





P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER.

#### **Supplementary information:**

Non-applicable

#### **2.3 Other hazards:**

vPvB Substances: None - PBT Substances: None

No other hazards

See at paragraph 11 the additional information concerning crystalline silica

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

#### **3.1 Substances**

N.A.

#### **3.2. Mixtures**

Hazardous components within the meaning of the CLP regulation and related classification:


$\geq 50\%$  -  $< 75\%$  free crystalline silica ( $\emptyset > 10 \mu$ )

CAS: 14808-60-7, EC: 238-878-4

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

$\geq 25\%$  -  $< 50\%$  Portland cement, Cr(VI)  $< 2$  ppm

CAS: 65997-15-1, EC: 266-043-4

 3.3/2 Eye Irrit. 2 H319

 3.8/3 STOT SE 3 H335

 3.2/2 Skin Irrit. 2 H315

 3.4.2/1 Skin Sens. 1 H317

$\geq 0.25\%$  -  $< 0.49\%$  free crystalline silica ( $\emptyset < 10 \mu$ )(\* )

CAS: 14808-60-7, EC: 238-878-4

 3.9/2 STOT RE 2 H373

### **SECTION 4: FIRST AID MEASURES**

#### **4.1 Description of first aid measures:**



In case of skin contact:

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely. In case of eye contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Wash the mouth thoroughly and drink plenty of water. In case of disease consult a physician immediately and present this safety-data sheet.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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

If inhaled, the product causes irritation in the airways. And if brought into contact with the skin, it causes appreciable inflammation, with erythema, scabs, and oedema.

If brought into contact with the eyes, the product causes serious eye injury, such as opacity of the cornea or lesions to the iris.

If brought into contact with the skin, the product may cause sensitization of the skin.

This preparation contains cement. Contact between cement and body fluids (e.g. sweat and eye fluids) may cause irritation or burns.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(See paragraph 4.1)

## **SECTION 5: FIREFIGHTING MEASURES**

### **5.1 Extinguishing media:**

Suitable extinguishing media:

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons: None in particular.

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

The product does not present a fire hazard

### **5.3 Advice for firefighters:**

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**



فیروزه نام پارس

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

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapors/dusts/aerosols. Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

### **6.2 Environmental precautions:**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand.

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

Rapidly recover the product, wearing protective clothing. Scoop into containers and seal for disposal.

After the product has been recovered, rinse the area and materials involved with water.

Wash with plenty of water.

### **6.4 Reference to other sections:**

See sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1 Precautions for safe handling:**

Avoid contact with skin and eyes and exposure to high dust concentration. Avoid powder development and deposit

Use localized ventilation system.

Contaminated clothing should be changed before entering eating areas. Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Fine dust may form explosive mixture with air. Keep away from open flames, heat and sparks. Do not remove shrink film in hazardous locations (because of risk of static charging/discharge)

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

Always keep the containers tightly closed.

Incompatible materials:

Keep away from water or from damp surroundings. Instructions as regards storage premises:

Adequately ventilated premises.

### **7.3 Specific end use(s):**

None in particular.

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



### 8.1 Control parameters:

Free crystalline silica ( $\emptyset > 10 \mu$ ) - CAS: 14808-60-7

ACGIH - LTE mg/m<sup>3</sup>(8h): 0.025 mg/m<sup>3</sup> - Notes: A2 (R) - Pulm fibrosis, lung cancer

Portland cement, Cr(VI) < 2 ppm - CAS: 65997-15-1

ACGIH - LTE mg/m<sup>3</sup>(8h): 1 mg/m<sup>3</sup> - Notes: A4, (E,R) - Pulm func, resp symptoms, asthma

Free crystalline silica ( $\emptyset < 10 \mu$ )(\*) - CAS: 14808-60-7

EU - LTE mg/m<sup>3</sup>(8h): 0.025 mg/m<sup>3</sup> - Notes: A2 (R) - Pulm fibrosis, lung cancer ACGIH

- LTE mg/m<sup>3</sup>(8h): 0,025 mg/m<sup>3</sup> - Notes: A2 (R) - Pulm fibrosis, lung cancer

#### DNEL (Workers):

Non-applicable

#### DNEL (Population):

Non-applicable

#### PNEC:

Non-applicable

### 8.2 Exposure controls:

#### Eye protection:

Safety goggles.

#### Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or Viton.

#### Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

#### Respiratory protection:

Not needed for normal use.

A dust mask (P2) should be worn if above exposure limits

In case of insufficient ventilation use mask with B type filters (EN 14387).

Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

#### Thermal Hazards:

None

#### Environmental exposure controls:

None

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties:

Appearance:	Powder
Color:	Various
Odor:	Typical
PH:	N.A.
PH (water dispersion, 10%):	12-12.5
Melting point / freezing point:	== °C



Initial boiling point and boiling range:	== °C
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapor density:	N.A.
Flash point:	== °C
Evaporation rate:	N.A.
Vapor pressure:	== kPa (23°C)
Relative density:	1.4 g/cm <sup>3</sup> (23°C)
Vapor density (air=1):	N.A.
Solubility in water:	partly soluble
Solubility in oil:	soluble
Viscosity:	N.A.
Auto-ignition temperature:	== °C
Explosion limits (by volume):	==
Decomposition temperature:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Explosive properties:	==
Oxidizing properties:	N.A.
<b>Other information:</b>	
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties:	N.A.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity:

Stable under normal conditions.

### 10.2 Chemical stability:

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions:

Stable under normal conditions.

### 10.4 Conditions to avoid:

Stable under normal conditions.

