

MATERIAL SAFETY DATA SHEET

AQUA CRYSTAL CLEAN

Not classified as hazardous according to criteria of NOHSC

IDENTIFICATION

Product Code:	Glass	Trade Name:	Glass
Manufacturers Code:	Various	Uses:	Various Uses
	3mm - 1mm	CAS Number:	Nil Assigned
	1.5mm - 0.75mm	Hazchem Code:	Nil Assigned
	1.0mm - 0.3mm	Dangerous Goods Code:	Nil Assigned
	0.75mm - 0.3mm	UN Number:	Nil Assigned
	0.5mm - 0.3mm	Subsidiary Risk:	Nil Assigned
	0.3mm - 0.1mm	Poisons Schedule:	Nil Assigned

Application: Abrasive blasting

PHYSICAL DESCRIPTION

Appearance:	Crushed glass - flint (colourless, blue, mixed amber, mixed green. Odourless, inorganic solid, ground, and graded glass.
Boiling Point:	Not Applicable
Flash Point [C]:	Non-Flammable
Flammability Limits [%]:	Not Applicable
Specific Gravity:	2.5 approx [water = 1]
Melting Point:	800
Vapour Pressure:	Not Applicable
Solubility In Water:	Insoluble

INGREDIENTS

Soda-lime-silica glass, with the following chemical composition:

Ingredients	%
Na O + K O = Li O	12 - 15%
CaO + MgO	10 - 13%
Al O	1 - 2%
Other Oxides [expect SiO]	0 - 1%
SiO [bound]	Balanced

Contains no free silica.

HEALTH HAZARD

The glass aggregate or dust particles in this product are chemically inert and may be regarded as having no specific toxicological effect. In high concentration, glass particles may cause some microscopic mechanical damage.

Acute:

Eye: Physical irritant 'foreign body', as are all commercial/domestic dusts Causing temporary irritation or inflammation.

Skin: Healthy skin is not susceptible to irritant effects from inert grit; hot sweaty conditions coupled with rubbing may produce skin irritancy.

Inhalation: No reports of adverse effects in humans. No significant gross changes detected in laboratory animals. Particles 10 µm are relatively soluble. Larger particles limited to entry into mouth, nose, throat and upper airways.

Ingestion: Simple physical irritant

Chronic:

There is no data available in the literature on glass particles to indicate the occurrence of any adverse health effects in long-term exposure to glass particles.

FIRST AID

Eye: Irrigate/flush copious quantities of water [ensure eyelids remain open]. Do not rub or scratch. If symptoms persist, seek medical advice.

Skin: Wash skin under running water. Treat grazes/cuts with antiseptic and cover.

Inhalation: Generated dust may produce temporary upper respiratory irritation - remove to fresh air [blow nose].

Ingestion: No action considered necessary. If pre-existing gastro-intestinal or medical condition exists, obtain medical advice.

ADVICE TO DOCTOR

Mechanical/physical irritant with no expected resultant health effects. Treat symptomatically to remove the source of irritation.

PRECAUTIONS FOR USE

Exposure Standards:

Worksafe Australia terms these dusts "Dusts not otherwise classified": [containing no asbestos and less than 1% crystalline silica]. The Exposure Standard [Time Weighted Average] is 10 mg/m, measured as respirable dust.

The American Conference of Government Industrial Hygienists similarly determined a Threshold Limit Value for "Particulates not otherwise classified" and established the same exposure standard.

While glass dust is not recognised as causing serious pathological conditions, the concentration of exposure should be maintained as low as practicable.

Engineering Controls:

Avoid generating airborne particles by vessel containment/process enclosure controls. For controlling safety and environmental issues during **please refer** to the relevant legislative guide/standards in state or country.

Personal Protection:

For general handling, provide goggles, dust mask and leather and/or fabric gloves. Plastic apron, sleeves and boots may be used. For blasting, **please refer** to the relevant legislative guide/standard in your state or country.

SAFETY HANDLING INFORMATION

Flammability:	Not flammable.
Transport:	Not classified as hazardous material - no specific transport considerations entailed.
Storage:	No special storage requirements necessary.
Fire/Explosion Hazard:	None

SPILLS AND DISPOSAL

Sweep using a dust suppressant or vacuum. Do not use compressed air. Wear goggles, dust mask and gloves. Normally suitable for disposal at approved land waste sites - Refer to State Land Management Authority.

OTHER INFORMATION

Negligible leachate from the glass particles as determined by the Toxicity Characteristics Leaching Procedures (TLCP) Test.

Radioactivity:

Radiation levels are very low as approved by Queensland Health Department in accordance with 'Health (Radioactive Substances) Regulation 1994'.

CONTACT POINT

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APPENDIX

Aerco. [1998] Paper: *Testing and certification of industrial abrasives manufactured from recycled glass*, prepared for Clean Washington Centre by AERCO Inc., P.S., Seattle.

Amcosh. [1996]. Product Information, *Specification Sheet and Material Safety Data Sheet*, Prepared for Visy by Amcosh OH Services, Laverton North.

Bisby, J.A. [1997]. Paper: *Health risk appraisal of Visy Abrasives*, prepared for Visy by Occupational medicine & Toxicology, Melbourne.

Gross M.D. Westrick M.L. & McNerney, J.M. [1960]. *Glass Dust - A Study of its Biology Effects*, *AMA Archives of Industrial Health*, V.21 10-23

KTA-Tator. [1998]. Paper: *Evaluation of substitute materials for silica sand in abrasive*, prepared for National Institute for OS&H by KTA-Tator, Inc., Pittsburgh.

Lara, Y. [1996]. Paper: *Toxicity of Amorphous Glass Dust*, AMCOSH, Prepared Laverton North.

Microglass, [1996]. Production Information: *Specification sheet and Material Safety Data Sheet*, prepared for Visy by Microglass Technology, Kenmore.

RMG. [1999]. Product Information: *Ordering, Glasses and Material Safety Data Sheet*, prepared for Recovered Material Foundation by Vision Today Resource Tomorrow Christchurch.

Szymczykiwicz, K. [1964]. *Effect on structure of Glass Dust on Its Action On Lungs of Rats*, 14th International Congress of Occupational Health, 651-653.