

Ternal® EV

KERNEOS

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

- 1.1. Product identifier : Ternal® EV
- 1.2. Relevant identified uses of the substance or mixture and uses advised against : Hydraulic binder for dry mortars and concrete
- 1.3. Details of the supplier of the safety data sheet
- Name : KERNEOS SA
- Address : 8, Rue des Gravieres
92521 Neuilly-sur Seine Cédex
FRANCE
- Telephone number : +33 1 46 37 90 00
- Telefax number : +33 1 46 37 92 00
- E-mail : sds@kerneos.com
- 1.4. Emergency telephone number : ORFILA (France) : +33 1 45 42 59 59

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

MOST IMPORTANT HAZARDS

- Adverse human health effects : To our knowledge, no specific risk when handled in accordance with good occupational hygiene and safety practice.
- Environmental effects : Presents no particular risk to the environment, provided the recommendations concerning disposal (see section 13) and any applicable national or local regulations are complied with.
- Physical and chemical hazards
- Fire or explosion : No specific hazard under normal conditions of use
- Classification of the product : According to EC regulations, this product is not classified as a "hazardous mixture". (directive 1999/45/EC and regulation (EC) 1272/2008 (CLP))
This material is not classified as hazardous under OSHA regulations
This material is not classified as hazardous under WHMIS regulations

2.2. Label elements

- Hazard pictograms : None
- Hazard statements : None
- Precautionary statements : None

2.3. Other hazards : None, to our knowledge

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

MIXTURE

Substance name	Contents	CAS No	EC No	Index No	Reach No	Classification
Cement, alumina, chemicals	> 98.5 %	65997-16-2	266-045-5	----	----	-----
Further information	: Does not contain any detectable quantities of free lime or free crystalline silica (such as quartz, tridymite or cristobalite)					

Ternal® EV
KERNEOS
SECTION 4 FIRST AID MEASURES
4.1. Description of first aid measures

- Inhalation** : In case of exposure to high concentrations of dust :
 Move the affected person away from the contaminated area and into the fresh air
 If you feel unwell, seek medical advice
- Skin contact** : Wipe off as much as possible
 Wash with soap and water
 In case of redness or irritation, consult a doctor
- Eye contact** : Rinsing with water whilst keeping the eyelids well open
 If irritation persists, consult an eye specialist
- Ingestion** : Rinse mouth out with water
 Never attempt to induce vomiting
 If you feel unwell, seek medical advice

4.2. Most important symptoms and effects, both acute and delayed : None, to our actual knowledge, in normal use.

4.3. Indication of any immediate medical attention and special treatment needed : None, to our actual knowledge, in normal use.

SECTION 5 FIRE-FIGHTING MEASURES

- 5.1. Extinguishing media** : All extinguishing media can be used.
- 5.2. Special hazards arising from the substance or mixture** : Not combustible. Does not present any particular risk in the event of a fire
- 5.3. Advice for fire-fighters** : Cool down the containers/equipment exposed to heat with a water spray
 Contain the extinguishing fluids by bunding
 Do not attempt to fight the fire without suitable protective equipment :
 Suitable breathing apparatus
 Complete protective clothing

SECTION 6 ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures** : For non-emergency personnel :
 Avoid contact with skin and eyes
 Do not breathe dust.
 For emergency responders :
 Do not attempt to fight the fire without suitable protective equipment
 For further information see section 8
- 6.2 Environmental precautions** : Do not discharge into the environment
 Do not discharge into drains and rivers
- 6.3. Methods and material for containment and cleaning up**
- Recovery : Sweep up or vacuum up the product
 Collect up the product and place it in a spare container suitably labelled
 Avoid the dispersion of dust
 - Cleaning/decontamination : Wash non-recoverable remainder with large amounts of water
 - Disposal : Dispose of at a licensed waste collection point
- 6.4 Reference to other sections** : For further information see section 13

Ternal® EV**KERNEOS****SECTION 7 HANDLING AND STORAGE****7.1. Precautions for safe handling**

- Technical measures** : Ensure good ventilation of the work station
- Precautions** : Avoid contact with skin and eyes
Do not breathe dust
- Hygiene measures** : Always wash your hands after handling the product
Do not drink, eat or smoke in the workplace

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

- **Recommended** : Store :
- the container tightly closed
- in a cool, dry area.
- protected from humidity

Packaging materials

- **Recommended** : Original packaging

- 7.3. Specific end use(s)** : No information available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limits**

- **France** : Dust without specific effect :
Total dust - VME : 10 mg/m³
Inhalable dust - VME : 5 mg/m³
- **Germany** : Dust without specific effect :
Inhalable dust : MAK : 3 mg/m³
Respirable dust : MAK : 10 mg/m³
- **USA (ACGIH)** : Respirable dust : TLV : 3 mg/m³
Inhalable dust : TLV : 10 mg/m³

8.2. Exposure controls

- Engineering measures** : Ensure good ventilation of the work station
Extraction to remove dust at its source

Personal protective equipment

- **Respiratory protection** : In the event of insufficient ventilation :
Suitable anti-dust mask
- **Hand protection** : Impermeable protective gloves
The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374
Breakthrough time : refer to the recommendations of the gloves supplier
- **Eye protection** : Safety goggles
- **Skin and body protection** : Protective clothing

