

# SAFETY DATA SHEET

## SODIUM METASILICATE PENTAHYDRATE

MYYY676

### 1. Identification of the substance/preparation and of the company/undertaking

<b>Product name</b>	<b>: SODIUM METASILICATE PENTAHYDRATE</b>	<b>Supplier</b>	<b>: Brenntag UK and Ireland Albion House Rawdon Park Green Lane Yeadon Leeds LS19 7XX</b>
<b>Synonyms</b>	<b>: disodiumtrioxosilicate, pentahydrate</b>		
<b>Chemical formula</b>	<b>: Na<sub>2</sub>SiO<sub>3</sub>·5H<sub>2</sub>O</b>		
<b>EMERGENCY ONLY TELEPHONE NUMBER</b>	<b>: (N.C.E.C. CULHAM) 01865 407333</b>	<b>Telephone No.</b>	<b>: (0113) 3879200</b>
		<b>Fax No.</b>	<b>: (0113) 3879280</b>
		<b>Molecular Mass</b>	<b>: 212.0608</b>

### 2. Composition/information on ingredients

**Substance/Preparation** : Substance

Chemical name*	CAS No.	%	EC Number	Symbol	R-Phrases
1) SODIUM METASILICATE PENTAHYDRATE	10213-79-3	100	229-912-9	C	R34, R37

\* Occupational Exposure Limit(s), if available, are listed in Section 8

<b>CAS No.</b>	10213-79-3
<b>EINECS Number</b>	229-912-9

### 3. Hazards identification

**Human health hazards** : Causes burns.  
Irritating to respiratory system.

### 4. First-aid measures

#### First-Aid measures

- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention immediately.
- Ingestion** : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : In case of contact, immediately flush skin copiously with water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Obtain medical attention immediately.
- Eye Contact** : In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Obtain medical attention immediately.

#### Effects and symptoms

- Inhalation** : Hazardous in case of inhalation (lung irritant). Inhalation of dust will produce irritation to gastrointestinal or respiratory tract, characterized by burning, sneezing and coughing. Overexposure by inhalation may cause respiratory irritation.
- Ingestion** : May be fatal if swallowed. May cause burns to mouth, throat and stomach.
- Skin contact** : corrosive The amount of tissue damage depends upon length of contact. Skin contact can produce inflammation and blistering.
- Eye Contact** : Corrosive to eyes. Eye contact can result in corneal damage or blindness.
- Aggravating conditions** : Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction or dermatitis. Repeated inhalation of dust can produce varying degrees of respiratory irritation or lung damage.

## 5. Fire-fighting measures

### Extinguishing Media

**Suitable** : SMALL FIRE: Use DRY chemical powder.  
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Hazardous thermal (de)composition products** : Some metallic oxides. Hydrogen

**Special fire-fighting procedures** : Fire fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

**Protection of fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

## 6. Accidental release measures

**Personal Precautions** : Splash goggles. Protective overalls/suit. Dust respirator. Boots. Gloves. If there is a significant airborne concentration then suitable breathing apparatus should be used to avoid inhalation of the product. Select appropriate protective clothing for the size of the spillage.

**Environmental precautions and cleanup methods** : Corrosive solid.  
Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapours. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Dispose of according to all federal, state and local applicable regulations. **Do not attempt to neutralise the spillage with acids unless you are sure it is safe to do so.**

## 7. Handling and storage

**Handling** : Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers may still contain significant residual amounts of the product. Ground all equipment containing material. Do not ingest. Do not breathe dust. Never add water to this product. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as metals, acids.

**Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.

### Packaging materials

**Recommended use** : Use original container. Stainless Steel.

## 8. Exposure controls/personal protection

**Engineering measures** : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Hygiene measures** : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

**Workplace Exposure Limits** : Not available.

### Personal protective equipment

**Respiratory system** : Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

**Skin and body** : Synthetic apron.

**Hands** : Gloves.

**Eyes** : Splash goggles.

## 9. Physical and chemical properties

**Physical state** : Solid. (Granular solid.)

**Colour** : White.

**Odour** : Odourless.

**Boiling point** : 110°C (230°F)

**Melting point** : 72°C (161.6°F)

**Density** : Not available.

**Solubility** : Easily soluble in cold water.

**pH** : 12.5 [Basic.]

**Flash point** : Not available.

## 10. Stability and reactivity

**Stability** : The product is stable.

**Materials to avoid** : Highly reactive with acids.  
Reactive with metals (Aluminium, zinc, tin, copper and their alloys).

**Hazardous decomposition products** : Some metallic oxides. Hydrogen

**11. Toxicological information****Local effects****Skin irritation** : Hazardous in case of skin contact (corrosive).**Eye irritation** : Hazardous in case of eye contact (irritant).**Acute toxicity** : Acute oral toxicity (LD50): 600 to 1350 mg/kg [Rat].**Chronic toxicity** : Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction or dermatitis. Repeated inhalation of dust can produce varying degrees of respiratory irritation or lung damage.**12. Ecological information****Bioaccumulative potential** : Not expected to bioaccumulate.**Ecotoxicity** : Not available.**13. Disposal considerations****Methods of disposal ; Waste of residues ; Contaminated packaging** : Waste must be disposed of in accordance with federal, state and local environmental control regulations.**Waste Classification** : Not applicable.**14. Transport information****International transport regulations****UN : UN number** 3253**UN : Proper shipping name** Disodium Trioxosilicate (SODIUM METASILICATE PENTAHYDRATE)**UN : Packing group** III**UN : Label****ADR/RID : Class** 8**IMDG : Proper shipping name** Disodium Trioxosilicate (SODIUM METASILICATE PENTAHYDRATE)**IMDG : Packing group** III**IMDG : Marine pollutant** Not pollutant.**IATA : Proper shipping name** Disodium Trioxosilicate (SODIUM METASILICATE PENTAHYDRATE)**IATA : Packing group** III**IATA : Additional Information** -**15. Regulatory information****EU Regulations****Hazard symbol(s)** :**Classification** : Corrosive**Risk Phrases** : R34- Causes burns.  
R37- Irritating to respiratory system.**Safety Phrases** : S2- Keep out of the reach of children.  
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.  
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).**Contains** : - SODIUM METASILICATE PENTAHYDRATE**Product Use** : Classification and labelling have been performed according to EU directives 67/548/EEC, 88/379/EEC, including amendments and the intended use.  
- Consumer applications.

**16. Other information**

**HISTORY**

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**Version** : 1  
**Prepared by** : Michael Hale / Alistair Hunter

**Notice to Reader**

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*

*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

**Version** 1

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