

**CIMENT FONDU®**



**SAFETY DATA SHEET**

**SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1. Product identifier**

Product name : CIMENT FONDU®

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

Hydraulic binder for concretes and dry-mix mortars manufacturing

**1.3. Details of the supplier of the safety data sheet**

Registered company name : Imerys Norfolk Inc., DBA Kerneos Inc..

Address : 1316 Priority Lane.VA 23324.Chesapeake.USA.

Telephone : +1 757 284 3200. Fax : +1 757 284 3300.

productsteward.aluminates@imerys.com

www.imerys.com

**1.4. Emergency telephone number : +1 703 741 5970.**

Association/Organisation : CHEMTREC international.

**Other emergency numbers**

CHEMTREC USA & Canada: +1 703 741 5970 / 1 800 424 9300

**SECTION 2 : HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture**

**HCS compliant.**

This substance does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This substance does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

**2.2. Label elements**

**HCS compliant.**

No labelling requirements for this substance.

**2.3. Other hazards**

None to our knowlegde

**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1. Substances**

**Composition :**

Identification	HCS	Nota	%
CAS: 65997-16-2 EC: 266-045-5 REACH: Exempt CEMENT, ALUMINA, CHEMICALS			100%

**Other data :**

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

**SECTION 4 : FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

**4.1. Description of first aid measures**

**In the event of exposure by inhalation :**

In case of exposure to high concentrations of dust : move the affected person away from the contaminated area and into the fresh air

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**In the event of splashes or contact with eyes :**

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

**In the event of splashes or contact with skin :**

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

Wash with soap

**In the event of swallowing :**

Seek medical attention, showing the label.

**4.2. Most important symptoms and effects, both acute and delayed**

The acute symptoms would give pain in the eyes because of dust entry. No delayed effects are anticipated if first aid treatment is applied and is effective.

**4.3. Indication of any immediate medical attention and special treatment needed**

No need for immediate medical attention. Follow the advice given in section 4.1.

**SECTION 5 : FIREFIGHTING MEASURES**

Non-flammable.

**5.1. Extinguishing media**

Non flammable

**Unsuitable methods of extinction**

No restriction on the extinguishing media to be used.

**5.2. Special hazards arising from the substance or mixture**

None. The material is not flammable and it does not lead to hazardous thermal decomposition products.

**5.3. Advice for firefighters**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**SECTION 6 : ACCIDENTAL RELEASE MEASURES**

**6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

**6.2. Environmental precautions**

Prevent any material from entering drains or waterways.

**6.3. Methods and material for containment and cleaning up**

Retrieve the product by mechanical means (sweeping/vacuuming) : do not generate dust.

**6.4. Reference to other sections**

Sections 7, 8 & 13

**SECTION 7 : HANDLING AND STORAGE**

Requirements relating to storage premises apply to all facilities where the substance is handled.

**7.1. Precautions for safe handling**

Always wash hands after handling.

Avoid the generation of airborne dust.

**Fire prevention :**

Prevent access by unauthorised personnel.

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**Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

**Prohibited equipment and procedures :**

No smoking, eating or drinking in areas where the substance is used.

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

Keep the container tightly closed in a cool, well ventilated place

Keep the container away from dampness

**Packaging**

Always keep in packaging made of an identical material to the original.

**7.3. Specific end use(s)**

If you require advice on specific uses, please contact your supplier.

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

**Occupational exposure limits :**

Particles not otherwise specified/classified

USA / OSHA PEL (Occupational Safety and Health Administration, Permissible Exposure Limits) : Respirable particles TWA = 5 mg/m<sup>3</sup> -- Total particles TWA = 15 mg/m<sup>3</sup>

ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) : Respirable particles TWA = 3 mg/m<sup>3</sup> -- Inhalable particles TWA = 10 mg/m<sup>3</sup>

**8.2. Exposure controls**

**Personal protection measures, such as personal protective equipment**

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

**- Eye / face protection**

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

**- Hand protection**

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

**- Body protection**

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

**- Respiratory protection**

Avoid inhaling dust.

