



1300 129 990

Safety Data Sheet : Glass Bead

Issue Date: 1st of December 2014

Section 1 - IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: SPHERICAL GLASS BEADS (100µm–5mm)
Other Means of Identification: Glass Microspheres: Grades 100µm to 5mm
Glass Microspheres: Grades 100µm to 5mm

Recommended Use of the Chemical and Restriction on Use:
Abrasive applications – Road marking and blasting media for wet or dry blasting.
Details of Manufacturer or Importer:

Abrasive Media Supplies
Unit 6 12 Daintree Drive
Redland Bay QLD 4165

Phone Number: 1300 129 990

Emergency telephone number: 0411 591 001

Section 2 – HAZARDOUS IDENTIFICATION

Emergency Overview: Large particle size white powder from 100µm to 5mm spheres (smooth spherical shape) with no odour. Not combustible. Fine dusts formed in use, can cause physical irritation to eyes and respiratory system and may cause dry skin and mild irritation.

Dangerous Goods Information: Not a Dangerous Good according to the ADG Code.

Hazardous Substances Information: Not a Hazardous Substance according to the Criteria of the Australian NOHSC.

Poison Schedule Not a Scheduled Poison

Acute Health Effects

Swallowed No harmful effects expected.
Large quantities swallowed may cause physical blockage of the digestive tract.

Eye For glass beads that are small enough to enter the eye: may cause physical irritation to eyes and may cause redness and tearing.

Skin No skin hazard for the as supplied spheres.
Fine dusts formed when used as blasting media, may cause dry skin and mild skin irritation.

Inhaled No inhalation hazard for the as supplied spheres.

Section 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Identity of Ingredients	CAS No.	Prop'n	Risk Phrases as 100%
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Soda-Lime Glass Oxide (no added heavy metal oxides)			
65997-17-3	>99.5%	-	

Note: Contains no free crystalline silica. All components are amorphous (non crystalline).

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Section 4 – FIRST AID MEASURES

Skin Contact: Wash contaminated skin with plenty of water. Get medical attention if irritation effects develop or persists.

Eye Contact: Immediately rinse with plenty of water for at least 15 minutes. Eyelids to be held open. Obtain medical attention if physical irritation persists.

Ingestion: Immediately rinse mouth with water. Repeat until product is thoroughly removed. Give water to drink. Get medical attention if effects develop or persist.

Inhaled: Remove victim to fresh air. Get medical attention if health effects develop or persist.

Inhalation: Dust may cause respiratory irritation.

First Aid Facilities: Safety shower and eye wash facilities nearby.

Advice to Doctor: Treat symptomatically as for physical irritation. Chronic lung conditions may be aggravated by exposure to high dust concentrations when used as blasting media.

Section 5 – FIRE FIGHTING MEASURES

Fire or Explosion Hazard:

Extinguishing Media: Combustion

Product Hazards

Special Protective Precautions & Equipment

Solid, non combustible glass bead. Electrostatic discharges may occur when pumping / transferring / pouring the dry powder.

Any extinguishing media suitable for the surrounding area. No hazardous

combustion products.

Eye and Respiratory protection where fine dust clouds are formed when used as a blasting media.

No other special precautions required.

Section 6 – ACCIDENTAL RELEASE MEASURES

Emergency Procedures: No special requirements.

Environmental Precautions:

Place spillages in clean labeled containers for reuse, recycling or disposal. See *Section 13* for Disposal Considerations

Special Issues:

Spilled material may be a slipping hazard.

Section 7 – HANDLING AND STORAGE

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust. Good housekeeping should

Keep container closed. Use only in well ventilated areas. Promptly clean up any spills or residues

Conditions for Safe Storage:

Keep containers closed at all times. Store in original containers or in clean metal or plastic containers and keep dry.

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Section 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

National Exposure Standards

Design and Engineering Control Measures

Personal Protective Equipment

No exposure standards have been established for the Soda-Lime Glass Oxide ingredient in this product by NOHSC (Worksafe Australia).

SUBSTANCE	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Nuisance Dust, Inspirable	-	10	-	-

This standard is the manufacturer's recommendation for good practice when these beads are used as blasting media where fine dusts are formed.

All atmospheric contamination should be minimised.

Use in well ventilated area. Avoid generating and inhaling dusts. When transferring the product consider the potential for electrostatic charge build up and the need to dissipate.

For the as supplied 100µm to 5mm glass beads: No special requirements.

For protection against dusts formed when used as a blasting media:

Avoid skin and eye contact. Avoid inhaling the dust. Follow normal industrial safety practices. The use of protective clothing and equipment depends on the degree and nature of exposure. The following personal protective equipment should be used:

- (1) Safety glasses, goggles or faceshield as appropriate.
- (2) Plastic, Rubber, Leather or Cotton gloves as appropriate.
- (3) Safety boots.
- (4) Overalls, splash apron or similar protective apparel.
- (5) Respiratory protection to AS1715/1716 when dusts levels are present. Wash contaminated

clothing and protective equipment before storing and re-using. The use of barrier cream is recommended to minimise the skin drying effects of this material.

