

**Section 1. Identification of the product and of the company/undertaking**1.1. Product identifier

<b>Commercial name</b>	Zirshot®
Description	Electrofused ceramic beads
<b>REACH registration numbers</b>	Exempted from registration under REACH regulation EC N°1907/2006

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Media for surface treatment by impact.
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1.3. Details of the supplier of the safety data sheet

<b>Company/undertaking identification</b>	Société Européenne des Produits Réfractaires S.E.P.R
Address	BP 30040 – 84131 LE PONTET Cedex France
Tel.	+ 33 4 90 32 70 00
Fax	+ 33 4 90 32 71 65
E-mail	zirpro@saint-gobain.com

1.4. Emergency telephone number

<b>Emergency tel.</b>	+ 33 4 90 32 70 78
	+ 33 1 45 42 59 59 (ORFILA number for emergency)

**Section 2. Hazards identification**2.1. Classification of the substance or mixture

Directives 67/548/EEC and 1999/45/CE	Ceramic beads are not classified as a hazardous product.
CLP regulation EC 1272/2008	Ceramic beads are not classified as a hazardous product
OSHA GHS (US)	Ceramic beads are not classified as a hazardous product

2.2. Label elements

Not required under Directives 67/548/EEC, Regulation EC 1272/2008 and OSHA GHS (US).

2.3. Other Hazard

Adverse effects on health	Possible irritation through abrasive friction. Moreover, surface treatments by impact might generate dust.
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NFPA Hazard Rating:	Reactivity: 0 Flammability: 0 Health: 0
WHMIS	Not hazardous

**Section 3. Composition/information on ingredients**

N°CAS	N°EINECS	Components	Weight %
1314-23-4	215-227-2	Zirconium Dioxide (ZrO <sub>2</sub> )	60 to 70 %
60676-86-0	262-373-8	Silica glass (SiO <sub>2</sub> )	28 to 33 %
1344-28-1	215-691-6	Alumina (Al <sub>2</sub> O <sub>3</sub> )	<10 %

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**ZIRSHOT®****Additional information**

- The ingredients of the silica-alumina vitreous phase cannot be dissociated by the product application in surface treatment by impact and it is free from crystalline silica.
- Traces of radioactive elements of natural origin (Series U238 and Th232, U+Th < 0.05%)

**Section 4. First aid measures****4.1. Description of first aid measures**

<u>Eye contact</u>	Rinse thoroughly. If irritation persists, consult an ophthalmologist.
<u>Ingestion</u>	N/A
<u>Skin contact</u>	N/A
<u>Inhalation</u>	N/A

**4.2. Most important symptoms and effects, both acute and delayed** No data available**4.3. Indication of any immediate medical attention and special treatment needed** Treat symptomatically.**Section 5. Fire fighting measures****5.1. Extinguishing media**  
Suitable extinguishing media All extinguishing agents can be used.**5.2. Special hazards arising from the substance or mixture** This product is not combustible or explosive.  
Does not present any particular risk in the event of fire.**5.3. Advice for firefighters**  
Specific fire fighting methods Does not require any particular methodsProtection of fire-fighters Use appropriate protective equipment.**Section 6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures** Avoid contact with the eyes and the inhalation of dust.**6.2. Environmental precautions** Do not discharge into drains and rivers.**6.3. Methods and material for containment and cleaning up** Vacuum up the product.  
Risk of slipping when present on the ground.**6.4. Reference to other sections** See section 8 for personal protective equipment.  
See section 13 for disposal considerations.

## Section 7. Handling and storage

### 7.1. Precautions for safe handling

Technical measures	Ensure that areas are well ventilated.
Precautions to be taken	For operations generating dust: Wear P3 dust mask (or N95 for US). Wear safety goggles.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	Does not require any specific or particular technical measures.
Recommended storage conditions	Dense material: Observe safety rules when stacking.

