

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: SODIUM SILICATE SOLUTION
CAS number: 6834-92-0
Product code: B8A71572
Synonyms: WATER GLASS
SODIUM TRISILICATE SOLUTION

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

Use of substance / mixture: Laboratory Chemicals, Manufacture of Substances.

1.3. Details of the supplier of the safety data sheet

Company name: PHILIP HARRIS
2 Gregory Street
Hyde
Cheshire
SK14 4HR
United Kingdom
Tel: +44 (0)845 1200 506
Fax: +44 (0)161 367 2140
Email: enquiries@philipharris.co.uk

1.4. Emergency telephone number

Emergency tel: +44 (0) 845 1200 506

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

Corrosive to metals (Category 1), H290
Skin Corrosion (Category 1), H314
Serious eye damage (Category 1), H318
Specific target organ toxicity - single exposure (Category 3) Respiratory system, H335

2.2. Label Elements

Label elements:

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard Statement(s)

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage

H335

May cause respiratory irritation

[cont...]

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Precautionary statements: P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.
P305+351+338+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.

2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

DISODIUM METASILICATE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
229-912-9	6834-92-0	-	Skin Corr. 1B: H314; STOT SE 3: H335	30-50%

Non-classified ingredients:

WATER

EINECS	CAS	CHIP Classification	CLP Classification	Percent
-	7732-18-5	-	-	30-50%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Protect Uninjured eye. Remove contact lenses, if present and easy to do. Consult a doctor.

Ingestion: Wash out mouth with water. Never give anything by mouth to an unconscious person. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Move to fresh air in case of accidental inhalation of vapours. Consult a doctor.

4.2. 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 pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

[cont...]

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Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

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

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

Immediate / special treatment: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: CO₂, dry sand Water spray. Dry chemical powder. Alcohol resistant foam.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of sodium oxide gases. Silicon Oxides

5.3. Advice for fire-fighters

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

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to a safe area.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

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

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid contact with skin & eyes. Avoid formation of dust & aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep away from heat, sparks and open flames. Keep Container tightly closed in a cool, well-ventilated place. Containers which are open must be carefully resealed and kept upright to prevent leakage.

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Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): Apart from uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full face respirator with multi purpose combination (US) or type AXBEK (EN14387 respirator cartridges as a back up to engineering controls. Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use.

Wash and dry hands. Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Eye protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU). Ensure eye bath is to hand.

Skin protection: Protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Environmental: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: No data available

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: No data available

Boiling point/range°C: No data available.

Flammability limits %: lower: No data available.

Flash point°C: No data available.

Autoflammability°C: No data available.

Relative density: 1.39g/cm³ @ 25oC

VOC g/l: No data available.

Melting point/range°C: No data available.

upper: No data available.

Part.coeff. n-octanol/water: No data available.

Vapour pressure: No data available.

pH: No data available.

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: No data available.

10.2. Chemical stability

Chemical stability: No data available.

10.3. Possibility of hazardous reactions

Hazardous reactions: No data available.

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

Haz. decomp. products: No data available.

Section 11: Toxicological information

11.1. Information on toxicological effects

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Toxicity values:

Route	Species	Test	Value	Units
ORL	RAT	LD50	790	mg/kg
ORL	MUS	LD50	2680	mg/kg
IVN	RAT	LD50	310	mg/kg
IVN	MUS	LD50	525	mg/kg

Hazardous ingredients:

DISODIUM METASILICATE

ORL	MUS	LD50	770	mg/kg
ORL	RAT	LD50	1153	mg/kg

Relevant hazards for substance:

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 pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

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

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
FISH	96H LC50	1840	mg/l
DAPHNIA	48H EC50	1983	mg/l

12.2. Persistence and degradability

Persistence and degradability: Expected to be biodegradable. Miscible with water, persistence is unlikely, based on information available. Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

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12.3. Bioaccumulative potential

Bioaccumulative potential: Bioaccumulation is unlikely.

12.4. Mobility in soil

Mobility: Soluble in water.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Disposal of packaging: Dispose of as unused product.

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

Section 14: Transport information

14.1. UN number

UN number: UN3266

14.2. UN proper shipping name

Shipping name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: I

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 1

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H314: Causes severe skin burns and eye damage.

H335: May cause respiratory irritation.

H290: May be corrosive to metals.

Legal disclaimer: and shall be used only as a guide. This company shall not be held liable for any lusive damage resulting from handling or from contact with the above product.