



E-SPHERES®

Please observe the general information about this PSI in chapter 16. Other Information.

1. Identification of the Substance / Mixture and of the Company / Undertaking

1.1 Product Identifier

| | |
|---------------------------|---|
| Commercial product name | E-SPHERES® |
| Synonyms | Cenospheres, hollow ceramic microspheres. |
| CAS no. | 93924-19-7 |
| EC-no. | 300-212-6 |
| REACH registration number | 01-2119563688-21-0002 |

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

| | |
|---------------------|---------------------|
| Use | Lightweight filler. |
| Use advised against | None. |

1.3 Details of the Supplier of the Product Safety Information

| | |
|---------------------------|---|
| Company designation | Envirospheres Pty Ltd PO Box 497 Lindfield NSW 2070 Australia Phone: +61 2 9416 5644 |
| E-mail (competent person) | info@envirospheres.com.au |

1.4 Emergency Telephone Number

| | |
|----------------------------|---|
| Emergency telephone number | REACH- and CLP helpdesk: http://echa.europa.eu/help/echahelp_de.asp |
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2. Hazards Identification

2.1 Classification of the Substance or Mixture

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|---|----------------------------------|
| Classification according to: Regulation (EC) No. 1272/2008 | Not classified according to CLP. |
|---|----------------------------------|

2.2 Other Hazards

| | |
|---|---|
| Particular information pertaining specific risk for human / environment | This substance does not meet the criteria for classification as PBT or vPvB. |
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3. Composition / Information on Ingredients

3.1 Chemical Characterization

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|---------------------------|--|
| Chemical characterization | Hollow ceramic microspheres of amorphous aluminosilicate (or aluminosilicate). |
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4. First Aid Measures

4.1 Description of First Aid Measures

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| General advice | In all cases of doubt, or when symptoms persist, seek medical advice. |
| If inhaled | Move person to fresh air. Upon discomfort, get medical advice. |
| In case of skin contact | Wash with water and soap. |
| In case of eye contact | Might cause mechanical irritation. Upon discomfort, keep eyelid open and rinse with large quantities of water. |
| If swallowed | Rinse mouth immediately and drink plenty of water. |

4.2 Indication of any Immediate Medical Attention and Special Treatment Needed

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| Immediate medical attention | First Aid, decontamination, treatment of symptoms. |
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5. Fire Fighting Measures

5.1 Extinguishing Media

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| Suitable extinguishing media | The product is not combustible. Choose extinguishing media suitable for surrounding fire. |
| Extinguishing media which must not be used for safety reasons | None. |

5.2 Special Hazards Arising from the Substance or Mixture

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| Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases | The product is stable if stored and handles as prescribed / indicated. |
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5.3 Advice for Fire Fighters

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| Special protective equipment for fire fighting | Self-contained respirator / breathing apparatus (DIN EN 133). |
| Additional information on fire fighting | No special measures are required. |



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6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

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| Personal precautions | Avoid generation and breathing of dust. Avoid contact with skin and eyes. If the dust concentration in workplace air exceeds the occupational exposure limit values, approved and suitable respiratory protection must be used. Personal protective equipment: refer to chapter 8. |
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6.2 Environmental Precautions

| | |
|---------------------------|---|
| Environmental precautions | The product is not classified as dangerous to the environment. Spillage to ground or water systems should be avoided as it floats on the water surface. |
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6.3 Methods and Materials for Containment and Cleaning Up

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| Methods for cleaning up | Dust must be exhausted directly at the point of origin. Use approved industrial vacuum cleaner for removal. To clean the floor and all objects contaminated by this material, use plenty of water. Retain contaminated washing water and dispose it. |
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6.4 Reference to Other Sections

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|-----------------------------|---|
| Reference to other sections | See protective measures under points 7 and 8. |
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7. Handling and Storage

7.1 Precautions for Safe Handling

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|-------------------------|---|
| Advice on safe handling | Keep container tightly closed and in a well-ventilated place. Carry out filling operations only at stations with exhaust ventilation facilities. Avoid generation of dust. Do not breathe dust. If the dust concentration in workplace air exceeds the occupational exposure limit values, approved and suitable respiratory protection must be used. |
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| Advice on protection against fire and explosion | No special fire protection measures are necessary. The product is not combustible, oxidizing, and/or explosive. |
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7.2 Conditions for Safe Storage, Including any Incompatibilities

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|--|--|
| Storage space and container requirements | No special requirements are necessary. |
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| | |
|------------------------|---|
| Storage specifications | Keep container tightly closed in a well-ventilated place. |
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8. Exposure Controls / Personal Protection

8.1 Exposure Controls

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| Respiratory protection | If the dust concentration in workplace air exceeds the occupational exposure limit values, approved and suitable respiratory protection must be used. Filter type P2. |
| Hand protection | The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. See information supplied by the manufacturer. |
| Eye protection | Wear goggles with side protection according to EN 166. |
| Skin and body protection | Wear suitable protective clothing, gloves and eye/face protection. |
| General protective and hygiene measures | When using, do not eat, drink, or smoke. Wash hands before breaks and after work. |
| Consumer exposure controls | <p>A) Occupational exposure limit values: (American Conference of Governmental Industrial Hygienists ACGIH, 2010).</p> <p>8h TWA: 10mg/m³ (Particulates (insoluble or poorly soluble) Not Otherwise Specified, PNOS) (E: inhalable fraction of dust)</p> <p>8h TWA: 4mg/m³ (PNOS) (A:respirable fraction of dust)</p> <p>B) Environmental exposure controls (Dir 2008/50/EC)</p> <p>PM10: 50µg/m³* limit value, one day (1.1.2010)</p> <p>PM10: 20µg/m³ limit value, calendar year</p> <p>PM2.5: 25µg/m³ target value (1.1.2010)</p> <p>PM2.5: 25µg/m³ limit value (1.1.2015)</p> <p>*not to be exceeded more than 7 times a calendar year</p> |

