SAFETY DATA SHEET "CONCRETE GROUT BUBBLES"

1) IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

1.1 Commercial name:	Concrete Grout Bubbles
1.2 Description/Use:	Lightweight inert filler for use in the manufacture of industrial products
1.3 Company Identification:	HYPERGRINDER s.r.l. Via Chieti 6 65021 Pescara (PE) ITALIA Tel: +39 085 9218160 Web: www.hypergrinder.com Mail: info@hypergrinder.com
1.4 Emergency Number:	(+61 2) 9416 5644

2) HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture
Non-Hazardous substance. Non-Dangerous Goods. According to SWA Criteria and the ADG Code.

GHS Classification:	Not applicable
Poisons Schedule:	Not applicable

2.2 GHS Label elements, including precautionary statements

Pictogram:	Not applicable
Signal word:	Not applicable
Hazard statement(s)	Not applicable
Precautionary statement(s)	Not applicable

2.3 Other Hazards
None

3) COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Chemical Characterization: Amorphous alumosilicate (or aluminosilicate) in the form of hollow ceramic microspheres approximately 100-350 micron in diameter, containing the following inseparable phases:

Chemical Name	CAS Number	Proportion
Amorphous alumino silicate	1327-36-2	65 - 85%
Mullite	1302-93-8	20 - 30%
Quartz	14808-60-7	0 - 1%
Calcite	1317-65-3	0 - 5%

Ingredients determined not to be hazardous to 100%.
Quartz is at or less than the analytical detection limit for XRD analysis (less than 1%).
Any quartz is fused into the ceramic matrix and hence it is not biologically available.
The spheres are inert and do not leach detectable levels of heavy metals.

4) FIRST AID MEASURES

4.1 Description of Necessary First Aid Measures:
Ingestion: Drink water, do not induce vomiting.
Eye: Flush continuously with water for 15 minutes, eyelids to be held open, do not rub eyes.
Skin: If skin becomes irritated, remove clothing, wash areas of contact with soap and water. Using a skin cream or lotion may be helpful in reducing irritation.
Inhalation: Remove exposed person to fresh air.

4.2 Medical Attention and Special Treatment:
First Aid Facilities: None should be required.
Comments: Treat according to person's condition and specifics of exposure.
Advice to Doctor: Treat symptomatically for irritant effects.

5) FIRE-FIGHTING MEASURE

5.1 Suitable Extinguishing Media: Not applicable. Material not combustible.
5.2 Hazards from Combustion Products: Not applicable. Material not combustible.
5.3 Precautions for Fire Fighters and Special Protective Equipment: Not applicable. Material not combustible.
5.4 Hazchem Code: Not applicable.

6) ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures.
General measures: Avoid breathing dust. Use in well-ventilated area. Handle in accordance with good industrial hygiene and safety practices.
Protective equipment: Wear Personal Protective Equipment (PPE) as detailed in Section 8 of the SDS.
Emergency procedure: Evacuate all unnecessary personnel. Increase ventilation.
6.2 Environmental precautions
The spheres are inert and are not expected to present a hazard to the environment. Prevent product from entering drains and waterways. If contamination of waterways occurs, contact the Environmental Protection Authority (EPA) in your state or territory.
6.3 Methods and materials for containment and cleaning up
Contain spillage immediately. Vacuum or sweep spilled material to avoid generating dust. Collect and transfer material to a suitable container for reuse or disposal. Sweep up or vacuum remaining material. If required, wash down surfaces with water. Dispose of in accordance with federal, EPA and state regulations.
6.4 References to other sections
See Sections 8 and 13 for exposure controls and disposal.

7) HANDLING AND STORAGE

7.1 Precautions for Safe Handling: Where possible use local exhaust ventilation.
7.2 Conditions for Safe Storage: Keep dry. No special storage requirements.
7.3 Specific end use(s): Apart from the uses mentioned in section 1.2, no other specific

8) EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control Parameters:

Exposure Standards:	10 mg/m3 Dust Not Otherwise Classified (inhalable dust), (NOHSC 1995). 10 mg/m3 Particulates Not Otherwise Classified (inhalable dust), (ACGIH). Biological Limit Values: No biological limit allocated.
Biological limits:	No biological limit values have been entered for this product.

8.2 Exposure Controls:

Engineering Controls:	Avoid generating dust. Work areas should be cleaned by sweeping or vacuuming. If generating dust cannot be avoided, follow personal protection recommendations below.Where possible use local exhaust ventilation.
Personal protective equipment:	
Eye Protection:	Wear safety glasses, safety goggles or full-face shield as appropriate. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Eye protection should conform to the specifications detailed in AS/NZS 1336:2014 Eye and Face Protection – Guidelines.
Hand protection:	Generally not required. However, for industrial use, wear gloves of impervious material. Reference should be made to AS/NZS 2161.1:2016 Occupational protective gloves - Selection, use and maintenance.
Body protection:	Wearing of long sleeved shirts and full-length trousers is recommended. Clothing should conform to the specifications detailed in AS/NZS 4501.1:2008 Occupational Protective Clothing – Guidelines on the selection, use, care and maintenance of protective clothing.
Respiratory:	If engineering controls are not effective in controlling airborne exposure then a Class P1 or P2 (Particulate) respirator should be worn. Final choice of appropriate breathing protection is dependent upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Respiratory protection should conform to the specifications detailed in AS/NZS 1715:2009 Selection, Use and Maintenance of Respiratory Protective Devices and AS/NZS ISO 16972:2015 Respiratory Protective Devices – Terms, definitions, graphical symbols and units of measurement.
General hygiene considerations:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Eye wash station is recommended.
Thermal protection:	Not Applicable

9) PHISICAL AND CHEMICAL PROPERTIES

9.1 Physical Description/Properties:

Physical Form, colour and odour:	Fine white/grey/tan powder, no odour.
Vapour Pressure:	Not applicable.
Boiling Point:	Not applicable.
Melting Point:	1200° - 1400°C
Solubility in Water:	Insoluble
Specific Gravity @ 25°C:	0.75 – 1.00
Flash Point:	Not applicable.
Lower Flammability Limit:	Not applicable.
Upper Flammability Limit:	Not applicable.
Auto ignition temperature:	Not applicable.

