

PO Box 328
Soneike
Kuilsriver
7583

CAPE SILICA
SUPPLIERS

REG. NO. 2009/19370/23



UNIT 2, VINEYARDS 2, 17 CABERNET RD., SAXENBURG

info@silicasand.co.za

MATERIAL SAFETY DATA SHEET

Product Name:	Silica Sand-crystalline Silica (Quartz)
Manufacture:	Cape Silica Suppliers
Date of MSDS:	January 2020
Telephone No:	(021) 905 6499
1. Product Identification and use	
1.1 Identification:	Silica Sand – Crystalline Silica (Quartz)
Physical State:	Solid, Washed & Dried
Appearance:	Buff in colour
Odour:	Odourless
1.2 Product Use:	Play Sand, Sandblasting, Foundry Sand, Construction products, Filter sand, Ceramics etc.
2. Hazards Identification	
Fire:	Nil
Flash point:	Not Applicable
Explosion:	Take precautionary measures against static discharges during conveying and handling.
Inhalation:	Harmful, accumulative effects. Excessive Exposure to respirable dust should be avoided.
Skin:	No hazard expected.
Eyes:	Particles may scratch eyes or cause mechanical irritation.
Ingestion:	No direct hazard. Used as food additive in some cases.
3. First-Aid and Preventative Measure	
Inhalation:	1) Use respirator protection. 2) Move to fresh air. In case of discomfort seek medical attention.
Skin:	No Hazard.
Eyes:	1) Avoid contact by using goggles. 2) Rinse immediately with plenty of water. If discomfort persists get medical attention.
Ingestion:	Observe the rules of hygiene wash before eating or drinking.
4. Fire Fighting Measures	
Fire Rating:	0 Can be used as fire break. 4 Minimal, no reaction with water.
5. Accident release measures	
Dampen any spillage with water to minimise dust.	
6. Handling and Storage	
Storage: No restraints Inert substance with no special requirements for hazard containment.	
7. Exposure Controls/Personal Protection	
Personal protection:	1) Use G.M.E. approved respirator. 2) Use eye protection.
Threshold Limit Values: 0,1 mg/m ³	
Time weighted averages (TWA):5,0 mg/m ³	
Short term exposure limits: 0,1 mg/m ³ Respirable dust.	
8. Physical and Chemical properties	
Class: Crystalline Silica	p.H. 5.59
Appearance: Sand	Density: 2,65 g/ml
Odour: Odourless	Coefficient water/oil distribution: No applicable.
Boiling point: 2230 C	
Melting point: 1703 C	
9. Stability and reactivity:	Reactivity Minimal – Inert – No reaction with water.

T:021 905 6499

F:021 905 7229

www.silicasand.co.za



SILCHEM 2314

1. PRODUCTS AND COMPANY IDENTIFICATION

Product/Trade Name	SILCHEM 2314
Product Codes	5320 - 00010 / 00020/ 00041/ 00050
Manufacturer/Supplier	FOSECO South Africa
Address	12 Bosworth Street Alrode 1450 PO Box 123850 Alrode 1451 Gauteng, South Africa
Phone Number	+27 (0) 11 903 9500
Fax Number	+27 (0) 11 908 2380
Emergency Tel	+27 (0) 11 903 9500
Material Uses	Foundry Industry. Sand binder.

2. COMPOSITION /INFORMATION ON INGREDIENTS

Substance / Preparation: Preparation

Chemical name	CAS No.	%	EC No.	Classification
Sodium Silicate	1344-09-8	> 50	215-687-4	Xi; R36/38, 41

The preparation is classified as "Irritant " under rules of the EEC " Dangerous Substance Directive " 67/548/ECC as amended by 92/32 EEC

Occupational Exposure Limit(s), if available, are listed in Section 8

See Section 16 for the full text of the R Phrases declared above

3. HAZARD IDENTIFICATION

Main Hazards	Hazardous in case of eye contact (irritant).
Health Effects - Eyes	Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering and itching. Serious damage may result if treatment is delayed.
Health Effects - Skin	Harmful in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening or occasionally blistering.
Health Effects - Ingestion	Swallowing may have the following effects: Irritation of the mouth, throat and digestive tract.
Health Effects - Inhalation	Inhalation of spray mist may produce irritation of respiratory tract, characterized by coughing, choking or shortness of breath.
Aggravating conditions	Repeated or prolonged exposure is not known to aggravate medical condition.

