

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Trade name : KRONOS

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

Product use : Mortar

### 1.3 Details of the supplier of the safety data sheet

Company name of supplier : Sika Italia S.p.A.  
Via Luigi Einaudi 6  
20068 Peschiera Borromeo  
Telephone : +39 02 54778 111  
Telefax : +39 02 54778 119  
E-mail address of person : EHS@it.sika.com  
responsible for the SDS

### 1.4 Emergency telephone number

CAV Napoli – Azienda Ospedaliera A. Cardarelli - Tel. 0817472870  
CAV Firenze - Az.Osp.Careggi U.O. Tossicologia Medica - Tel. 0557947819  
CAV Pavia - Centro Naz.le d'informazione Tossicologica - Tel. 038224444  
CAV Milano - Ospedale Niguarda Ca' Grande - Tel. 0266101029  
CAV Bergamo - Azienda Ospedaliera Papa Giovanni XXIII - Tel. 800883300  
CAV Roma - Policlinico Umberto I - Tel. 0649978000  
CAV Roma - Policlinico Agostino Gemelli - Tel. 063054343  
CAV Foggia - Az. Osp. Universitaria Riuniti - Tel. 0881732326  
CAV Roma - Ospedale Pediatrico Bambino Gesù - Tel. 0668593726  
CAV Verona - Az. Osp. Universitaria di Borgo Trento - Tel. 800011858

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :





Signal word	:	Danger	
Hazard statements	:	H315 H317 H318 H335	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.
Precautionary statements	:	P101 P102	If medical advice is needed, have product container or label at hand. Keep out of reach of children.
		<b>Prevention:</b>	
		P271	Use only outdoors or in a well-ventilated area.
		P280	Wear protective gloves/ eye protection/ face protection.
		<b>Response:</b>	
		P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
		<b>Disposal:</b>	
		P501	Dispose of contents/container in accordance with local regulation.

**Hazardous components which must be listed on the label:**

Cement, portland, chemicals

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.



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## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Cement, portland, chemicals	65997-15-1 266-043-4	Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 STOT SE 3; H335	>= 60 - < 80
calcium oxide	1305-78-8 215-138-9 01-2119475325-36- XXXX	Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335	>= 3 - < 5
Substances with a workplace exposure limit :			
Quartz (SiO <sub>2</sub> )	14808-60-7 238-878-4		>= 10 - < 20

For explanation of abbreviations see section 16.

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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.  
Consult a physician after significant exposure.
- In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off with soap and plenty of water.  
If symptoms persist, call a physician.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Continue rinsing eyes during transport to hospital.  
Remove contact lenses.  
Keep eye wide open while rinsing.
- If swallowed : Do not induce vomiting without medical advice.  
Rinse mouth with water.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.



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

- Symptoms : Cough  
Respiratory disorder  
Allergic reactions  
Excessive lachrymation  
Erythema  
Dermatitis  
See Section 11 for more detailed information on health effects and symptoms.
- Risks : irritant effects  
sensitising effects
- Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
May cause respiratory irritation.

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

- Treatment : Treat symptomatically.
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### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

- Suitable extinguishing media : In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction.

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

- Hazardous combustion products : No hazardous combustion products are known

#### 5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Standard procedure for chemical fires.
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### SECTION 6: Accidental release measures

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

- Personal precautions : Use personal protective equipment.  
Avoid breathing dust.  
Deny access to unprotected persons.
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### 6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and arrange disposal without creating dust.  
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For personal protection see section 8.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid exceeding the given occupational exposure limits (see section 8).  
Do not get in eyes, on skin, or on clothing.  
For personal protection see section 8.  
Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.  
Smoking, eating and drinking should be prohibited in the application area.  
Follow standard hygiene measures when handling chemical products

Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

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

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Store in accordance with local regulations.

Further information on storage stability : Keep in a dry place.  
No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

Specific use(s) : Consult most current local Product Data Sheet prior to any use.

