



Precautionary Statements Do not breathe dust / fume / gas / mist / vapours / spray. Use only outdoors or in a well-ventilated area. Wear protective gloves / protective clothing / eye protection / face protection. **IF ON SKIN** (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. **IF IN EYES**: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. **IF SWALLOWED**: Rinse mouth. Do NOT induce vomiting.

## Section 3. Composition

### 3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Sodium metasilicate	6834-92-0	229-912-9	01-2119449811-37-XXXX	>98%	Met. Corr. 1, Skin Corr. 1B, Eye Dam. 1, STOT SE 3 (I)

## Section 4. First Aid

### 4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If irritation persists or there is any sign of skin damage, seek IMMEDIATE MEDICAL ASSISTANCE
Inhalation	Remove from exposure.
Ingestion	If conscious give plenty of water to drink. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

## Section 5. Fire Fighting

### 5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

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

Hazards	Solutions react with aluminium, zinc, tin and their alloys to liberate flammable hydrogen gas.
---------	--

### 5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.
-------------------------	---

## Section 6. Accidental Release Measures

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

Personal Protection	Avoid breathing dust. Use approved personal protective equipment. Evacuate area immediately. Do not allow other people to enter area. Do not allow general use of area until it is safe to do so.
---------------------	---

### 6.2 Environmental precautions

Environmental	Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
---------------	--

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

Major Spillage	Shovel/sweep up into container for removal Neutralise area of spill with dilute acid wash to drain with copious amounts of water.
----------------	---

Minor Spillage

Wash area down with copious amounts of water.

#### 6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

## Section 7. Storage & Handling

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.

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

Store in a dry place protected against moisture and water.

### 7.3 Specific end use(s)

See section 1.2.

## Section 8. Workplace Exposure & Personal Protection

### 8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits	
			Long Term (8hr TWA)	Short Term 15min period
Sodium metasilicate	6834-92-0	>98%	-	-

Exposure data source(s) No occupational exposure data currently available.

### 8.2 Exposure controls

Respiratory Protection	If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.
Hand Protection	Use nitrile gloves or PVC gauntlets.
Eye Protection	Use chemical full face shield.
Skin Protection	If skin contact or contamination of clothing is likely, protective clothing must be worn. Wear PVC oversuit.
Special Hazards	No special precautions required.

## Section 9. Physical & Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance	White free flowing granular material.
Odour	Odourless.
pH	12 @ 20°C solution.
Boiling Point	Not available
Melting Point	1000°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	2.5000
Water Solubility	Completely soluble in water.

### 9.2 Other information

No data available.

## Section 10. Stability & Reactivity

<b>10.1</b>	Reactivity	No data available.
<b>10.2</b>	Chemical Stability	Stable under normal conditions
<b>10.3</b>	Possibility of hazardous reactions	No data available.
<b>10.4</b>	Conditions to Avoid	Avoid contact with acids.
<b>10.5</b>	Incompatible Materials	Acids. Solutions react with aluminium, zinc, tin and their alloys evolving flammable hydrogen gas.
<b>10.6</b>	Hazardous Decomposition Products	None unusual.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	The solid and solutions will cause burns.
Skin	Contact with the solid or solution will not lead to immediate pain but damage begins at once. Severe ulceration and scarring may occur in serious cases.
LD50 Skin	Not available
Ingestion	Ingestion will cause severe mouth burns, and if swallowed extensive damage to the oesophagus.
LD50 Oral	1280mg/kg Rat
Inhalation	Inhalation of dust will produce irritation of the eyes, nose, throat and respiratory tract.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

## Section 12. Ecological

<b>12.1</b>	Toxicity	On dilution, material depolymerises to species indistinguishable from natural silica. However, the pH will be above acceptable limits.
	LC50 Algal	Not available
	LC50 Crustacea	1700mg/l Daphnia magna (48 hours)
	LC50 Fish	210mg/l Fish (96 hours)
<b>12.2</b>	Persistence and degradability	No data available.
<b>12.3</b>	Bioaccumulative potential	No data available.
<b>12.4</b>	Mobility in soil	No data available.
<b>12.5</b>	Results of PBT & vPvB assessment	Assessment not required.
<b>12.6</b>	Other adverse effects	None known at present.

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

Disposal Methods	Dilute in a large excess of water and carefully neutralise with an acid, then wash to drain with copious amounts of water
Contaminated Packaging	Very carefully wash out containers with water. Use a licensed waste disposer.

## Section 14. Transport Information

<b>14.1 UN Number</b>	3253
<b>14.2 Proper Shipping Name</b>	Disodium trioxosilicate
<b>14.3 Transport classes</b>	
UN classification	8
Subsidiary hazard(s)	None
Transport category	3
ADR Hazard ID	80
Tunnel Restriction Code	E
<b>14.4 Packing Group</b>	III
<b>14.5 Environment hazards</b>	See section 12.
<b>14.6 Special precautions for user</b>	No special precautions required.
<b>14.7 Transport in bulk</b>	Not transported in bulk.



## Section 15. Regulatory Information

### 15.1 Safety, health and environment regulations specific for substance/mixture.

#### Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Corrosive to metals, category 1; Skin corrosion/irritation, category 1B; Serious eye damage/irritation, category 1; Spec target organ tox - single, category 3

Signal word Danger

Hazard Pictograms



Hazard Statements H314+H318, H335, H290  
Causes severe skin burns and eye damage. May cause respiratory irritation. May be corrosive to metals.

Precautionary Statements P260, P271, P280, P303+P361+P353, P305+P351+P338, P301+P330+P331  
Do not breathe dust / fume / gas / mist / vapours / spray. Use only outdoors or in a well-ventilated area. Wear protective gloves / protective clothing / eye protection / face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

### 15.2 Chemical safety assessment

Assessment not required.

## Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 1.1 (Supercedes revision 1.0)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 16 September 2024

Copyright: 2024 Scientific Laboratory Supplies