Where applicable refer to the following Standards: AS/NZS1337 Eye protectors for industrial applications

AS1715 Selection, use & maintenance of respiratory protective devices AS1716 Respiratory protective devices

AS2161 Industrial safety gloves and mittens AS2210 Safety footwear

AS3765 Clothing for protection against hazardous chemicals.

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Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odour:	Large particle size white powder, from 100µm to 5mm smooth spheres. with no odour
Chemical Formula:	Na₂SiO₃ / Na ₂ O / CaO (fused ingredients general formulae, no added heavy metal oxides)
Melting point/Boiling Point	MP: >600°C (softens) BP: Not determined
Decomposition Temperature:	Not determined
Vapour Pressure:	Not determined
Relative Vapour Density:	Not applicable
Specific Gravity or Density:	2.5 g/cm ³
Bulk Density:	500-1000 kg/m ³ (with narrow ranges for each microsphere size) Bulk density does vary with size.
Solubility:	Rate of solubility is dependant on environment. Presences of alkali accelerate dissolution particularly above a pH of 9
pH:	7 to 9 (of a 5% slurry when left for several hours - estimated)
Percent Volatile:	<0.5%
Octanol/Water Partition:	Not applicable (not soluble in either fraction)
Corrosiveness:	No corrosive effects known
Flammable Properties:	Non combustible solid
Flashpoint:	Not applicable
Autoignition Temp:	Not applicable

Section 10 – STABILITY AND REACTIVITY

Possibility of Hazardous Reactions: None known.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Dust cloud fomration.

Incompatible Materials: None in particular. Strong bases may eventually dissolve the glass microspheres. Hydrofluoric Acid solutions will readily dissolve these glass microspheres.

Hazardous Decomposition Products: No hazardous decomposition products known.

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Section 11 – TOXICOLOGICAL INFORMATION

Toxicity:

Toxicity Data: **Acute Oral Toxicity** LD50 (rat): >5000 mg/kg (estimated)

Eye Irritation: No eye irritation.

Skin Irritation: No skin irritation.

Oral Toxicity: When a similar product was tested for acute oral toxicity to rats at a dosage level of 500 mg/kg body weight, all animals survived and gained weight.

Respiratory Toxicity: No Inspirable/Respirable Fraction (as supplied spheres)

For Dusts Formed when used as a Blasting Media: When a similar product was tested for respiratory toxicity in a 6-month intratracheal study in rats, no mortalities, untoward reactions, or observations correlated with exposure to the product. Minimal multifocal inflammation of the lung occurred in 90% of males and 80% of females. No appreciable increase in fibrous tissue was present in these lesions.

Human Experience: 30 years experience handling the product in a manufacturing facility have not lead to any reported skin, eye or respiratory irritation effects.

Skin Irritation: Not a Skin Irritant.

Carcinogenic Effects: Not listed as a Carcinogen by the WHO IARC, USA NTP or USA OSHA.

Note: Contains no free crystalline silica. All components are amorphous (non crystalline).

Section 12 – ECOLOGICAL INFORMATION

General: Avoid contaminating waterways. Not expected to be an environmental hazard provided glass oxides do not contain added heavy metals. May physically block systems.

Ecotoxicity Data: No data available. Not expected to be harmful to the environment.

Mobility: Sinks in water. Immobile in soil.

Section 13 – DISPOSAL CONSIDERATIONS

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

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Section 14 – TRANSPORT INFORMATION

Dangerous Goods by Road & Rail.

SEA: Not a Dangerous Good according to the International Maritime Dangerous Goods Code (IMDG Code).

AIR: Not a Dangerous Good according to the International Air Transport Association (IATA) Dangerous Goods Regulations.

Section 15 – REGULATORY INFORMATION

Labelling: Not a Workplace Hazardous Not
a Scheduled Poison Not a
Dangerous Good

Packaging Any type. However, consider the potential for electrostatic charge dissipation.

Australian Chemical Control Schemes

NICNAS – AICS *All ingredients are on the Australian Inventory of Chemical Substances. Aust.*

Pesticides & Veterinary Medicine Authority - Ag & Vet Chemicals *Not applicable*

Therapeutic Goods Administration - Medicines *Not applicable*

Food Standards Australian & New Zealand - Food *Not applicable*

Chemicals Weapons Act

Not applicable Ozone Depleting Substance Act

Not applicable

Section 16 – OTHER INFORMATION

Abbreviations and acronyms:

Acronyms Used

ADG Code Chinese Dangerous Goods Code for the Transport of Dangerous Goods by Road & Rail

NOHSC Chinese National Occupational Health and Safety Commission
Workplace Hazardous Substance

CAS No. Chemical Abstracts Service Registry Number UN No.
United Nations Dangerous Goods Number

MSDS Code Used This MSDS has been prepared according to the National Code of Practice for the Preparation of Material Safety Data Sheets [NOHSC:2011(2003)]

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016"

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