

**1 – IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**
*Product identifier*

**Commercial Product Name** **ZIRCOVAL® DR / DN**  
**Name** Secondary Raw Material

*Relevant identified uses of the substance or mixture and uses advised against*

**Use of the Mixture** Manufacturing of concrete and formed refractories

*Details of the supplier of the safety data sheet*

**Supplier** **VALOREF S.A.**  
 ZI La Croisière  
 F – 84 500 BOLLENE

**Phone** + 33 (0) 4 90 40 50 00  
**Email** contact.valoref@saint-gobain.com  
**Website** www.valoref.eu

*Emergency phone number* + 33 (0) 4 90 40 50 00

**2 – HAZARDS IDENTIFICATION**
*Classification of the substance or mixture*

**Classification according to Directive 67/548/EEC, 1999/45/EC and CLP (EC) 1272/2008**

None of the components are classified as hazardous

*Label elements*

No label elements according to regulation 1272/2008/EC

*Other hazards*

**Human** Product with a low rate of fines: risks of emission of dust while handling  
 Possible irritation by abrasive action  
**Environment** Product with trace of natural radioactive elements (U+Th<0.05%)  
 No particular risks to the environment

**3 – COMPOSITION/INFORMATION ON INGREDIENTS**
*Substances*

Not applicable

*Mixtures*

**Nature** Refractory grain of zircon isostatic  
**Origin** Secondary raw material from the treatment of used refractory

**Chemicals characteristics** **ZIRCOVAL® DR / DN**

ELEMENTS	%	EINECS	CAS	REACH Registration Number
ZIRCONIUM SILICATE	65 %	239-019-6	14940-68-2	Exempted
SILICON DIOXYDE	33 %	231-545-4	7631-86-9	Exempted

#### 4 – FIRST AID MEASURES

##### *Description of first aid measures*

<b>Skin contact</b>	Wash with water and soap
<b>Eyes contact</b>	Immediately wash with water for 15 minutes and treat as well a particle
<b>Ingestion</b>	Seek medical advice immediately
<b>Inhalation</b>	Dust : go to dust free environment

##### *Most important symptoms and effects, both acute and delayed*

Not applicable

##### *Indication of any immediate medical attention and special treatment needed*

Not applicable

#### 5 – FIREFIGHTING MEASURES

##### *Extinguishing media*

The product is non – flammable and is compatible with all firefighting measures

##### *Special hazards arising from the substance or mixture*

Not applicable

##### *Advice for firefighters*

Not applicable

#### 6 – ACCIDENTAL RELEASE MEASURES

##### *Personal precautions, protective equipment and emergency procedures*

Wear gloves, an anti-dust mask, type FFP3, and security glasses. Clean by aspiration

##### *Environmental precautions*

Clean by aspiration to prevent dust production

##### *Methods and materials for containment and cleaning up*

**Cleaning methods** Pick up mechanically and clean by aspiration

##### *Reference to other sections*

Not applicable

#### 7 – HANDLING AND STORAGE

##### *Precautions for safe handling*

<b>Deconditioning</b>	Use an anti-dust mask, type FFP3, according to NF EN 149
<b>Product handling</b>	Use the Individual Protection Equipments (Security glasses, anti-dust mask type FFP3 according to NF EN 149, security shoes) Handle in ventilated areas

##### *Conditions for safe storage, including any incompatibilities*

<b>Storage</b>	Dry storage needed
<b>Special care of</b>	Dense Product, control of right capacity of silos and all containers

##### *Specific end use(s)*

Not applicable

## 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

In normal conditions of use, the product doesn't yield exposure above >1 mSv/y (1600 h/y) – public limits in accordance with Euratom 96/29 directive

### Limits of inhalation :

- **Compounds of zirconium silicate :** 0.5 mg/m<sup>3</sup> per 8 hours ACGIH, MAK et OSHA (TWA)
- **Amorphous silicon dioxide :** 10 mg/m<sup>3</sup> per 15 min ACGIH et OSHA (STEL)
- **Amorphous silicon dioxide :** 4 mg/m<sup>3</sup>, MAK – 6 mg/m<sup>3</sup>, OSHA per 8 hours (TWA)
- **Amorphous silicon dioxide :** 10 mg/m<sup>3</sup> ACGIH per 8 hours (TWA)

### Exposure controls

<b>Individual protection measures in normal use</b>	Use the Individual Protection Equipments (Security glasses, anti-dust mask type FFP3 according to NF EN 149, security shoes)
<b>Special protection measures</b>	Handle in ventilated areas

## 9 – PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Granule – fines	<b>Odour</b>	Nil
<b>Bulk density</b>	3.7 / 4.3 t/m <sup>3</sup>	<b>Solubility in water</b>	Product non soluble
<b>Colour</b>	Grey to beige	<b>Humidity</b>	<1 %

### Other information

Not applicable

## 10 – STABILITY AND REACTIVITY

Not applicable

## 11 – TOXICOLOGICAL INFORMATION

### Information on toxicological effects

<b>Acute toxicity</b>	
- orally	No data available
- by inhalation	No data available
<b>Skin irritation</b>	None
<b>Eye Irritation</b>	Abrasive by friction
<b>Chronic toxicity</b>	
- by inhalation	Injurious effect repetitive inhalation of dust
<b>Genetic toxicity in vitro</b>	
<b>Ingestion</b>	None

## 12 – ECOLOGICAL INFORMATION

*Toxicity*

No data available

*Persistence and degradability*

No data available

*Bioaccumulative potential*

No data available

*Mobility in soil*

No data available

*Results of PBT and vPvB assessment*

No data available

*Other adverse effects*
**Other information**

Avert the reject in the environment

**13 – DISPOSAL CONSIDERATIONS**
*Waste treatment methods*
**Elimination**

Inert material which can be eliminated as same, but which may contain some lixiviable pollutant agent. Control of pollutant potential before elimination.

**14 – TRANSPORT INFORMATION**
*UN number*

Not applicable

*Proper shipping name*

Not applicable

*Transport hazard clas(ses)*

Not applicable

*Packing group*

Not applicable

*Environmental hazards*

Not applicable

*Special precautions for user*
**Unloading care**

 Bulk transportation :  
 Move away the personnel of the zone of unloading  
 Open the doors with a mechanical or hydraulic system

**15 – REGULATORY INFORMATION**

*Safety, health and environmental regulations/legislation specific for the substance or mixture*

**CLP regulation EC 1272/2008**

Symbols and indications of danger	No symbol
H phrases	No H phrase
P phrases	No P phrase

*Chemical Safety Assessment*

No data available

**16 – OTHER INFORMATION**

*The information hereby contained is elements aware by VALOREF fat the time of the product's delivery. They couldn't substitute any safety and care instructions specified by the company while processing. Responsibility of VALOREF couldn't be engaged in case of injuries or accident because of wrong non utilization of this information.*