



SAFETY DATA SHEET

SPHERICAL GLASS BEADS (75µm–5mm)



Not a Hazardous Chemical according to the Australian WHS
Not a Dangerous Good according to the ADG Code.
Not a Hazardous Chemical according to the GHS Classification

Section 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT IDENTIFIER & IDENTITY FOR THE CHEMICAL

Product Identifier GLASS BEADS (75µm–5mm)

Other Means of Glass Microspheres: Grades 75µm to 5mm
Identification Ballotini beads: Grades 75µm to 5mm
 Syntech Soft Media®

Trade Names:

Potters Highway Safety Spheres (75µm to 5mm)
Ballontini Impact Beads (75µm to 5mm)

Manufacturer:

Potters Industries
Potters Industries

Recommended Use and Restrictions on Use

Road marking and blasting media for wet or dry blasting.

Avoid blasting in combustible environments as blasting can result in the generation of heat, sparks and static electricity discharge

SUPPLIER DETAILS

Company Name **Potters Industries Pty. Ltd.**

Address **HEAD OFFICE:**
100 - 102 Boundary Road
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VICTORIA 3020
Tel: (03) 8325 6777
Fax: (03) 9315 1601

Emergency Telephone 1800 240 779
Australia :

Emergency Telephone : +(64)-98010034 (Chemtrec)
New Zealand

Section 2. HAZARD IDENTIFICATION

Chemical Hazard Classification	GHS Not classified as dangerous for use/supply EC Not classified as dangerous for use/supply Not Dangerous Goods according to the ADG Code, IMDG Code, IATA Regulations. Not a Scheduled Poison.
Hazard Summary	Dust may cause irritation. Spilled product is slippery
Emergency Overview:	Large particle size white powder from 75µm to 5mm spheres (smooth spherical shape) with no odour. Not combustible. Fine dusts formed in use may cause physical irritation to eyes and respiratory system and may cause dry skin and mild irritation.
Labelling Elements	No pictogram required
Signal Wording	None applicable
Hazard Statements	None applicable
Precautionary Statements P261 P281 P304 + P340	Avoid breathing dust Use personal protective equipment as required IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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. Fine dusts formed when used as blasting media, may cause mild respiratory irritation, and may cause sneezing and dryness of the mucous membranes.
Chronic Health Effects	
All Routes	No chronic skin, eye, or respiratory hazards for the as supplied spheres. For Chronic exposure to the fine dusts formed when used as blasting media see under Acute Effects.
Physical Hazards	Spilled material is very slippery Abrasive blasting is major noise hazard and can result in the generation of heat, sparks and static electricity discharge.

Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity of Ingredients		CAS No.	Prop'n	Hazards as 100%
Ingredients	%W/W	CAS No	EINICS No. REACH Reg.	Hazard Symbols & Hazard Statements
Soda lime glass; glass oxide	100	65997-17-3	2660460	None applicable

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

Section 4. FIRST AID MEASURES

Swallowed	Immediately rinse mouth with water. Repeat until product is thoroughly removed. Give water to drink. Do not induce vomiting. Get medical attention if effects develop or persist.
Eye	Immediately rinse with plenty of water for at least 15minutes. Eyelids to be held open. Obtain medical attention if physical irritation persists.
Skin	Wash contaminated skin with plenty of water. Get medical attention if irritation effects develop or persist.
Inhaled	Dust may cause irritation; remove victim to fresh air. Get medical attention if health effects develop or persist.
First-Aid Facilities	Safety shower and eye wash facilities nearby.
Medical Attention and Special Treatment	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

Extinguishing Media	Any extinguishing media suitable for the surrounding area..
Specific Hazards:	Solid, non-combustible glass bead. Electrostatic discharges may occur when pumping / transferring / pouring the dry powder.
Combustion Product Hazards	Non combustible.
Special Protective Equipment and Precautions for Fire Fighters	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

Personal Precautions	Eye and Respiratory protection where fine dust clouds are formed <i>Refer Section 8 Exposure Controls and Personal Protection</i>
Emergency Procedures	No special requirements
Environmental Precautions	No special requirements.
Methods and Materials for Containment & Clean Up	Sweep or preferably vacuum up and collect into clearly labelled clean containers for recovery or disposal. No absorbent is required <i>Refer Section 13 for Disposal Considerations</i>
Special Issues	Spilled material presents a slipping hazard.

Section 7 - HANDLING and STORAGE

Precautions for Safe Handling	Keep container closed. Use only in well ventilated areas. Promptly clean up any spills or residues. Do not eat, drink or smoke in the workplace.
Precautions for Safe Handling	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.
Storage Incompatibilities	None identified.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards No exposure standards have been established for the Soda-Lime Glass Oxide ingredient in this product by Safe Work Australia.

SUBSTANCE	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Nuisance Dust, Inspirable	-	10	-	-
Glass oxide, glass	No Occupational Exposure Limit assigned 15mg/m ³ total dust; 5mg/m ³ respirable			

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.

Biological Monitoring None applicable

Design and Engineering Control Measures 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.

Personal Protective Equipment (PPE) For the as supplied 75µm to 5mm glass beads: No special requirements have been identified. 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.

