

**1 - Identification of the preparation and of the company**

Product identification	Ciment Fondu®
Product use	Hydraulic binder for the manufacture of special concretes, mortars and refractory castables.
Company identification	Kerneos SA 8, des graviers F-92521 Neuilly sur Seine Cedex; FRANCE Tel +33 (0)1 46 37 90 00 Fax +33 (0)1 46 37 92 00 Contact : sds@kerneos.com
Emergency telephone number	ORFILA number: +33 1 45 42 59 59 (France)

**2 - Hazards identification**

Classification	Preparation not classified in accordance with European directive 1999/45/CE
Symbol/indication of danger	None
R phrases	None
General hazards not resulting in classification	Should dust be generated within a confined space, it is regarded as nuisance dust without any known specific effects to health.

**3 - Composition / information on ingredients**

Chemical name	Content	CAS n° / EINECS n° / Index n°	Symbol	R phrases
<u>Calcium Aluminate</u> <u>Cement Clinker</u>	> 99.5%(w/w)	65997-16-2 / 266-045-5 /	None	None

Further information Does not contain any detectable quantities of free lime or free crystalline silica (such as quartz, tridymite or cristobalite).

**4 - First aid measures**

Inhalation	Make the person breath in fresh air. If symptoms persist, consult a doctor.
Contact with the skin	Remove soiled clothes and wash the skin with soap and water.
Contact with the eyes	Rinse abundantly with water. If symptoms persist, consult a doctor.
Ingestion	Should it be the case, rinse out mouth with water and drink abundant quantities of water.

**5 - Fire-fighting measures**

The product is not flammable and will not support flame. It does not promote combustion with other materials.

**6 - Accidental release measures**

Individual precautions	See sections 7 and 8. It is preferable for a dust mask to be worn.
Environmental precautions	Prevent entry to sewers / surface or ground water.
Clean-up methods	For large amounts, preferably use dry methods, while avoiding dust exposure. Do not empty materials into drains, sewers or water courses as the fines harden in contact with water.

## 7 - Handling and storage

Storage	Store the product in a dry place, preferably protected by a plastic cover, or in a silo.
Handling	A ventilation system is recommended to be used during handling of the product (unloading, mixing, transport, packing in sacks etc.) in order to evacuate dust.

## 8 - Exposure controls / Personal protection

Control parameters	Particles not otherwise classified (ACGIH): Inhalable : TLV (TWA) = 10 mg/m <sup>3</sup> Respirable : TLV (TWA) = 3 mg/m <sup>3</sup>
Personal protection	
Hand protection	Protective clothing is recommended, including waterproof gloves, and boots.
Eye protection	Dust proof goggles should be worn whenever there is a risk of fines or wet mixture entering the eyes.
Respiratory protection	Suitable respiratory protection should be worn when the conditions are such that the personal exposure is estimated to approach or exceed the stated limits.
Ingestion	When manipulating do not eat, drink or smoke.

## 9 - Physical and chemical properties

Form:	Fine Powder
Colour:	Grey/Brown
Odour:	None
pH value:	11 - 11.5 (10% water dispersion)
Melting point:	1300° C
Flash point:	Not Applicable
Flammability (solid,gaseous):	Not Applicable
Explosive characteristics:	Not Applicable
Specific gravity (kg/m <sup>3</sup> ):	3200 - 3300
Solubility (in water):	< 2% soluble compound (solubility of non hydrated calcium aluminate is around 3.5g/l)
Bulk density (kg/m <sup>3</sup> ):	1100 - 1300

## 10 - Stability and reactivity

Stability	In a dry environment, the product is chemically stable.  In the presence of water, calcium aluminates react chemically and harden to form stable calcium aluminate hydrates. This reaction is exo-thermal and may last up to 24 hours. The total heat released is < 500 kJ/kg.
Dangerous decomposition products	None known

### 11 - Toxicological information

Acute toxicity	
Oral	No data available
Inhalation	No data available
Contact with the eyes	Non-irritant
Contact with the skin	Non-irritant
* Sensitization / chronic toxicity	The product has been checked in accordance with standard NF EN 196-10 with respect to compliance with the provisions of directive 2003/53/CE and it does not contain any soluble chrome VI reducing agent.

### 12 - Ecological information

Possible effect on the environment	In the presence of water or moisture, alkaline conditions are obtained which may have local effects on vegetation and aquatic life.
Eco-toxicity	No data available
Mobility, endurance and degradability	After hydration (a few hours or days in moist conditions) the product is stable in soil and in water, with a negligible mobility of its constituents.
Bio-accumulation potential	No data available

### 13 - Disposal considerations

The product is not industrial waste which requires specific treatment.

### 14 - Transport information

Transport regulations	
ADR (road)	Not regulated
RID (rail)	Not regulated
IMDG (sea)	Not regulated
OACI/IATA (air)	Not regulated

### 15 - Regulatory information

Data on label in accordance with directive 1999/45/CE	Classification	None
	Symbol/indication of danger	None
	Phrases - R	None
	Phrases - S	None
Data on label in accordance with European directive 2003/53/CE	None	

### 16 - Other information

#### Document content and format

This safety data sheet has been drafted in accordance with the rules and recommendations of Reach regulation 1907/2006/CE.

It has been prepared under the responsibility of the Kerneos Technical Marketing Manager.

#### Version

This version supersedes the previous version. Any modifications that have been made compared to the previous version of this document are indicated by an asterisk in the margin.

#### Recommendations and restrictions for use

Please refer to the Product Data Sheet for detailed information relating to the intended applications.

#### Liability disclaimer

Any information is given based on Kerneos' current knowledge and experience of the products and is deemed to be accurate. However, Kerneos undertakes no liability or responsibility of any kind in respect thereof.

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