

# MATERIAL SAFETY DATA SHEET



MSDS Review Date: February 2009

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

**Product name:** E – SPHERES®  
**Recommended use:** Lightweight inert filler  
**Supplier:** Enviropheres Pty Ltd  
**ABN:** 93 077 898 849  
PO Box 497, Lindfield  
NSW 2070  
Australia  
**Telephone:** + 61 2 9416 5644  
**Facsimile:** + 61 2 9416 1718  
**European distributor:** Details of EU distributors are available from Enviropheres®.  
**e-mail:** [info@enviropheres.com](mailto:info@enviropheres.com)  
**Emergency telephone number:** + 61 2 9416 5644 (ALL HOURS)

## 2. HAZARDS IDENTIFICATION

The product has no hazard classification according to EC Directive 67/548/EEC (as amended).

The substance may cause temporary physical irritation (by abrasive action) on contact with skin and eyes. Minor irritation of the nose and respiratory tract (following inhalation) or gastric mucosa (following ingestion) are also possible.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Recommended use:** Lightweight inert filler.

**Appearance:** SL Series, fine white powder, no odour. BL Series, fine grey/tan powder, no odour.

**Ingredients:** Hollow alumino silicate spheres. The material contains the following inseparable (non-hazardous) phases :

Chemical Name	EC Number	CAS Number	Proportion
Amorphous alumino silicate	215-475-1	1327-36-2	65 - 80%
Mullite	215-113-2	1302-93-8	25 - 35%
Quartz	238-878-4	14808-60-7	0 - 1%
Calcite	215-279-6	1317-65-3	0 - 1%

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## 4. FIRST AID MEASURES

**Ingestion:** Drink water do not induce vomiting.

**Eye contact:** Flush continuously with water for 15 minutes, eyelids to be held open, do not rub eyes.

**Skin contact:** 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.

**Notes to physician:** Treat symptomatically for irritant effects.

## 5. FIRE-FIGHTING MEASURES

**Specific hazards:** Not flammable and not explosive.

**Suitable extinguishing agents:**

Dry powder, carbon-dioxide, foam, or water may be used (as appropriate to the burning materials) to control fires in the vicinity of E - Spheres.

**Extinguishing agent(s) which must not be used:**

None specified.

**Known hazards arising from combustion:**

None known, substance not flammable.

**Protective equipment needed by firefighters:**

Full protection (suitable clothing and positive pressure, self-contained breathing apparatus) as appropriate to the burning materials.

## 6. ACCIDENTAL RELEASE MEASURES

Wear suitable protective clothing: gloves and dust masks.

Shovel up bulk, use vacuum cleaner to clean up residues.

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.

## 7. HANDLING AND STORAGE

**Storage:** Keep dry. No special storage requirements.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational Exposure Standards:

#### Inhalable dust (not identified as hazardous)

**German MAK:** Alveolar Fraction – 3 mg/m<sup>3</sup>  
Respirable Fraction – 10 mg/m<sup>3</sup>

**UK OES (for inhalable dust):** 10 mg/m<sup>3</sup>

**ACGIH TLV:** 10 mg/m<sup>3</sup>

(Time-weighted average concentration for a normal eight-hour work day).

**Engineering measures:** Where possible use local exhaust ventilation.

**Personal protection equipment:** A half-face (P1 or P2) respirator should be worn during work in poorly ventilated spaces, or where evidence suggests that inspirable dust levels may exceed 10 mg/m<sup>3</sup>. Where overhead work is involved, goggles and head covering should be worn.

All respiratory devices should be tested for compliance with local standards.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form / Colour / Odour:** SL Series, fine white powder, no odour. BL Series, fine grey/tan powder, no odour (do not attempt to detect odour of supplied sample).

**Specific Gravity:** 0.6 - 0.8g/cc  
**Melting Point:** 1600° - 1800°C  
**Solubility:** Insoluble in water  
**Flash Point:** N/A  
**Boiling Point:** N/A  
**Flammability Limits:** not flammable  
**Vapour Pressure:** N/A

N/A = Not applicable

## 10. STABILITY AND REACTIVITY

**Conditions known to cause instability:** None known, not explosive.

**Materials to avoid (known incompatibilities):** None known.

**Hazardous decomposition products:** None known.

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## 11. TOXICOLOGICAL INFORMATION

<b>Acute Oral toxicity:</b>	Low (LD50 in rats > 2000 mg/kg).
<b>Acute toxicity (other routes):</b>	Not determined.
<b>Irritation/corrosion on the skin:</b>	Not irritating (in rabbit test).
<b>In the eye:</b>	Not irritating (in rabbit test).
<b>Skin sensitisation:</b>	Not determined.
<b>Mutagenicity:</b>	Not determined.
<b>Other available toxicity data:</b>	None available.

**Main symptoms:** No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.  
Symptoms that may arise if the product is mishandled are:

**Irritation:** The substance may cause temporary physical irritation (by abrasive action) by contact to skin and eyes and possibly by inhalation to nose and respiratory tract and if ingested in sufficient quantities, gastric irritation.

**Long Term Effects:** None expected.

E-SPHERES consist of amorphous and poorly crystalline aluminosilicates with a very low crystalline silica content. They are inert and do not leach detectable levels of heavy metals. In line with evidence from other naturally occurring non-fibrous aluminosilicates, if dust exposures are kept below the exposure standard, no long term health or toxic effects such as pneumoconiosis or cancer are expected.

## 12. ECOLOGICAL INFORMATION

**Avoid contaminating waterways.**

<b>Toxicity to aquatic life:</b>	Low (Fish 48h NOEC = 700 mg/l, Daphnia 24h EC50 > 140 mg/l, Algal 72h EC10 > 1400 mg/l).
<b>Other information on ecotoxicity:</b>	Not inhibitory to aquatic microorganisms (NOEC in 16h inhibition test 1200 mg/l).

## 13. DISPOSAL CONSIDERATIONS

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.

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## 14. TRANSPORT INFORMATION

Not classified as Dangerous for Transport.

**UN-No:** None Allocated

**Class:** None Allocated

**Hazchem code:** None Allocated

**EPG:** None Allocated

**Packing group:** None Allocated

## 15. REGULATORY INFORMATION

The product has no hazard classification according to EC Directive 67/548/EEC (as amended).

This product is not a "toy" as defined in Article 1 of Council Directive 88/378/EEC, EN71.

## 16. OTHER INFORMATION

This Material Safety Data Sheet conforms to EC Directive 2001/58/EC.

**Reference:** Replaces MSDS of December 2004.  
Changes have been made to Sections 2, 3, 8 and 15.

**Contact Point:** Envirospheres Pty Ltd, Technical Manager

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