Do not eat and drink in the workplace

Where applicable refer to the following Standards:
 AS/NZS1337 Eye protectors for industrial applications
 AS/NZS1715 Selection, use & maintenance of respiratory protective devices
 AS/NZS 1716 Respiratory protective devices
 AS/NZS 2161 Industrial safety gloves and mittens
 AS/NZS 2210 Safety footwear
 AS/NZS 3765 Clothing for protection against hazardous chemicals

Section 9 - PHYSICAL and CHEMICAL PROPERTIES

Appearance	Large particle size white powder, from 75µm to 5mm smooth Spheres
Shape	
Odour	No odour.
Chemical Formula	Na_2SiO_3 / Na_2O / CaO fused ingredients general formulae. No added heavy metal oxides
pH	Not applicable
Melting Point	Approximately 730°C
Freezing Point	Not determined
Boiling Point	Not determined
Flash Point	Not combustible
Evaporation Rate	Solid glass does not evaporate
Flammability	Not combustible
Explosive Limits	Non explosive however dust clouds should be avoided to mitigate potential for dust cloud explosions
Vapour Pressure	Not determined
Relative Vapour Density	Not applicable
Specific Gravity or Density	2.5 g/cm ³
Bulk Density	1000-1800 kg/m ³ (with narrow ranges for each microsphere size) Bulk density does vary with size.
Solubility	Rate of solubility is dependent on environment. Presences of alkali accelerate dissolution particularly above a pH of 9.
Octanol/Water Partition Co-efficient	Not applicable (not soluble in either fraction)
Auto-ignition temperature	Non combustible.
Decomposition Temperature	Temperature will not result in decomposition
Viscosity	Not applicable to solid glass beads
Specific Heat Value	0.88 KJ x (kg x K) ⁻¹ @25°C
Particle Size	75µm–5mm. Refer data sheet for specific grades



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% Volatile	< 0.5%
Saturated Vapour Concentration	Not applicable for solid glass beads
Release of invisible vapours and gasses	No vapours expected to be released during normal usage

Additional Parameters

Shape	Spherical
Crystallinity	No free crystalline silica present
Dustiness	Dust may be formed during use in blasting applications
Surface Area	0.02mm ² – 80mm ² . Refer data sheet for specific grades
Degree of agglomeration	May agglomerate when exposed to moisture over extended periods
Ionisation	Not applicable
Corrosiveness	No corrosive effects known

Section 10 - STABILITY AND REACTIVITY

Reactivity	Considered non-reactive under normal usage. Avoid contact with strong acids
Chemical Stability	Stable.
Conditions to Avoid	Dust cloud formation. Avoid contact with hydrofluoric acid.
Possibility of Hazardous Reactions	None known
Incompatible Materials: & Reactions	None in particular. Strong bases may eventually degrade glass Hydrofluoric Acid solutions will readily dissolve glass.
Hazardous Decomposition Products:	None known.
Unsuitable Container Materials:	None in particular. Containers should allow any electrostatic charges built up to dissipate.

Section 12 - ECOLOGICAL INFORMATION

General:	Avoid contaminating waterways. Not expected to be an environmental hazard as products do not contain added heavy metals. Heavy metals are tested for conformance with standards prior to despatch May physically block systems.
Persistence and Degradability	These products are considered almost non degradable
Ecotoxicity Data:	No data available. No environmental hazards known or reported
Bioaccumulative Potential	No data available. Not expected to bioaccumulate
Mobility	Sinks in water. Immobile in soil.
Other Adverse Effects Results of	None recognised

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods	Disposal to be in accordance with Local, State & Federal waste regulations. Normally suitable for disposal at approved land waste. Avoid releasing dusts.
Disposal of Contaminated Containers and Packages	Normally suitable for disposal at approved land waste.
Effects of Sewage Disposal	Not suitable for disposal by sewage as pipes may block May be landfilled.
Landfill Incineration	Not suitable for incineration.

Section 14 - TRANSPORT INFORMATION

UN Number	Not applicable
Proper Shipping Name	None allocated
Transport Hazard Classes	Not defined as a Dangerous Good: by the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code). Not a Dangerous Good according to the International Maritime Dangerous Goods (IMDG Code). Not a Dangerous Good according to the International Air Transport Association (IATA) Dangerous Goods Regulations.
- Road & Rail	
- Sea	
- Air	
Packing Group	None allocated



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Packaging	Any type. However, consider the potential for electrostatic charge dissipation.
Environmental Hazards for Transport	No hazards identified
Special Precautions During Transport	No special precautions
Hazchem Code	None allocated

Section 15 - REGULATORY INFORMATION

Labelling: No GHS Labelling required
Not a hazardous chemical according to GHS Criteria
Not Dangerous Goods according to the ADG Code, IMDG Code, IATA Regulations. Not a Schedule Poison.

Australian Chemical Control Schemes

NICNAS – AICS

All ingredients are on the Australian Inventory of Chemical Substances.

Aust. Pesticides & Veterinary Medicine Authority - Agricultural & Veterinary Chemicals *Not included*

Therapeutic Goods Administration - Medicines *Not included*

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

Other Australian Regulations

Chemicals Weapons Act *Not included*

Ozone Depleting Substance Act *Not applicable*

Schedule Poison (SUSMP) *Not applicable*

Other Global Regulations

TSCA Inventory Status:	Reported/Included.
DSL/NDSL Inventory Status:	Reported/Included.
WHMIS Classification :	Not classified.
German Water Hazard Classification VwVwS:	WGK Class 1 (low)
HMIS: 0,0,0	



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Section 16 - OTHER INFORMATION

SDS Dates and Revisions

SDS Original Preparation Date: 1 Dec 2004
SDS Latest Revision Date: May 2020
Sections Changed in Latest Revision: Sections 1, 2, 3, 5, 6, 8, 9, 11, 12, 16

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Acronyms Used

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

CAS No. Chemical Abstracts Service Registry Number

UN No United Nations Dangerous Goods Number

GHS Globally Harmonised System of Classification and Labelling of Chemicals

SUSMP Standard for the Uniform Scheduling of Medicines and Poisons

EC European Commission Regulation 1272/2008

SDS Code Used This SDS has been prepared according to the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals as approved in Section 274 of the Work Health and Safety Act

This SDS summarises to the best of our knowledge the health and safety hazard information on the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.