9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

| | |
|--------------------|-----------------------------------|
| Physical state | Solid. |
| Form | Hollow microspheres. |
| Colour | White or Light grey / Grey. |
| Odour | Barely perceptible odour. |
| Odour threshold | Not applicable. |
| pH | |
| remarks: | Raw cenospheres in leachate |
| pH: | 5.5 - 6.4 (30 min. - 24h). |
| remarks: | Processed cenospheres in leachate |
| pH: | 6.5 - 6.9 (30 min. - 24h). |
| Melting point | 1260 - 1560 °C. |
| Boiling point / °C | Not applicable. |
| Flash point / °C | Not combustible. |

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| Flammability | Non-flammable. |
| Risk of explosion | Not explosive. |
| Vapour pressure | Not applicable. |
| Density | |
| remarks: | Raw cenospheres |
| density: | 1 g/cm ³ . |
| remarks: | Processed cenospheres (dried at 105 °C) |
| density: | 0.7 g/cm ³ . |
| Water solubility | 0.051 - 0.068 g/L (0.17□ - 0.23□ w/w) |
| remarks: | Main components are not soluble in water. |
| Solubility | Practically insoluble. |
| Partition coefficient (n-octanol/water) | Not applicable. |
| Autoflammability | No self-ignition up to the melting point. |
| Decomposition temperature | No data available. |
| Viscosity, dynamic | Not applicable. |
| Oxidation | Not oxidising. |

9.2 Other Information

| | |
|--------------|---|
| Bulk Density | 0.4 g/cm ³ |
| remarks: | Raw cenospheres, processed cenospheres (dried at 105 °C). |

10. Stability and Reactivity

10.1 Reactivity

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|------------|---|
| Reactivity | The product is stable if stored and handled as advised. |
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10.2 Chemical Stability

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|--------------------|---|
| Chemical stability | The product is stable if stored and handled as advised. |
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10.3 Possibility of Hazardous Reactions

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|---------------------|--|
| Hazardous reactions | The product is stable if stored and handled as advised |
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10.4 Conditions to Avoid

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|---------------------|--|
| Conditions to avoid | Avoid contact with skin, eyes and clothes. |
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10.5 Incompatible Materials

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|--------------------|--------------------|
| Materials to avoid | No data available. |
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10.6 Hazardous Decomposition Materials

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|----------------------------------|-------|
| Hazardous decomposition products | None. |
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11. Toxicological Information

11.1 Additional Information

Other information (chapter 16) The product does not meet the criteria for classification as hazardous as laid down in (EC) No. 1272/2008 (CLP) for any toxicological endpoint.

12. Ecological Information

12.1 Persistence and Degradability

Biodegradability Product is inorganic. The methods for determining the biological degradability are not applicable to inorganic substances.

12.2 Bioaccumulative Potential

Bioaccumulation Not applicable. Product / Substance is inorganic.

12.3 Mobility in Soil

Mobility No data available.

12.4 Results of PBT and vPvB Assessment

Results of PBT characteristics determination Product / Substance is inorganic.

12.5 Other Adverse Effects

Further information on ecology The product does not meet the criteria for classification as hazardous to the environment as laid down in (EC) No. 1272/2008 (CLP) for any ecotoxicological endpoint.

13. Disposal Considerations

13.1 Waste Treatment Methods

Disposal considerations The material should be recovered for recycling if possible. This material is not classified as hazardous waste according to Commission decisions 2000/532/EC and 2001/118/EC. Prior to disposal of large quantities of this material advice should be sought from the Environment Agency Office.

14. Transport Information

14.1 Land Transport GG□S/ADT/RID

Remarks No dangerous good in sense of this transport regulation.

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14.2 Marine Transport IMDG/GG See

Remarks No dangerous good in sense of this transport regulation.

14.3 Air Transport ICAO/IATA

Remarks No dangerous good in sense of this transport regulation.

15. Regulatory Information

15.1 Safety, Health and Environmental Regulations / Legislations Specific for the Substance or Mixture

Additional regulations Specific national regulations must be considered.

Water hazards class (self-classification) Non-hazardous to water (nwg).

15.2 Chemical Safety Assessment

Safety assessment The PSI has been compiled in compliance with (EC) No. 1907/2006 (REACH) and (EC) No. 1272/2008 (CLP). Conclusion from CSA: non-hazardous.

16. Other Information

16.1 General Information

According to Chapter 1.5.2 of the UN Globally Harmonised System of classification and labelling of chemicals (GHS), Article 58 (2)(a), and Article 59(2)(b) of (EC) No 1272/2008 (CLP), which amends REACH article 31(1), **safety data sheets are only required for substances and mixtures that meet the harmonised criteria for physical, health or environmental hazards.**

Since the product does not meet these criteria, a safety data sheet is not issued.

In order to communicate relevant HSE information, this Product Safety Information (PSI) is provided instead. REACH article 31(7) requires relevant exposure scenarios from the Chemical Safety Report (CSR) to be placed into the annex to the Safety Data Sheet. According to REACH Annex I, section 0, subsection 0.6. no. 4 and 5 however, **exposure scenarios are only required for hazard-classified substances or preparations.**

Since the product is not hazard-classified, there is no requirement for exposure scenarios.

16.2 Legal Disclaimer

The information given in this PSI is to the best of ENVIROSPHERES' knowledge and believed accurate and reliable as of the data indicated. However, no representation, warranty or guarantee is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

This Product Safety Information sheet replaces the Material Safety Data Sheet of December 2009

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