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits



Components	CAS-No.	Value type (Form of exposure)	Control parameters *	Basis *
Cement, portland, chemicals	65997-15-1	TWA (Respirable particulate matter)	1 mg/m3	ACGIH
Quartz (SiO2)	14808-60-7	TWA (Respirable particulate matter)	0,025 mg/m3	ACGIH
		TWA (Respirable particulate matter)	0,025 mg/m3 (Silica)	ACGIH
		TWA (Respirable particulate matter)	0,025 mg/m3	ACGIH
		TWA (Respirable particulate matter)	0,025 mg/m3 (Silica)	ACGIH
calcium oxide	1305-78-8	TWA (Respirable fraction)	1 mg/m3	2017/164/EU
Further information: Indicative				
		STEL (Respirable fraction)	4 mg/m3	2017/164/EU
		TWA (mist, thoracic fraction)	1 mg/m3	IT OEL
		STEL (mist, thoracic fraction)	4 mg/m3	IT OEL
		TWA	2 mg/m3	ACGIH

\*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

## 8.2 Exposure controls

### Engineering measures

Maintain air concentrations below occupational exposure standards.  
Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

- Eye/face protection : Safety glasses with side-shields conforming to EN166  
Eye wash bottle with pure water
- Hand protection : Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.
- Recommended: Butyl rubber/nitrile rubber gloves.  
Contaminated gloves should be removed.
- Skin and body protection : Dust impervious protective suit  
Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing and stirring work.
- Respiratory protection : In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.  
particulate filter P  
P1: Inert material; P2, P3: hazardous substances  
Ensure adequate ventilation. This can be achieved by local



exhaust extraction or by general ventilation. (EN 689 - Methods for determining inhalation exposure). This applies in particular to the mixing / stirring area. In case this is not sufficient to keep the concentrations under the occupational exposure limits then respiration protection measures must be used.

**Environmental exposure controls**

General advice : Do not flush into surface water or sanitary sewer system.

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**SECTION 9: Physical and chemical properties**

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

Physical state : solid  
Appearance : powder  
Colour : grey  
Odour : characteristic

Melting point/range / Freezing point : No data available

Boiling point/boiling range : No data available

Flammability (solid, gas) : No data available

**Upper/lower flammability or explosive limits**

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Flash point : Not applicable

Auto-ignition temperature : Not applicable

Decomposition temperature : No data available

pH : > 10 (20 °C)  
Concentration: 50 %

**Viscosity**

Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

**Solubility(ies)**

Water solubility : insoluble

Partition coefficient: n-octanol/water : No data available



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Vapour pressure	:	No data available
Density	:	ca. 1,2 g/cm <sup>3</sup> (20 °C)
Relative vapour density	:	No data available
Particle characteristics	:	No data available

## 9.2 Other information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

The product is chemically stable.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No hazards to be specially mentioned.

### 10.4 Conditions to avoid

Conditions to avoid : No data available

### 10.5 Incompatible materials

Materials to avoid : No data available

### 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

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## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Not classified due to lack of data.

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/eye irritation

Causes serious eye damage.

#### Respiratory or skin sensitisation

#### Skin sensitisation

May cause an allergic skin reaction.





**Respiratory sensitisation**

Not classified due to lack of data.

**Germ cell mutagenicity**

Not classified due to lack of data.

**Carcinogenicity**

Not classified due to lack of data.

**Reproductive toxicity**

Not classified due to lack of data.

**STOT - single exposure**

May cause respiratory irritation.

**STOT - repeated exposure**

Not classified due to lack of data.

**Aspiration toxicity**

Not classified due to lack of data.

**11.2 Information on other hazards**

**Endocrine disrupting properties**

**Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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**SECTION 12: Ecological information**

**12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..



## 12.6 Endocrine disrupting properties

**Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## 12.7 Other adverse effects

**Product:**

Additional ecological information : There is no data available for this product.

