

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

**Commercial Product Name** **VALORCHROM® R**  
**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

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

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

**2 – HAZARDS IDENTIFICATION**
*Classification of the substance or mixture*
**Classification according to regulation 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  
 Product with a chromic oxide basis which may contain trace of hexavalent chrome (100 ppm): hexavalent chromium was acknowledged to be carcinogenic, the inhalation of dusts must be avoided

**Environment** No particular risks to the environment

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

Not applicable

*Mixtures*

**Nature** Intered refractory grain of chromic oxide / corundum  
**Origin** Secondary raw material from the treatment of used refractory

**Chemicals characteristics** **VALORCHROM® R**

ELEMENTS	%	EINECS	CAS	REACH Registration Number
CHROMIUM OXIDE	85 - 90 %	215-160-9	1308-38-9	01-2119433951-39
ALUMINIUM OXIDE	3 %	215-691-6	1344-28-1	01-2119529248-35
SILICIUM DIOXIDE	7 %	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 aluminum oxide :** 5 mg/m<sup>3</sup> - OSHA / 10 mg/m<sup>3</sup> ACGIH per 8 hours (TWA)  
6 mg/m<sup>3</sup> cellular, MAK per 8 hours  
10 mg/m<sup>3</sup> France per 8 hours (VME)
- **Compounds of chromium oxide :** 0.5 mg/m<sup>3</sup> de Cr III, ACGIH - MAK et OSHA (TWA)
- **Compounds silicium oxide :** 4 mg/m<sup>3</sup> , MAK – 6 mg/m<sup>3</sup> , OSHA per 8 hours (TWA)  
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>	4 / 4.5 t/m <sup>3</sup>	<b>Solubility in water</b>	Product non soluble
<b>Colour</b>	Green	<b>Humidity</b>	<1 %

### Other information

<b>Solubility</b>	Trivalent chromium compounds are generally insoluble in water, except for the acetate, chloride hexahydrate and nitrate salts. Nevertheless, some of hexavalent chromium compounds have solubility in water relatively important this is the case of sodium chromate, for example.
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## 10 – STABILITY AND REACTIVITY

Not applicable

## 11 – TOXICOLOGICAL INFORMATION

### Information on toxicological effects

<b>Acute toxicity</b>	
- orally	Al <sub>2</sub> O <sub>3</sub> LD50 > 2000 mg/kg bw (rat). <i>OECD 420</i>
- by inhalation	Average maximum concentration applicable : Al <sub>2</sub> O <sub>3</sub> LC50 > 2.3 mg/l. <i>OECD 403</i>
<b>Skin irritation</b>	Al <sub>2</sub> O <sub>3</sub> Not irritating to the skin of rabbits <i>OECD 404</i>
<b>Eye Irritation</b>	Al <sub>2</sub> O <sub>3</sub> The substance was determined to not be eye irritant <i>OECD 405</i>
<b>Chronic toxicity</b>	
- by inhalation	Al <sub>2</sub> O <sub>3</sub> NOAEC = 70 mg/m <sup>3</sup> <i>OECD 413</i>

**Genetic toxicity in vitro** Aluminium oxide No effects (The authors briefly mention that no mortality nor toxic symptoms were observed at any dose level in the range-finding study nor in the 5 rats at the highest dose level in the main study that was reported in the article)  
*OECD TG 420*

**Local effects** Harmful

## 12 – ECOLOGICAL INFORMATION

### Toxicity

#### Short-term toxicity

##### - to fish

Al<sub>2</sub>O<sub>3</sub> NOEC (96h) > 0.071 mg/L *OECD 203 (Salmo trutta)*  
 LC50 (96h) > 218.64 mg/L total Al, no filtered *Pimephales promelas*

##### - to aquatic invertebrates

Al<sub>2</sub>O<sub>3</sub> NOEC (48h) > 0.071 mg/L dissolved. (*Daphnia Magna*) *OECD 202*

### Persistence and degradability

No data available

### Bioaccumulative potential

#### Bioaccumulation

Al<sub>2</sub>O<sub>3</sub> Not applicable, the substance is not classified

### Mobility in soil

Al<sub>2</sub>O<sub>3</sub> Not applicable, the substance is not classified

### Results of PBT and vPvB assessment

Al<sub>2</sub>O<sub>3</sub> Not applicable, the substance is not classified

### Other adverse effects

#### Other information

Avert the reject in the environment

## 13 – DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### Elimination

Material with a chromic oxide basis which may loose some chrome and hexavalent chrome traces by leaching. The elimination of the clearance products and same shall be done in controlled dumping Centre for dangerous industrial waste.

## 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 – INFORMATIONS REGLEMENTAIRES***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*

Al<sub>2</sub>O<sub>3</sub> Not applicable, the substance is not classified

**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.*