### 10.5 Incompatible materials:

Non in particular.

### 10.6 Hazardous decomposition products:

None.

## SECTION II: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects:

Route(s) of entry:

Ingestion: Yes

Inhalation: Yes

Contact: No

**Toxicological information related to the product:**

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information of the mixture: N.A.

Toxicological information of the main substances found in the mixture: N.A.

Corrosive/Irritating Properties:

Skin: The product can cause irritation by contact.

Eye: The product can cause damage to eyes by contact

Sensitizing Properties:

Frequent and prolonged skin contacts with cement paste may cause dermatitis.

Cancer genic Effects:

The IARC (International Agency for Research on Cancer) believes that the crystalline silica inhaled at the workplace can cause lung cancer in man.

However, it also points out that the cancer effect depends on the silica characteristics and on the biological-physical condition of the environment.

There is a large amount of information in support of the fact that increased risk of cancer is limited to persons suffering from silicosis.

In the current situation of studies, protection of workers from silicosis can be ensured by respecting the exposure limit values.

Mutagenic Effects: No effects are known.

Teratogenic Effects: No effects are known.

Additional Information:

Susceptibility to skin irritation and sensitization varies from person to person.

In a sensitized individual the allergic dermatitis may not appear until after several days or weeks of frequent and prolonged contact.

Therefore, even though the skin irritation potential is slight, skin contact should be avoided. Once sensitization has occurred, exposure of the skin to very small quantities of the material may cause erythema and edema.

For this reason, the contact with the skin should be avoided. Once sensitization has occurred, exposures to small amounts of material may cause erythema and edema locally.

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) Acute toxicity
- b) Skin corrosion/irritation
- c) Serious eye damage/irritation
- d) Respiratory or skin sensitisation
- e) Germ cell mutagenicity
- f) Carcinogenicity
- g) Reproductive toxicity
- h) STOT-single exposure



فیروزه فام پارس

- i) STOT-repeated exposure
- j) Aspiration hazard

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity:

Adopt good industrial practices, so that the product is not released into the environment. Not available data on the mixture

Biodegradability: not readily biodegradable Biodegradability: no data available on the preparation. N.A.

### 12.2 Persistence and degradability:

Not available

### 12.3 Bio accumulative potential:

Not available

### 12.4 Mobility in soil:

Not available

### 12.5 Results of PBT and vPvB assessment:

List of substances dangerous for the environment and corresponding classification: 49 ppm tin sulphate

CAS: 7488-55-3

R50 Very toxic to aquatic organisms. EC50 (Algae): 0.2 mg/l (72 hr)

vPvB Substances: None - PBT Substances: None

### 12.6 Other adverse effects:

Not available data on the mixture

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods:

Recover if possible. In so doing, comply with the local and national regulations currently in force. 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

Disposal of hardened product (EC waste code): 17 01 01

Disposal of not hardened product (EC waste code): 17 01 01

The suggested European waste code is just based on the composition of the product. According to the specific process or application field a different waste code may be necessary.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 UN number

Not classified as dangerous in the meaning of transport regulations. UN Number: ==

### 14.2 UN proper shipping name

N.A.

### 14.3 Transport hazard class(es)





Rail/Road (RID/ADR): no dangerous good  
ADR-Upper number: N.A.  
Air (ICAO/IATA): no dangerous good  
Sea (IMO/IMDG): no dangerous good N.A.

#### **14.4 Packing group**

N.A.

#### **14.5 Environmental hazards**

Marine pollutant: NO

#### **14.6 Special precautions for user**

N.A.

#### **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

N.A.

### **SECTION 15: REGULATORY INFORMATION (continue)**

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Dir. 2006/8/EC

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 453/2010 (Annex I)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: No restriction.

Restrictions related to the substances contained: No restriction.

REACH Regulation (1907/2006) – All. XVII

The product contains Cr (VI) under the limit established by annex. XVII pt.47. Respect the duration according to the information described on the packaging.

Legislative Decree no. 81 of the 9th of April 2008 Title XI "Dangerous substances - Chapter I - Protection against chemical agents"

Directive 2000/39/CE and s.m.i. (Professional threshold limit)

Legislative Decree no. 152 of the 3rd of April 2006 and subsequent modifications and additions. (Environmental regulations)

Directive 105/2003/CE (Seveso III): N.A.

ADR Agreement – IMDG Code – IATA Regulation

VOC (2004/42/EC) : N.A. g/l

Social Dialogue on Respirable Crystalline Silica

On April 26, 2006 was signed a multi-sector social dialogue, based on a "Guide to Good Practices", on workers' health protection who are in contact with products containing crystalline silica.



فیروزه فام پارس

The text of the agreement published in G.U. European Union (2006 / C 279/02) and the "Guide to Good Practices", with attachments, are available on [www.nepsi.eu](http://www.nepsi.eu) website, they offer guidelines and useful information for handling products containing reparable crystalline silica.

## 15.2 Chemical safety assessment:

No

## SECTION 16: OTHER INFORMATION

Text of phrases referred to under heading 3:

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 15: Regulatory information

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX'S - Dangerous properties of industrial materials

Istituto Superiore di Sanità - Inventario Nazionale Sostanze Chimiche

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances. GefStoff

VO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients. KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population. LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.



- STOT: Specific Target Organ Toxicity.
- TLV: Threshold Limiting Value.
- TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
- OEL: European threshold limit value
- VLE: Threshold Limiting Value.
- WGK: German Water Hazard Class.
- TSCA: United States Toxic Substances Control Act Inventory
- DSL: DSL - Canadian Domestic Substances List