Category :

- FFP3

**- Thermal risks**

The substance does not represent a thermal hazard, thus special consideration is not required.

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**Exposure controls linked to environmental protection**

Avoid release into the environment. Contain the spillage.

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

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

**General information :**

Physical state :	Powder or dust.
Apparent bulk density (Loose packed) :	1100 - 1300 kg/m <sup>3</sup>
Color:	Grey / brown
Odour:	Odourless

**Important health, safety and environmental information**

pH :	Not stated.
pH (aqueous solution) :	11 - 11.5 (20°C - 10%)
Boiling point/boiling range :	Not specified.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	3.2 - 3.3
Water solubility :	Partially soluble. <2%
Melting point/melting range :	1300 °C.
Self-ignition temperature :	Not specified.
Decomposition point/decomposition range :	Not specified.
Explosive characteristics :	Not applicable
Evaporation rate:	Not applicable (solid with a melting point >450°C)
Flammability (solid, gas):	Not flammable
Flammability or explosion limits:	Not explosive
Vapour density :	Not applicable
Partition coefficient n-octanol/water:	Not applicable
Viscosity :	Not applicable
Oxidising properties :	Not applicable

**9.2. Other information**

None

**SECTION 10 : STABILITY AND REACTIVITY**

**10.1. Reactivity**

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.

**10.2. Chemical stability**

This substance is stable under the recommended handling and storage conditions in section 7.

**10.3. Possibility of hazardous reactions**

None under normal conditions.

**10.4. Conditions to avoid**

Avoid :  
- humidity

**10.5. Incompatible materials**

None, to our knowledge

**10.6. Hazardous decomposition products**

None, to our knowledge

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**SECTION 11 : TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects**

**11.1.1. Substances**

**Acute toxicity :**

Cement has no acute toxicity.

**Skin corrosion/skin irritation :**

CEMENT, ALUMINA, CHEMICALS (CAS: 65997-16-2)

Corrosivity :

No observed effect.

Species : Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Serious damage to eyes/eye irritation :**

CEMENT, ALUMINA, CHEMICALS (CAS: 65997-16-2)

Corneal haze :

Average score < 1

Species : Rabbit

Duration of exposure : 72 h

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

No observed effect.

Iritis :

Average score < 1

Species : Rabbit

Duration of exposure : 72 h

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Conjunctival redness :

Average score < 2

Species : Rabbit

Duration of exposure : 72 h

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Conjunctival oedema :

Average score < 2

Species : Rabbit

Duration of exposure : 72 h

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

**Respiratory or skin sensitisation :**

In accordance with the requirements REACH Annex XVII, art. 47, Cement Alumina Chemicals (CAS : 65997-16-2) does not contain quantities of hexavalent chromium > 2 ppm, measured according to EN 196-10

CEMENT, ALUMINA, CHEMICALS (CAS: 65997-16-2)

Local lymph node stimulation test :

Non-Sensitiser.

Species : Guinea pig

OECD Guideline 406 (Skin Sensitisation)

**Germ cell mutagenicity :**

CEMENT, ALUMINA, CHEMICALS (CAS: 65997-16-2)

No mutagenic effect.

OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Ames test (in vitro) :

Negative.

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With or without metabolic activation.  
Species : *S. typhimurium* TA102

**Carcinogenicity :**

By read across with aluminium oxide, the substance is not considered carcinogenic.

**Reproductive toxicant :**

By read across with aluminum oxide, the substance is not considered reprotoxic.

**Specific target organ systemic toxicity - single exposure :**

Dust from this product may cause irritation to the respiratory tract.

**Specific target organ systemic toxicity - repeated exposure :**

The available evidence for a repeated toxicity by oral or inhalation route to the substance does not support a toxic effect.

**Aspiration hazard :**

No data available.

**SECTION 12 : ECOLOGICAL INFORMATION**

The product must not be allowed to run into drains or waterways.