10) STABILITY AND REACTVITY

10.1 Reactivity: The product is stable if stored and handled as advised.
10.2 Chemical Stability: The product is stable if stored and handled as advised.
10.3 Possibility of Hazardous Reactions: The product is stable if stored and handled as advised
10.4 Conditions to Avoid: Avoid contact with skin, eyes and clothes.
10.5 Incompatible Materials: No data available
10.6 Hazardous Decomposition Materials: None.

11) TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:
Inhalation, skin contact and eye contact. Exposure by ingestion (swallowing) is not expected to occur.

11.2 Symptoms related to the physical, chemical and toxicological characteristics:
Inhalation: Inhalation of airborne dust may cause irritation to the mucous membrane and upper airways. Symptoms can include: Coughing, sneezing and breathing difficulties. Repeated exposure to respirable silica may result in pulmonary fibrosis. (Silicosis). Silicosis is a fibro nodular lung disease caused deposition in the lungs of fine respirable particles of crystalline silica. Principal symptoms of silicosis are coughing and breathlessness.
Skin: Prolonged contact with skin may cause irritation resulting in redness and itching. People with pre-existing skin conditions, such as dermatitis, should take extra care so as not to exacerbate the condition.
Eye: Contact with eyes may cause mechanical irritation resulting in redness, lacrimation and pain. May cause mild abrasion.
Ingestion: Ingestion of large amounts may cause gastrointestinal disturbances. Symptoms can include nausea, vomiting and abdominal pain.

11.3 Toxicological effects from short and long term exposure

Acute toxicity	∅	Carcinogenicity	∅
Skin corrosion/irritation	∅	Reproductive toxicity	∅
Serious eye damage/irritation	∅	(STOT) – single exposure	∅
Respiratory or skin sensitization	∅	(STOT) – repeated exposure	∅
Germ cell mutagenicity	∅	Aspiration hazard	∅

Legend:

✗ - Data available but does not fill the criteria for classification

✔ - Data required to make classification available

∅ - Data not available to make classification

12) ECOLOGICAL INFORMATION

12.1 Ecotoxicity: No adverse effects on aquatic organisms are predicted.
Bioaccumulation: No bioaccumulation potential.
12.2 Persistence and Degradability Biodegradability
Product is inorganic. The methods for determining the biological degradability are not applicable to inorganic substances.
12.3 Environmental Fate and Distribution: Not soluble in water. It will adhere to soil or sediments.
12.4 Fate and Effects in Waste Water
Treatment Plants: No adverse effects on bacteria are predicted.
12.5 Mobility in Soil Mobility - No data available.

13) DISPOSAL CONSIDERATIONS

13.1 Disposal Method: Waste should be placed in containers, plastic bags or other methods which prevent dust emission, and disposed of in accordance with the local waste disposal authority requirements.
13.2 Special Precautions for Landfill or Incineration: None known.

14) TRANSPORT INFORMATION

14.1 UN Number: None allocated.
14.2 Proper Shipping Name: None allocated.
14.3 Transport Class and Subsidiary Risk: None allocated.
14.4 Packing Group: None allocated.
14.5 Special Precautions for User: Not applicable.
14.6 Hazchem Code: Not applicable.

15) REGULATORY INFORMATION

15.1 Classified as non-dangerous goods. Safework Australia criteria is based on the Globally Harmonized System (GHS) of classification and labelling of chemicals.
15.2 SUSDP Poisons Schedule Number: None allocated.
15.3 Prohibition/Licensing Requirements: There are no applicable prohibition or notification/licensing requirements, including for

carcinogens under Commonwealth, State or Territory legislation.
15.4 Industrial Chemicals (Notification and Assessment) Act 1989: All ingredients are listed on or exempt from the *Australian Inventory of Chemical Substances* (AICS).

16) OTHER INFORMATION

Date of Previous Revision: January 2017
Next Review Date for this SDS: December 2020
The product consist of amorphous and poorly crystalline alumino silicates. XRD analysis of crystalline silica (quartz) determines that the quartz content is below the detection limit of analysis (in bulk materials). Any quartz that is potentially present (below the detection limits) is fused into the microspheres' ceramic matrix and hence it is not biologically available. The microspheres are inert and do not leach detectable levels of heavy metals. Particle size analysis indicates that 99% of the particles are greater than 20 micron with less than 0.5% being in the respirable size range. On the basis of findings of increased lung cancer risk in silicotics in some industries (but not in others) IARC has classified quartz as carcinogenic. However, in line with evidence from other naturally occurring non-fibrous alumino silicates that also may contain low levels of quartz, if dust exposures are kept below the exposure standard, no long term health or toxic effects such as pneumoconiosis or lung cancer are expected.

Disclaimer: This information is based on our current knowledge and is intended to describe the product for the purpose of health, safety and environmental requirements only. Since Hyper Grinder Srl cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product.