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4. FIRST AID MEASURES

First Aid - Eyes	Check for and remove any contact lenses. Immediately flood eye(s) with plenty of water for at least 15 minutes, holding the eye(s) open. Cold water may be used. Obtain medical attention immediately.
First Aid - Skin	Immediately wash skin thoroughly with soap and water. Remove contaminated clothing and shoes as washing proceeds. Continue washing for at least 15 minutes. Obtain medical attention if blistering occurs or redness persists.
First Aid - Ingestion	Do not induce vomiting. Wash out mouth with water. Have conscious person drink several glasses of water or milk. Never give anything by mouth to an unconscious person. Obtain medical attention immediately.
First Aid - Inhalation	Remove from exposure. Keep warm and at rest. If breathing stops or shows signs of failing, give artificial respiration. Obtain medical attention immediately.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Not combustible. Aqueous solution. Will not support combustion.
Special Hazards of Product	Not applicable
Hazardous thermal Decomposition products	Not applicable
Protective Equipment for Fire-fighters	Wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Wear appropriate protective clothing, safety glasses, boots and gloves. Wear respiratory protection. Consider the need for evacuation.
Environmental Precautions	Stop leaks if without risk. Try to prevent the material from entering sewers, basements or confined areas, dike if needed. Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.
Spillages and cleanup	Contain and absorb using earth, sand or other inert noncombustible material. Do not touch spilled material. Transfer into suitable containers for recovery or disposal. Finally flush area with plenty of water.

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7. HANDLING AND STORAGE

Handling	Adequate ventilation should be provided if there is a risk of vapour build-up. Avoid contact with eyes, skin and clothing. Emergency shower and eye wash facilities.
Storage	Store in original containers. Keep containers tightly closed. Store away from sources of heat or ignition. Storage area should be: cool, well ventilated and away from incompatible materials. Protect from extremes of cold. Do not store below 5°C (41°F). Do not cut, puncture or weld on or near to the container.
Specific Use(s)	For details of application and use refer to the relevant Product Data Sheet for this product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures	Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure. Provide exhaust ventilation or other engineering control to keep the airborne concentrations of vapour below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstations.
Hygiene Measures	Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory and at the end of day.

Ingredient name	Occupational Exposure Limits
Sodium Silicate	Not available

Personal Protective Equipment

Respiratory Protection	Respiratory protection not normally required
Hand Protection	Alkali-resistant gloves.
Eye Protection	Alkali-resistant splash goggles or face shield.
Body Protection	Wear overall or apron.
Protection During Application	During application, adequate ventilation must be provided.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Colour	Colourless to Light green
Odour	Odourless.
pH	> 12
Boiling point	The lowest known value is 99.9°C (211.8°F) (Water) Weighted average: 99.91°C (211.8°F)
Melting /Freezing point	May start to solidify at -0.1°C (31.8°F) based on data for: Water
Flash point	Not available
Auto ignition temperature	Not available
Explosive properties	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Density	1.50 to 1.60 g/cm ³ at 20°C
Solubility	Soluble in cold water, hot water.
Viscosity (1 cP = 1 mPa.s)	Not available
Evaporation rate (Butyl acetate = 1)	The highest known value is 0.36 (Water)

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions
Conditions to avoid	Protect from extremes of cold and high temperatures
Materials to avoid	Extremely reactive or incompatible with acids
Hazardous Decomposition Products	Not available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingredient Name	Test	Results	Route	Species
Sodium Silicate	LD50	2200 mg/kg	Oral	Rat
	LD50	>4640 mg/kg	Dermal	Rabbit