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : The generation of waste should be avoided or minimized wherever possible.  
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.  
Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.  
Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.  
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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## SECTION 14: Transport information

### 14.1 UN number or ID number

ADR : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA : Not regulated as a dangerous good

### 14.2 UN proper shipping name

ADR : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA : Not regulated as a dangerous good

### 14.3 Transport hazard class(es)



**ADR** : Not regulated as a dangerous good  
**IMDG** : Not regulated as a dangerous good  
**IATA** : Not regulated as a dangerous good

**14.4 Packing group**

**ADR** : Not regulated as a dangerous good  
**IMDG** : Not regulated as a dangerous good  
**IATA (Cargo)** : Not regulated as a dangerous good  
**IATA (Passenger)** : Not regulated as a dangerous good

**14.5 Environmental hazards**

Not regulated as a dangerous good

**14.6 Special precautions for user**

Not applicable

**14.7 Maritime transport in bulk according to IMO instruments**

Not applicable for product as supplied.

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**SECTION 15: Regulatory information**

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

International Chemical Weapons Convention (CWC) : Not applicable  
Schedules of Toxic Chemicals and Precursors

REACH Information: All substances contained in our Products are  
- registered by our upstream suppliers, and/or  
- registered by us, and/or  
- excluded from the regulation, and/or  
- exempted from the registration.

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : None of the components are listed (= > 0.1 %).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable



Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.  
Not applicable

Volatile organic compounds : Law on the incentive tax for volatile organic compounds (VOCV)  
no VOC duties

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)  
Not applicable

**Other regulations:**

Legislative Decree April 9,2008, 81 (Implementation of Article 1 of the Law of 3 August 2007, n. 123, concerning the protection of health and safety in the workplace.) and subsequent amendments

Legislative Decree April 3, 2006, n.152, (Environmental standards) and subsequent amendments

Legislative Decree February 6, 2009, 21 (Regulations for the execution of the provisions laid down in Regulation (EC) no. 648/2004 on detergents)

**15.2 Chemical safety assessment**

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

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**SECTION 16: Other information**

**Full text of H-Statements**

H315 : Causes skin irritation.  
H317 : May cause an allergic skin reaction.  
H318 : Causes serious eye damage.  
H335 : May cause respiratory irritation.

**Full text of other abbreviations**

Eye Dam. : Serious eye damage  
Skin Irrit. : Skin irritation  
Skin Sens. : Skin sensitisation  
STOT SE : Specific target organ toxicity - single exposure  
2017/164/EU : Europe. Commission Directive 2017/164/EU establishing a fourth list of indicative occupational exposure limit values  
ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
IT OEL : Italy. List of indicative limit values for professional exposure to chemical agents.  
2017/164/EU / STEL : Short term exposure limit  
2017/164/EU / TWA : Limit Value - eight hours



ACGIH / TWA	:	8-hour, time-weighted average
IT OEL / TWA	:	8 hour exposure limit
IT OEL / STEL	:	Short term exposure limit
ADR	:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	:	Chemical Abstracts Service
DNEL	:	Derived no-effect level
EC50	:	Half maximal effective concentration
GHS	:	Globally Harmonized System
IATA	:	International Air Transport Association
IMDG	:	International Maritime Code for Dangerous Goods
LD50	:	Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50	:	Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
MARPOL	:	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
OEL	:	Occupational Exposure Limit
PBT	:	Persistent, bioaccumulative and toxic
PNEC	:	Predicted no effect concentration
REACH	:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency
SVHC	:	Substances of Very High Concern
vPvB	:	Very persistent and very bioaccumulative

**Further information**

**Classification of the mixture:**

Skin Irrit. 2	H315
Eye Dam. 1	H318
Skin Sens. 1	H317
STOT SE 3	H335

**Classification procedure:**

Calculation method
Calculation method
Calculation method
Calculation method

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

|| Changes as compared to previous version !

IT / EN