


SAFETY DATA SHEET

Microsilica

Section 1: Identification of the Substance and Supplier

Product name	Microsilica 600
Other names	Microsilica, amorphous silica ,amorphous silica dioxide
Recommended use	Natural pozzolan for high performance concrete.
Company details	Golden Bay Cement Site Address: Portland Road, Whangarei 0178 Postal Address: PO Box 1143, Whangarei 0140 Phone: 09 432 2656 Hours 7.30am – 4 pm, Mon – Fri
Emergency telephone	0800 764 766 (0800 POISON) 24 hours human health.
Date of preparation	15 August 2014

Section 2: Hazards Identification

Hazard classifications	Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
HSNO approval number	Construction Products (Toxic [6.7A]) Group Standard 2006.
HSNO approval number	HSR002545
Hazard classifications	6.1E, 6.7A, 6.9, 6.9A
GHS Pictograms	
Signal word	DANGER
Hazard statements	H333 May be harmful if inhaled. H335 May cause respiratory irritation. H350 May cause cancer. H372 May cause damage to organs.
Prevention statements	P103 Read label 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. P264 Wash hands and exposed skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in well-ventilated area. P281 Use personal protective equipment as required.

SAFETY DATA SHEET

Microsilica

Response statements	<p>P101 If medical advice needed, have product container or label at hand.</p> <p>P308 + P313 If exposed or concerned: Get medical advice.</p> <p>P314 Get medical advice if you feel unwell.</p> <p>P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.</p> <p>P312 Call a POISON CENTRE or doctor if you feel unwell.</p>
Storage statements	<p>P403 + P233 Store in well-ventilated space. Keep container tightly closed.</p>
Disposal statements	<p>P405 Store locked up.</p> <p>P501 Dispose of product and packaging in accordance with local regulations.</p>

Section 3: Composition/Information on Ingredients

Chemical name	CAS number	Concentration % w/w
Amorphous silica	7631-86-9	90
contains < 20% crystalline quartz and cristobalite	14808-60-7 14464-46-1	
Aluminium oxide (Al ₂ O ₃)	1344-28-1	< 5
Titanium dioxide (TiO ₂)	13463-67-7	< 1
Potassium oxide (K ₂ O) and other metals salts and trace elements	12136-45-7	< 1

Note: The product contains naturally occurring materials that may contain trace amounts of potentially harmful chemicals.

SAFETY DATA SHEET

Microsilica

Section 4: First Aid Measures

Advice	If medical advice is needed, have the product container or label at hand.
Ingestion	Contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor if exposed or concerned or feeling unwell.
Inhalation	Rinse mouth. Do NOT induce vomiting. Immediately call the Poisons Centre or a doctor for advice.
Eyes	Remove to fresh air. If breathing is difficult, keep person at rest in a position comfortable for breathing. If experiencing respiratory symptoms, e.g. coughing does not subside, or if feeling unwell, immediately call the Poisons Centre or a doctor. If breathing is difficult, administer oxygen and get immediate medical assistance.
Skin	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so after the first 5 minutes. Continue rinsing for at least 15 minutes ensuring all particles are removed from under eyelids. Immediately call the Poisons Centre or a doctor for advice if irritation persists. Remove contaminated clothing. Flush skin with plenty of water followed by washing with soap

SAFETY DATA SHEET

Microsilica

Precautions for safe handling	Obtain special instructions and read Safety Data Sheet before use. Do not handle until all safety precautions have been read and understood. Keep containers sealed during transfer, transport and when not in use. Do not breathe dust. Wash hands thoroughly after handling. Use only outdoors and in a well-ventilated area.
Regulatory requirements	Approved Handler and Tracking not required. Emergency response plans are required where quantities greater than 1,000kg are present.
Handling practices	Avoid contact with eyes; wear eye protection. Keep packaging adequately sealed during material transfer, transport, or when not in use. Use safe work practices to avoid eye contact and inhalation of particles/dust. Observe good personal hygiene, including washing hands before rest or meal breaks or when finished using product. Prohibit eating, drinking and smoking in contaminated areas (e.g. if packaging is damaged). Wash exposed skin thoroughly after handling.
Conditions for safe storage	Keep out of reach of children. Ensure packaging is labelled, protected from physical damage and sealed when not in use. Prevent product from being exposed to high humidity and moisture.
Store site requirements	Store locked up in a cool, dry, well-ventilated area, away direct heat or direct sunlight. Keep packaging sealed when not in use.