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11. TOXICOLOGICAL INFORMATION (Continues)

Local effects:	
Irritancy - Eyes	Hazardous in case of eye contact (irritant).
Irritancy - Skin	Harmful in case of skin contact (irritant).
Skin Sensitisation	The possibility of allergic sensitisation should be considered.
Chronic Toxicity	Repeated or prolonged exposure is not known to aggravate medical condition.
Carcinogenicity	Classified None
Mutagenic effects	No data
Reproduction toxicity	No data

12. ECOLOGICAL INFORMATION

Aquatic toxicity:

Ingredient Name	Species	Period	Result
Sodium Silicate	Daphnia (LC50)	100 hours	247 mg/l

Mobility	A major part of the product will dissolve rapidly in water.
Persistence/Degradability	No data
Bioaccumulation	No data
Ecotoxicity	No data

13. DISPOSAL

Product Disposal	Before carrying out disposal operations customers are advised to evaluate any changes to the product which may be induced by the introduction of substances and operating conditions not under control of the vendor. Dispose of product in accordance with all applicable local and national regulations.
Container Disposal	Dispose of containers in accordance with all applicable local and national regulations. Do not cut, puncture or weld on or near to the container. Empty containers may contain hazardous residues.

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14. TRANSPORT INFORMATION

Regulatory Information	UN Number	Proper Shipping Name	Class	Packing Group	Label	Additional Information
ADR/RID class	Not regulated	-	-			-
AADN Class	Not regulated	-	-			
IMDG Class	Not regulated	-	-			
IATA DGR Class	Not regulated	-	-			

15. REGULATORY INFORMATION

Hazard symbol(s)



Irritant

Risk phrases

R38: Irritating to skin.
R41: Risk of serious damage to eyes.

Safety phrases

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

Contains

Sodium Silicate CAS No.: 1344-09-8

Classification / Labelling

Classification and labelling have been performed according to EU directives 67/548/EEC, 88/379/EEC, including amendments and the intended use.

Information

Industrial applications

16. OTHER INFORMATION

Full text of R-Phrases with no. Appearing in section 2:

R38: Irritating to skin.
R36/38: Irritating to eyes and skin.
R41: Risk of serious damage to eyes.

Text of classification appearing in section 2

Xi - Irritant

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SILCHEM 2314

16. OTHER INFORMATION (Continues)

Date of issue	03/08/2009
MSDS first issued	1995
Version	04

DISCLAIMER

Notice to Reader:

"Information contained within this safety data sheet is based on the current state of knowledge and relates to such products, their intended usage and the required safety precautions. Although every effort has been made to ensure that this information is correct and gives adequate safety margins in line with current knowledge, it does not constitute a specification and no information for other purposes, particularly information regarding properties of the delivered materials, may be inferred. Determination of the technical suitability of each material and complying with any guidance relating to safe usage remain the sole responsibility of the user. Consequently, beyond any separately agreed contractual arrangements, the aforementioned manufacturer and its subsidiaries exclude any and all liability resulting from the use of the product. Unknown hazards may be inherent in all materials; therefore these materials shall be treated with caution. Although certain hazards are described herein, we are unable to guarantee that these are the only hazards."

Foseco RSA MSDS number: 0067

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SOLOSIL 433

1. PRODUCTS AND COMPANY IDENTIFICATION

Product/Trade Name	SOLOSIL 433
Product Codes	5320 - 00010 / 00020 / 00025
Manufacturer/Supplier	FOSECO South Africa (Pty) Ltd
Address	12 Bosworth Street Alrode 1450 PO Box 123850 Alrode 1451 Gauteng, South Africa
Phone Number	+27 (0) 11 903 9500
Fax Number	+27 (0) 11 908 2380
Emergency Tel	+27 (0) 11 903 9500
Material Uses	Foundry Industry. Sand binder.