**12.1. Toxicity**

**12.1.1. Substances**

CEMENT, ALUMINA, CHEMICALS (CAS: 65997-16-2)

Fish toxicity :

LC50 > 100 mg/l  
Species : *Oncorhynchus mykiss*  
Duration of exposure : 96 h  
OECD Guideline 203 (Fish, Acute Toxicity Test)

NOEC > 100 mg/l  
Species : *Oncorhynchus mykiss*  
Duration of exposure : 96 h  
OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity :

EC50 = 6.6 mg/l  
Species : *Daphnia magna*  
Duration of exposure : 48 h  
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

NOEC = 1.8 mg/l  
Species : *Daphnia magna*  
Duration of exposure : 48 h  
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity :

ECr50 > 5.6 mg/l  
Species : *Pseudokirchnerella subcapitata*  
Duration of exposure : 72 h  
OECD Guideline 201 (Alga, Growth Inhibition Test)

NOEC = 3.2 mg/l  
Species : *Pseudokirchnerella subcapitata*  
Duration of exposure : 72 h  
OECD Guideline 201 (Alga, Growth Inhibition Test)

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**12.2. Persistence and degradability**

After hydration (several hours or several days under humid conditions), the product is stable in soil and in water, with a negligible mobility of its components

**12.3. Bioaccumulative potential**

Not relevant because cement is inorganic.

**12.4. Mobility in soil**

Not relevant because cement is inorganic.

**12.5. Results of PBT and vPvB assessment**

The substance does not satisfy the PBT or vPvB criteria.

**12.6. Endocrine disrupting properties**

No data available.

**12.7. Other adverse effects**

No other adverse effects are identified.

**SECTION 13 : DISPOSAL CONSIDERATIONS**

The appropriate waste management of the substance and/or its container must be determined in accordance with local regulations.

**13.1. Waste treatment methods**

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

**SECTION 14 : TRANSPORT INFORMATION**

Exempt from transport classification and labelling.

**14.1. UN number**

Not relevant

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**14.2. UN proper shipping name**

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Not relevant

**14.3. Transport hazard class(es)**

ADR : not classified

IMDG : not classified

ICAO/IATA : not classified

RID : not classified

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**14.4. Packing group**

Not applicable.

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**14.5. Environmental hazards**

Not relevant

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**14.6. Special precautions for user**

Avoid any release of dust during transportation, by using air-tight tanks for powders and covered trucks for pebbles.

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**SECTION 15 : REGULATORY INFORMATION**

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

The following regulations have been used:

- OSHA Hazard Communication Standard 29 CFR 1910.1200

**- Container information:**

No data available.

**- Particular provisions :**

Canada - DSL (Domestic Substances List): Calcium aluminate cement [CAS: 65997-16-2] is listed.

**- Clean Water Act : Toxic Pollutants (CWA 307A)**

Unlisted.

**- Clean Water Act : Hazardous Substances (CWA 311)**

Unlisted.

**- Clean Water Act : Hazardous Substances (CWA 304b)**

Unlisted.

**- Clean Water Act : Priority Pollutants (CWA Priority)**

Unlisted.

**- Clean Air Act : Hazardous Air Pollutants (CAA 112(b) HAP (188))**

Unlisted.

**- Clean Air Act : Organic Hazardous Air Pollutants National Emission Standards (CAA 112(b) HON (387))**

Unlisted.

**- Clean Air Act : Protection of Stratospheric Ozone (CAA 602)**

Unlisted.

**- SARA 110**

Unlisted.

**- SARA 302/304**

Unlisted.

**- SARA 313**

Unlisted.

**- California proposition 65 : Chemicals known to the state to cause cancer or reproductive toxicity**

Unlisted.

**- Massachusetts : Right to Know**

Unlisted.

**- New Jersey : Right to Know**

Unlisted.

**- Pennsylvania : Hazardous Substance**

Unlisted.

**- Rhode Island : Hazardous substance list**

Unlisted.

**- TSCA (Toxic Substances Control Act) - USA**

All components are listed or exempted.



### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the substance and not as a guarantee of the properties thereof.

### Abbreviations :

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

NOEC : The concentration with no observed effect.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

HCS : Hazard Communication standard (OSHA).