they are appropriate. It is therefore recommended that you undertake your own risk assessment in relation to your method of handling and proposed use of this product. Sibelco Australia Limited accepts no liability whatsoever for damage or injury caused from the use of this information or of suggestions contained herein.

END OF SDS