Section 8: Exposure Control/Personal Protection

Workplace exposure standards	Effective from February 2013 Silica – amorphous Crystalline silica (quartz) as respirable dust Cristobalite silica (quartz) as respirable dust Aluminium oxide mg/m ³	WES-TWA 10 mg/m ³ 0.2 mg/m ³ 0.1 mg/m ³ 10
Application in the workplace	Use with adequate natural ventilation. Where dust inhalation hazard exists, mechanical extraction ventilation is required to keep concentrations of components below the WES concentrations.	
Exposure standards outside the workplace	No TEL or EEL is set for this substance.	
Personal protection	Wear dust-proof goggles. When high dust levels exist, wear a class P3 (particulate) respirator or a powered air purifying respirator (PAPR) with class P3 (particulate) filter. Where an inhalation risk exists, wear a Class P2 approved dust mask or a Class P1 (particulate) respirator as appropriate to the exposure circumstances. When using large quantities or where heavy contamination is likely, wear overalls. Contaminated work clothing should not be allowed out of the workplace	
Engineering controls	Where possible ventilation should be used (with a suitable dust trap or filter) to maintain the environment below the Workplace Exposure Standards.	

Section 9: Physical and Chemical Properties

SAFETY DATA SHEET

Microsilica

Appearance	Off white, very fine powder.
pH	Not applicable
Melting Point	1,700°C (transformation may occur at > 500 OC)
Bulk Density	Not known.
Specific Gravity	2.32
Vapour Pressure	Inert
Solubility in water	Insoluble
Respirable dust fraction	~ 60% (dust fraction <7 micron)

Section 10: Stability and Reactivity

Stability of the substance	Stable.
Conditions to avoid	None specified.
Material to avoid	Avoid contact with acids, especially hydrofluoric acid.
Hazardous decomposition products	May evolve toxic gases if heated to decomposition.

SAFETY DATA SHEET

Microsilica

Section 11: Toxicological Information

Summary	Avoid eye contact or inhalation of dust. Crystalline silica can cause silicosis (lung disease) when inhaled from chronic over exposure. Silica is classified as carcinogenic to humans.
Ingestion	Not expected to have any adverse effects. Due to product form, ingestion is not considered a likely exposure route.
Inhalation	Respiratory irritant. Over-exposure may result in severe mucous membrane irritation & bronchitis. Pre-existing respiratory conditions may be aggravated. Chronic inhalation exposure to free crystalline silica may cause delayed lung injury including silicosis, a serious and potentially fatal disease, and cause or aggravate other lung conditions or diseases.
Skin	Not expected to have any adverse irritation or toxic effects from skin contact.
Eye	Irritation possible with contact with airborne powder/ dust.

Section 12: Environmental Information

General information	The product is not classified as being ecotoxic.
Aquatic	Volatilisation to the atmosphere and bioconcentration in fish and other aquatic organisms are not expected to occur. If released into the atmosphere, the particulates would be deposited by rainfall or drop out from the atmosphere.
Soil	Not classified for soil ecotoxicity under the Hazardous Substances and New Organisms Act
Terrestrial vertebrates	Not classified as toxic to terrestrial vertebrates under the Hazardous Substances and New Organisms Act.
Terrestrial invertebrates	Not classified as toxic to terrestrial invertebrates under the Hazardous Substances and New Organisms Act.
EEL	No EEL has been set for this substance.

Section 13: Disposal Considerations

Disposal information	This product is inert. Dispose of in accordance with any local regulations. Dispose of empty packaging by incineration or to landfill according to requirements of local regulations.
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SAFETY DATA SHEET

Microsilica

Section 14: Transport Information

Relevant requirements	Not regulated for transport purposes. Consult the Land Transport Rule: Dangerous Goods 2005, and NZS 5433:2012 Transport of Dangerous Goods on Land for information.
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Section 15: Regulatory Information

Regulatory status	HSNO Approval Code: HSR002545 - Construction Products (Toxic [6.7A]) Group Standard 2006. For the Controls refer to the Group Standard available on www.epa.govt.nz .
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Section 16: Other Information

Date of issue	15 August 2014	
Reasons for issue	Review of product composition and hazardous classifications	
Replaces	Safety Data Sheet dated xxxxxxx	
Abbreviations	CAS	Chemical Abstract Service number - used to uniquely identify chemical compounds.
	CCID	Chemical Classification and Information Database
	EPA	Environmental Protection Authority
	HSDB	Hazardous Substances Databank (US National Library of Medicine)
	IARC	International Agency for Research on Cancer.
	IUCLID	International Uniform Chemical Information Database
	mg/m ³	milligrams per cubic metre.
	ppm	parts per million.
	pH	relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly
		alkaline.
	TEL	Tolerable Exposure limit
	TWA	Time Weighted Average.
	WES	Workplace Exposure Standard
Additional information	This product is classified by reference to the Hazardous Substances (Classification) Regulations 2001 using the product specification and component information available for various databases, e.g. New Zealand EPA CCID, HSDB, IUCLID.	

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End of Safety Data Sheet