

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product identifier:

Product name: POTASSIUM SILICATE POWDER
REACH registered number(s): 01-2119456888-17-XXXX
CAS number: 1312-76-1
EINECS number: 215-199-1

Relevant identified uses of the substance or mixture and uses advised against:

Use of substance / mixture: Corrosion inhibitor. Chemical for the chemical industry Dust control. Binding agent. Flame retardant. Flotation agent. Stabiliser. Viscosity control agent.

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Classification under CLP: STOT SE 3: H335; Eye Irrit. 2: H319; Skin Irrit. 2: H315

Most important adverse effects: Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Label elements:

Hazard statements: H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Hazard pictograms: GHS07: Exclamation mark



Signal words: Warning

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Precautionary statements:

P261: Avoid breathing dust.

P262: Do not get in eyes, on skin, or on clothing.

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

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards:

PBT: This product is not identified as a PBT/vPvB substance.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances:

Chemical identity: POTASSIUM SILICATE POWDER

CAS number: 1312-76-1

EINECS number: 215-199-1

REACH registered number(s): 01-2119456888-17-XXXX

4. FIRST AID MEASURES

Description of first aid measures:

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

Most important symptoms and effects, both acute and delayed:

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Indication of any immediate medical attention and special treatment needed:

Immediate / special treatment: Eye bathing equipment should be available on the premises.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used.

Special hazards arising from the substance or mixture:

Exposure hazards: In combustion emits toxic fumes.

[cont...]

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Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not create dust.

Environmental precautions: Do not discharge into drains or rivers.

Methods and material for containment and cleaning up:

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method.

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

7. HANDLING AND STORAGE

Precautions for safe handling:

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air.

Conditions for safe storage, including any incompatibilities:

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Specific end use(s): No special requirement.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Workplace exposure limits: No data available.

DNEL/PNEC Values: POTASSIUM SILICATE POWDER

Type	Exposure	Value	Population	Effect
DNEL	Inhalation (repeated dose)	5.61mg/m ³	Workers	Systemic
DNEL	Dermal (repeated dose)	1.49/mg/kg bw/day	Workers	Systemic
DNEL	Oral (repeated dose)	0.74/mg/kg bw/day	Consumers	Systemic
DNEL	Inhalation (repeated dose)	1.38mg/m ³	Consumers	Systemic
DNEL	Dermal (repeated dose)	0.74/mg/kg bw/day	Consumers	Systemic

[cont...]

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Hazardous ingredients: POTASSIUM SILICATE POWDER

Type	Exposure	Value	Population	Effect
DNEL	Inhalation (repeated dose)	5.61mg/m3	Workers	Systemic
DNEL	Dermal (repeated dose)	1.49/mg/kg bw/day	Workers	Systemic
DNEL	Oral (repeated dose)	0.74/mg/kg bw/day	Consumers	Systemic
DNEL	Inhalation (repeated dose)	1.38mg/m3	Consumers	Systemic
DNEL	Dermal (repeated dose)	0.74/mg/kg bw/day	Consumers	Systemic

Exposure controls:

Engineering measures:	Ensure there is sufficient ventilation of the area.
Respiratory protection:	Respiratory protective device with particle filter.
Hand protection:	Protective gloves.
Eye protection:	Safety glasses. Ensure eye bath is to hand.
Skin protection:	Protective clothing.
Environmental:	Refer to specific Member State legislation for requirements under Community environmental legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

State:	Powder
Colour:	White
Odour:	Odourless
Solubility in water:	Soluble
Melting point/range°C:	>1000
pH:	<7 9
Other information:	No data available.

10. STABILITY AND REACTIVITY

Reactivity: Stable under recommended transport or storage conditions.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions:

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

Conditions to avoid: Heat.

Incompatible materials:

Materials to avoid: Strong oxidising agents. Strong acids.

Hazardous decomposition products:

Haz. decomp. products: In combustion emits toxic fumes.

[cont...]

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	>5000	mg/kg
DERMAL	RAT	LD50	>5000	mg/kg

Hazardous ingredients: POTASSIUM SILICATE POWDER

DERMAL	RAT	LD50	>5000	mg/kg
ORAL	RAT	LD50	>5000	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated

Symptoms / routes of exposure:

Skin contact:	There may be irritation and redness at the site of contact.
Eye contact:	There may be irritation and redness. The eyes may water profusely.
Ingestion:	There may be soreness and redness of the mouth and throat.
Inhalation:	There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing. Delayed / immediate effects: Immediate effects can be expected after short-term exposure.
Other information:	Not applicable.

12. ECOLOGICAL INFORMATION

Toxicity:

Ecotoxicity values:

Species	Test	Value	Units
FISH	96H LC50	>146	mg/l
Daphnia magna	48H EC50	>146	mg/l

Hazardous ingredients: POTASSIUM SILICATE POWDER

Daphnia magna	48H EC50	>146	mg/l
FISH	96H LC50	>146	mg/l

Persistence and degradability: Not applicable.

Bioaccumulative potential: No bioaccumulation potential.

Mobility in soil:

Mobility: Soluble in water.

Results of PBT and vPvB assessment:

PBT identification: This product is not identified as a PBT/vPvB substance.

Other adverse effects: Negligible ecotoxicity.

[cont...]

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

Transport class: This product does not require a classification for transport.

15. REGULATORY INFORMATION

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

Specific regulations: Not applicable.

Chemical safety assessment: A chemical safety assessment has been carried out for the substance or the mixture by the supplier.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008.

Phrases used in s.2 and s.3: H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Legal disclaimer: The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.