### 7.3. Specific end use(s)

See section 1.1

## Section 8. Exposure control / personal protection

### 8.1. Control parameters

<u>Engineering measures</u>	Use in an enclosed cabinet or containment with an equipment able to capture the dust.
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<u>Control parameters</u>	No applicable specific control parameters.
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<u>Occupational exposure limit values and/or biological limit values</u>	No official limit values.
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### 8.2. Exposure controls

#### Personal protective equipment

Respiratory protection	Wear a P3 dust mask (or N95 for US) during any operation which might generate dust.
Hand protection	Wear safety gloves.
Eye protection	Wear safety goggles.
Skin and body protection	Safety shoes.

<u>Hygiene measures</u>	Do not drink, eat or smoke during use.
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## Section 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<u>Physical State</u>	Beads
<u>Color</u>	White
<u>Odor</u>	Odorless
<u>Median diameter</u>	< 1.2 mm
<u>Specific temperatures</u>	Melting point: between 1850°C and 2550°C
<u>Flammability characteristics</u>	Flash point: not applicable
<u>Bulk density</u>	2.3 kg/dm <sup>3</sup>
<u>Mass density</u>	3.8 kg/dm <sup>3</sup>
<u>Solubility</u>	Insoluble

<u>9.2. Other information</u>	None
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**ZIRSHOT<sup>®</sup>****Section 10. Stability and reactivity**

<u>10.1. Reactivity.</u>	No reactivity under normal conditions of use.
<u>10.2. Chemical stability.</u>	Stable under normal conditions of use and below 1300°C
<u>10.3. Possibility of hazardous reactions.</u>	No data available
<u>10.4. Conditions to avoid.</u>	No dangerous reactions known under normal conditions of use.
<u>10.5. Incompatible materials</u>	
<u>Materials to avoid</u>	Reacts with strong acids and bases.
<u>10.6. Hazardous decomposition products.</u>	No data available

**Section 11. Toxicological information**11.1. Information on toxicological effects

<u>Toxicity</u>	No specific data available.
<u>Local effects</u>	The dust can cause mechanical irritation of the eyes and the respiratory tract.

**Section 12. Ecological information**

<u>12.1. Toxicity</u>	
<u>Ecotoxicity</u>	No data available.
<u>Effects on aquatic organisms</u>	No data available.
<u>12.2. Persistence and degradability</u>	No data available
<u>12.3. Bioaccumulative potential</u>	No data available
<u>12.4. Mobility in soil</u>	No data available
<u>12.5. Results of PBT and vPvB assessment</u>	Not relevant.
<u>12.6. Other adverse effects</u>	No data available

**Section 13. Disposal considerations**13.1. Waste treatment methodsWaste from productDestruction/disposal

The waste materials from surface treatment process must undergo a physico-chemical analysis in order to define their mode of disposal.

Possibility to collect the used ceramic beads for recycling upon request (product stewardship).

Contaminated packagingDestruction/disposal

Dispose off at an authorised site.

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## Section 14. Transport information

International regulations  
RID/ADR/IMDG/IATA

Not restricted.

## Section 15. Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Directives 67/548/CEE, 1999/45/CE The ceramic beads are not classified as a dangerous product.  
and regulation CLP (EC) 1272/2008: All constituent substances are listed on TSCA (Toxic Substance Control Act).  
None of the constituent substances are listed in Proposition 65 (California).

### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

## Section 16. Other information

### Restrictions of use

This product must not be used for applications other than those indicated in § 1.

### Voluntary labelling

Pictogram displayed on all the packaging.



### Replaces sheet

30/08/2013

### Information concerning the amendments:

- addition of subtitles in each section of the SDS
- addition of dust mask N95 for US standard
- mention of US GHS in sections 2, and 15
- modification of CAS number and EC number of silica glass in order to better fit to the definition of the product

This sheet is in addition to the technical sheets but it does not replace them. The information is given in good faith based on our current knowledge of this product, at the time of publication.

The attention of the user is drawn to the risks possibly incurred by using the product for any other purpose than that for which it was intended.

This does not in any way exempt the user from knowing and applying all the regulations governing his use of the product.

It is the sole responsibility of the user to take all precautions required in handling the product.

The mandatory regulations mentioned are only intended to help the user to fulfil his obligations regarding the use of hazardous products.

This listing must not be considered exhaustive. It does not exonerate the user from ensuring that other legal obligations than those mentioned do not exist, relating to the use and storage of the product for which he solely is responsible.