2. COMPOSITION /INFORMATION ON INGREDIENTS

Substance / Preparation: Preparation

Chemical name	CAS No.	%	EC No.	Classification
Sodium Silicate	1344-09-8	> 50	215-687-4	Xi; R36/38, 41
Resorcinol	108-46-3	< 0.10	203-585-2	Xn; R22 Xi; R36/38

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments. Occupational Exposure Limit(s), if available, are listed in Section 8
See Section 16 for the full text of the R Phrases declared above

3. HAZARD IDENTIFICATION

Main Hazards	Hazardous in case of eye contact (irritant).
Health Effects - Eyes	Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering and itching. Serious damage may result if treatment is delayed.
Health Effects - Skin	Harmful in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening or occasionally blistering.
Health Effects - Ingestion	Swallowing may have the following effects: Irritation of the mouth, throat and digestive tract.
Health Effects - Inhalation	Inhalation of spray mist may produce irritation of respiratory tract, characterized by coughing, choking or shortness of breath.
Aggravating conditions	Repeated or prolonged exposure is not known to aggravate medical condition.

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SOLOSIL 433

4. FIRST AID MEASURES

First Aid - Eyes	Check for and remove any contact lenses. Immediately flood eye(s) with plenty of water for at least 15 minutes, holding the eye(s) open. Cold water may be used. Obtain medical attention immediately.
First Aid - Skin	Immediately wash skin thoroughly with soap and water. Remove contaminated clothing and shoes as washing proceeds. Continue washing for at least 15 minutes. Obtain medical attention if blistering occurs or redness persists.
First Aid - Ingestion	Do not induce vomiting. Wash out mouth with water. Have conscious person drink several glasses of water or milk. Never give anything by mouth to an unconscious person. Obtain medical attention immediately.
First Aid - Inhalation	Remove from exposure. Keep warm and at rest. If breathing stops or shows signs of failing, give artificial respiration. Obtain medical attention immediately.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Not combustible. Aqueous solution. Will not support combustion.
Special Hazards of Product	Not applicable
Hazardous thermal Decomposition products	Not applicable
Protective Equipment for Fire-fighters	Wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Wear appropriate protective clothing, safety glasses, boots and gloves. Wear respiratory protection. Consider the need for evacuation.
Environmental Precautions	Stop leaks if without risk. Try to prevent the material from entering sewers, basements or confined areas, dike if needed. Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.
Spillages and cleanup	Contain and absorb using earth, sand or other inert noncombustible material. Do not touch spilled material. Transfer into suitable containers for recovery or disposal. Finally flush area with plenty of water.

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SOLOSIL 433

7. HANDLING AND STORAGE

Handling	Adequate ventilation should be provided if there is a risk of vapour build-up. Avoid contact with eyes, skin and clothing. Emergency shower and eye wash facilities.
Storage	Store in original containers. Keep containers tightly closed. Store away from sources of heat or ignition. Storage area should be: cool, well ventilated and away from incompatible materials. Protect from extremes of cold. Do not store below 5°C (41°F). Do not cut, puncture or weld on or near to the container.
Specific Use(s)	For details of application and use refer to the relevant Product Data Sheet for this product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures	Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure. Provide exhaust ventilation or other engineering control to keep the airborne concentrations of vapour below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstations.
Hygiene Measures	Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory and at the end of day.

Ingredient name	Occupational Exposure Limits
Sodium Silicate	Not available
Resorcinol	EH40-OES (United Kingdom (UK), 2000). TWA: 2 mg/m ³ STEL: 20 ppm TWA: 46 mg/m ³ TWA: 10 ppm

Personal Protective Equipment

Respiratory Protection	Respiratory protection not normally required
Hand Protection	Alkali-resistant gloves.
Eye Protection	Alkali-resistant splash goggles or face shield.
Body Protection	Wear overall or apron.
Protection During Application	During application, adequate ventilation must be provided.

