

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

Product identifier:

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

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

Use of substance / mixture: Corrosion inhibitor.
Chemical for the chemical industry.
Dust binding agents.
Flame retardant and fire preventing agents.
Flotation agent.
Stabilisers.
Viscosity adjusters.

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

Skin corrosion/irritation, Category 2 - H315

Serious eye damage/eye irritation, Category 2 - H319

Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation – H335

Full text of H- and EUH-statements: See section 16.

Adverse physicochemical, human health and environmental effects

May cause respiratory irritation.
Causes skin irritation.
Causes serious eye irritation.

[cont...]

SAFETY DATA SHEET

Potassium Silicate Powder

Issued: 05/03/2024

Page 2

Label elements:

Labelling according to Regulation (EC) No. 1272/2008 [CLP]:

Hazard pictograms (CLP): GHS07



Signal words (CLP): Warning.

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

Precautionary statements (CLP): P261: Avoid breathing dust.
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: No additional information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances:

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008
Potassium Silicate Powder	CAS No.: 1312-76-1	100	Skin Irrit. 2, H315
	EC No.: 215-199-1		Eye Irrit. 2, H319
	REACH No.: 01-2119456888-17-XXXX		STOT SE 3, H335

4. FIRST AID MEASURES

Description of first aid measures:

First-aid measures general: Call a poison centre or a doctor if you feel unwell.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Call a poison centre or a doctor if you feel unwell.

First-aid measures after skin contact: Take off contaminated clothing. Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth out with water. Call a doctor.

[cont...]

Most important symptoms and effects, both acute and delayed:

Symptoms/effects after inhalation: May cause respiratory irritation. May cause shortness of breath, tightness of the chest, a sore throat and cough.

Symptoms/effects after skin contact: Irritation.

Symptoms/effects after eye contact: Eye irritation. redness, itching, tears.

Symptoms/effects after ingestion: Irritation to throat.

Indication of any immediate medical attention and special treatment needed: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Special hazards arising from the substance or mixture:

Hazardous decomposition products in case of fire: Toxic fumes may be released.

Advice for fire-fighters:

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Emergency procedures: Avoid dust production. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Keep upwind.

For emergency responders:

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Environmental precautions: Do not discharge into drains or rivers.

Methods and material for containment and cleaning up:

Methods for cleaning up: Mechanically recover the product. Transfer the product into a spare container: Suitably labelled.

Other information: Dispose of materials or solid residues at an authorized site.

Reference to other sections: For further information refer to section 8: "Exposure controls/personal protection".
For further information refer to section 13.

7. HANDLING AND STORAGE

Precautions for safe handling:

Precautions for safe handling: Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Avoid creating or spreading dust.

Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities:

Storage conditions: Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Specific end use(s): No additional information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

National occupational exposure and biological limit values: No additional information available.

Recommended monitoring procedures: No additional information available.

Air contaminants formed: No additional information available.

DNEL and PNEC:

POTASSIUM SILICATE POWDER (1312-76-1)

DNEL/DMEL (Workers):

Long-term - systemic effects, dermal: 1.49 mg/kg bodyweight/day

Long-term - systemic effects, inhalation: 5.61 mg/m³

DNEL/DMEL (General population):

Long-term - systemic effects, oral: 0.74 mg/kg bodyweight/day

Long-term - systemic effects, inhalation: 1.38 mg/m³

Long-term - systemic effects, dermal: 0.74 mg/kg bodyweight/day

Control banding: No additional information available.

Exposure controls:

Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the workstation.

Personal protection equipment:

Personal protective equipment symbol(s):



Eye and face protection:

Eye protection: Safety glasses.

Skin protection:

Skin and body protection: Wear suitable protective clothing.

Hand protection: Protective gloves.

Respiratory protection: Respiratory protective device with a particle filter.

Thermal hazards: No additional information available.

Environmental exposure controls: Avoid release to the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Physical state: Solid

Colour: White

Odour: Odourless

Odour threshold: No data available

pH: < 7

Relative evaporation rate (butylacetate=1): No data available

Melting point: > 1000

Freezing point: Not applicable

Boiling point: No data available

Flash point: Not applicable

Auto-ignition temperature: Not applicable

Decomposition temperature: No data available

Flammability (solid, gas): Non-flammable

Vapour pressure: No data available

Relative vapour density at 20°C: No data available

Relative density: No data available

Solubility: Soluble

Partition coefficient n-octanol/water (Log Pow): No data available

Viscosity, kinematic: Not applicable

Viscosity, dynamic: No data available

Explosive properties: No data available

Oxidising properties: No data available

Explosive limits: Not applicable

Other information: No additional information available

10. STABILITY AND REACTIVITY

Reactivity: The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: No dangerous reactions known under normal conditions of use.

Conditions to avoid: Heat.

Incompatible materials:

Materials to avoid: Strong acids. Strong oxidising agents.

Hazardous decomposition products: On combustion releases: Toxic fumes.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

Acute toxicity (oral): Not classified.

Acute toxicity (dermal): Not classified.

Acute toxicity (inhalation): Not classified.

POTASSIUM SILICATE POWDER (1312-76-1)

LD50 oral rat > 5000 mg/kg

LD50 dermal rat > 5000 mg/kg

Skin corrosion/irritation: Causes skin irritation.
pH: < 7

Serious eye damage/irritation: Causes serious eye irritation.
pH: < 7

Respiratory or skin sensitisation: Not classified.

Germ cell mutagenicity: Not classified.

Carcinogenicity: Not classified.

Reproductive toxicity: Not classified.

STOT-single exposure: May cause respiratory irritation.

STOT-repeated exposure: Not classified.

Aspiration hazard: Not classified.

12. ECOLOGICAL INFORMATION

Toxicity:

Ecology – general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute): Not classified.

Hazardous to the aquatic environment, long-term (chronic): Not classified.
Not rapidly degradable.

[cont...]

SAFETY DATA SHEET
Potassium Silicate Powder

Issued: 05/03/2024

Page 7

Persistence and degradability: No additional information available.

Bioaccumulative potential: No additional information available.

Mobility in soil:

Ecology – soil: Soluble in water.

Results of PBT and vPvB assessment: No additional information available.

Other adverse effects: No additional information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

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:

National regulations: No additional information available.

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

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.