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

- Physical state** : Fine powder

Ternal® EV**KERNEOS****SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES (continued)**

Colour	: light brown
Odour	: odourless
Odour threshold	: Not applicable
pH	: 11.5-12 (Aqueous dispersion - 10 %)
Specific temperatures	
- Boiling	: Not applicable
- Melting point	: Not applicable
Decomposition temperature	: Not determined
Flammability characteristics	
- Flash point	: Not applicable
- Auto-ignition temperature	: Not applicable
Flammability (solid, gas)	: The product is not flammable
Oxidizing properties	: Non oxidizing material according to EC criteria
Explosive limits in air	: Not applicable
Vapour pressure	: Not applicable
Vapour density (air = 1)	: Not applicable
Relative density (water = 1)	: Not determined.
Bulk density	: 1200 -1400 kg/m3
Density :	: 2500 - 2600 kg/m3
Solubility	
- in water	: < 3 %
Octanol/water partition coefficient	: Not applicable (inorganic substance)
Kinematic viscosity	: Not applicable
Evaporation rate	: Not applicable
Explosive properties	: Not explosive
9.2 Other information	: No additional information available

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity	: In contact with water, the product reacts chemically and hardens into stable hydrates. This reaction is exothermic and can last for 24h. The total heat released is about 500 kJ/kg
10.2. Chemical stability	: Stable at ambient temperature and under normal conditions of use
10.3. Possibility of hazardous reactions	: None under normal conditions.
10.4. Conditions to avoid	: Water, humidity
10.5. Incompatible materials	: None, to our knowledge
10.6. Hazardous decomposition products	: None, to our knowledge

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Ternal® EV**KERNEOS****SECTION 11 TOXICOLOGICAL INFORMATION (continued)**

Acute toxicity	: Based on available data, the classification criteria are not met.
Skin corrosion/irritation	: Not irritating (OECD 404)
Serious eye damage/irritation	: Not irritating (OECD 405) Dust may cause slight irritation to the ocular mucous membranes due to the presence of a foreign body.
Respiratory or skin sensitization	: Does not contain measurable amounts of soluble Chromium VI
Carcinogenicity	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Based on available data, the classification criteria are not met.
STOT - single exposure	: Dust from this product may cause irritation to the respiratory tract.
STOT - repeated exposure	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Not applicable

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity	: No information available
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	: Available data on aluminium show that aluminium does not bioaccumulate
12.4. Mobility in soil	: No information available
12.5. Results of PBT and vPvB assessment	: Based on available data, the classification criteria are not met.
12.6. Other adverse effects	: No information available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods	
WASTE FROM PRODUCT	
Destruction/Disposal	: Dispose of in accordance with relevant local regulations
CONTAMINATED PACKAGING	
Destruction/disposal	: Recycle following cleaning or dispose of at an authorised site
NOTE	: The user's attention is drawn to the possible existence of specific European, national or local regulations regarding disposal

SECTION 14 TRANSPORT INFORMATION

14.1. UN number	: Not restricted
14.2. UN proper shipping name	: Not restricted
14.3. Transport hazard class(es)	: Not restricted
14.5. Environmental hazards	: Not restricted
14.6. Special precautions for user	: No information available
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	: No information available
DOT 49 CFR (Road) :	: Not restricted

Ternal® EV**KERNEOS****SECTION 14 TRANSPORT INFORMATION (continued)**

NOTE : The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, in case the date of issue is older than 12 months, compared to the current one, it would be advisable to check their validity with your commercial agency

SECTION 15 REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Germany : : Water hazard class (WGK) : 1
Storage class (Germany) : 13 (according to The German chemical association VCI)

USA

US Toxic Substances Control Act - TSCA : : Calcium aluminate cement is listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory

SARA - USA : : SARA section 311/312 categorizations : none

CERCLA Hazardous Substance (40CFR Part 302) : None

Canada

Domestic Substance List (DSL) : Calcium aluminate cement is registered in the DSL (Canada) inventory

WHIMS Classification : : None

15.2. Chemical Safety Assessment : No information available

SECTION 16 OTHER INFORMATION

Further information : This sheet has been written in conformity with the REACH regulation

NFPA Hazard Rating : - Reactivity : 0
- Flammability : 0
- Health : 0
- Special : 0

*** Update :** : This sheet was updated (refer to the date at the top of this page)
This sheet has been revised completely (changes were not marked)

Safety data sheet established by : LISAM SERVICES - TELEGIS
6 rue des Boucheries F-60400 NOYON
www.reachelp.com
Safety Made Easy with www.lisam.com

This sheet complements the technical sheets but does not replace them. The information given is based on our knowledge of the product, at the time of publication. It is given in good faith.

Besides, the attention of the user is drawn to the possible risk incurred by using the product for any other use than that for which it was intended.

In no way does this exempt the user from knowing and applying all the regulations controlling his activity. The user alone will take on the responsibility for taking the precautions involved by the use of the product.

The aim of all the mandatory regulations mentioned is just to help the user to fulfill his obligations regarding the use of hazardous products.

This information must not be considered exhaustive. It does not exempt the user from ensuring that other obligations than those mentioned could apply, related to the storage and use of the product, this being his sole responsibility.

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