

## SAFETY DATA SHEET n° : DS MS BE 11 GB

(in accordance with 91/155/EEC, amended by 93/112/EC)

### 1 . IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

**Commercial name :** ZIRBLAST

**Description :** Ceramic beads (zirconia, silica)..  
for shot peening.

**Emergency tel :** 33 (0) 4 90 32 70 78

**Société Européenne des Produits Réfractaires S.E.P.R.**  
**B.P. 40 – 84131 LE PONTET Cedex France**

**Tel. : +33 (0)4 90 32 70 00 – Fax :+33 (0)4 90 32 71 65**

### 2 . COMPOSITION/INFORMATION ON INGREDIENTS

<u>CASE NR</u>	<u>Component</u>	<u>Weight %</u>
1314-23-4	ZrO2	60 à 70
7631-86-9	SiO2(1)	28 à 33
1344-28-1	Al2O3	< 10
	*Other	

(1) fused silica containing also Al2O3

\*Other: Traces of radioactive components with natural origin (U + Th < 0.05%)

### 3 . HAZARDS IDENTIFICATION

Possible irritation through abrasive friction.  
Risk of slipping if the product (beads) is spread out on the floor.  
As such, the product should not cause an inhalation problem.

### 4 . FIRST AID MEASURES

Eyes: may be abrasive through friction, treat as particle in eye, rinse abundantly with water.

### 5 . FIRE FIGHTING MEASURES

This product is not combustible or explosive. It is compatible with all standard fire-fighting methods.

### 6 . ACCIDENTAL RELEASE MEASURES

Isolate the area and clean up the floor in order to collect the beads to avoid slipping by rolling of beads.

### 7 . HANDLING AND STORAGE

In case of operations which generate dust, wear dust mask, type FFP2 or FFP3 in accordance with NF EN 149  
Heavy material, respect the security rules in case of stacking.  
Use safety shoes for handling.

<p><b>8 . EXPOSURE CONTROL / PERSONAL PROTECTION</b></p>	<p><u>General protection</u>: provide for ventilation, checkup the ventilation of equipments.  <u>Respiratory protection</u> :          . Room ventilation and/or wear dust mask.          . Inhalation limits of zirconium compounds :            - 5 mg/m<sup>3</sup> of Zr for 8 hours ACGIH, MAK to OSHA (TWA)            - 10 mg/m<sup>3</sup> of Zr for 15 mn ACGIH, OSHA (STEL)          . Inhalations limits of amorphous silica            - 4 mg/m<sup>3</sup>, MAK – 6 mg/m<sup>3</sup> OSHA            - 10 mg/m<sup>3</sup> ACGIH for 8 hours (TWA)          . Inhalation limits of Al<sub>2</sub>O<sub>3</sub> :            - 5 mg/m<sup>3</sup>, OSHA – 10 mg/m<sup>3</sup>, ACGIH            - 6 mg/m<sup>3</sup> alveolate, MAK for 8 hours (TWA)            - 10 mg/m<sup>3</sup> France for 8 hours (VME).          . Under normal conditions of use, the working up of the product does not yield exposure above 1mSv/year (1760H/year) - (public limits in accordance with Euratom 96/29 directives).</p>
<p><b>9 . PHYSICAL AND CHEMICAL PROPERTIES</b></p>	<p>Aspect : Beads of &lt; 1.2mm diameter, of white colour.          Melting interval : between 2120 and 2820°K.          Bulk density : 2.3kg/dm<sup>3</sup>          Water soluble : nil at ambient temperature</p>
<p><b>10 . STABILITY AND REACTIVITY</b></p>	<p>Stable in temperature up to 1570°K.          Chemically stabilized product and no dangerous reaction.</p>
<p><b>11 . TOXICOLOGICAL INFORMATION</b></p>	<p>No toxicological information known.</p>
<p><b>12 . ECOLOGICAL INFORMATION</b></p>	<p>No data available.</p>
<p><b>13 . DISPOSAL CONSIDERATIONS</b></p>	<p>Please consult national laws or local regulations in force for landfill.</p>
<p><b>14 . TRANSPORT INFORMATION</b></p>	<p>No special precautions are required.</p>
<p><b>15 . REGULATORY INFORMATION</b></p>	<p>No risk phrase R.</p>
<p><b>16 . OTHER INFORMATION</b></p>	<p>No other information.</p>