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SOLOSIL 433

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Colour	Brownish-red. (Dark.)
Odour	Odourless.
pH	Not available
Boiling point	The lowest known value is 99.9°C (211.8°F) (Water) Weighted average: 99.91°C (211.8°F)
Melting /Freezing point	May start to solidify at -0.1°C (31.8°F) based on data for: Water
Flash point	Not available
Auto ignition temperature	Not available
Explosive properties	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Density	1.45 to 1.46 g/cm ³ at 20°C
Solubility	Soluble in cold water, hot water.
Viscosity (1 cP = 1 mPa.s)	Dynamic: 350 to 425 cP
Evaporation rate (Butyl acetate = 1)	The highest known value is 0.36 (Water)

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions
Conditions to avoid	Protect from extremes of cold and high temperatures
Materials to avoid	Extremely reactive or incompatible with acids
Hazardous Decomposition Products	Not available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingredient Name	Test	Results	Route	Species
Sodium Silicate	LD50	2200 mg/kg	Oral	Rat
	LD50	>4640 mg/kg	Dermal	Rabbit
Resorcinol	LD50	301 mg/kg	Oral	Rat
	LDLo	500 mg/kg	Oral	Rabbit

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SOLOSIL 433

11. TOXICOLOGICAL INFORMATION (Continues)

Local effects:	
Irritancy - Eyes	Hazardous in case of eye contact (irritant).
Irritancy - Skin	Harmful in case of skin contact (irritant).
Skin Sensitisation	The possibility of allergic sensitisation should be considered.
Chronic Toxicity	Repeated or prolonged exposure is not known to aggravate medical condition.
Carcinogenicity	Classified None
Mutagenic effects	No data
Reproduction toxicity	No data

12. ECOLOGICAL INFORMATION

Aquatic toxicity:

Ingredient Name	Species	Period	Result
Sodium Silicate	Daphnia (LC50)	100 hours	247 mg/l
Resorcinol	Fish (LC50)	96 hours	53.4 ppm

Mobility	A major part of the product will dissolve rapidly in water.
Persistence/Degradability	No data
Bioaccumulation	No data
Ecotoxicity	No data

13. DISPOSAL

Product Disposal	Before carrying out disposal operations customers are advised to evaluate any changes to the product which may be induced by the introduction of substances and operating conditions not under control of the vendor. Dispose of product in accordance with all applicable local and national regulations.
Container Disposal	Dispose of containers in accordance with all applicable local and national regulations. Do not cut, puncture or weld on or near to the container. Empty containers may contain hazardous residues.

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14. TRANSPORT INFORMATION

Regulatory Information	UN Number	Proper Shipping Name	Class	Packing Group	Label	Additional Information
ADR/RID class	Not regulated	-	-			-
AADN Class	Not regulated	-	-			
IMDG Class	Not regulated	-	-			
IATA DGR Class	Not regulated	-	-			

15. REGULATORY INFORMATION

Hazard symbol(s)



Irritant

Risk phrases

R38: Irritating to skin.
 R41: Risk of serious damage to eyes.

Safety phrases

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

Contains

Sodium Silicate CAS No.: 1344-09-8

Classification / Labelling

Classification and labelling have been performed according to EU directives 67/548/EEC, 88/379/EEC, including amendments and the intended use.

Information

Industrial applications

16. OTHER INFORMATION

Full text of R-Phrases with no. Appearing in section 2:

R22: Harmful if swallowed.
 R38: Irritating to skin.
 R36/38: Irritating to eyes and skin.
 R41: Risk of serious damage to eyes.

Text of classification appearing in section 2

Xi - Irritant
 Xn -Harmful

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SOLOSIL 433

16. OTHER INFORMATION (Continues)

Date of issue	03/08/2009
MSDS first issued	1995
Version	03

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Foseco RSA MSDS number: 0070

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