

Revision: 16 Jul 2018

# SAFETY DATA SHEET

#### SECTION 1 Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
  - Product Name: Sodium silicate liquid (molar ratio > 2.6; ≤ 3.2)
  - Synonyms: Sodium Silicate NS75
  - REACH Registration Number : 01-2119448725-31-0012
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
  - Use of the substance/mixture: Industrail, Consumer and Professional uses
- 1.3 Details of the supplier of the safety data sheet
  - Name of Supplier: Palatine Paints & Chemicals Limited
  - Address of Supplier: 55 Smallbrook Lane, Leigh, Lancashire, WN7 5PZ
  - Telephone: 01942 884122
  - Responsible Person: sales@palatinepaints.co.uk
  - Email: sales@palatinepaints.co.uk

1.4 Emergency telephone number

- Emergency Telephone: 01942 884122 (not 24 hrs)

### **SECTION 2** Hazards identification

Hazards summary: Alkaline solution. Cause skin irritation and serious eye irritation

2.1 Classification of the substance or mixture

- CLP: Skin Irrit. 2, Eye Irrit. 2
- CHIP:
- 2.2 Label elements



- Signal Word: Warning
- Hazard statements
   H315 Causes skin irritation.
   H319 Causes serious eye irritation.
- Precautionary statements

P262 - Do not get in eyes, on skin, or on clothing.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.

- 2.3 Other hazards
  - No information available

## **SECTION 3** Composition/information on ingredients

3.1 Substances

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### SECTION 3 Composition/information on ingredients (....)

- Sodium Silicate (molar ratio > 2.6; ≤ 3.2) CAS Number: 1344-09-8 Categories: Skin Irrit. 2, Eye Irrit. 2 H Statements: H315, H319 EC Number: 215-687-4 % w/w 20-60
- Water CAS Number: EC Number: 231-791-2 % w/w 40-80

#### SECTION 4 First aid measures

- 4.1 Description of first aid measures
  - General Information
  - Inhalation After inhalation of spray mist: bring to fresh air, seek medical advice if necessary.
  - Ingestion
     Rinse mouth and throat.
     Drink 1-2 glasses of water
     P313 Get medical advice/attention.
  - Contact with skin
     Rinse with running water and soap.
     Apply replenishing cream
     Remove contaminated clothing
  - Contact with eyes Immediately flush eyes with eyewash solution or water (for 10 minutes). Seek an oculist
- 4.2 Most important symptoms and effects, both acute and delayed
  - Causes skin irritation
  - Causes severe eye irritation
- 4.3 Indication of any immediate medical attention and special treatment needed
  - Speed in removal of material is of prime importance
  - Remove soiled clothing immediately

### SECTION 5 Fire-fighting measures

- 5.1 Extinguishing media
  - Inorganic material.
  - Not applicable
  - Treat fire according to surrounding area
- 5.2 Special hazards arising from the substance or mixture
  - Inorganic material.
  - Not applicable
- 5.3 Advice for firefighters
  - Wear protective chemical clothing

### SECTION 6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  - Avoid contact with skin and eyes
  - Danger of slipping on spilled product
- 6.2 Environmental Precautions
  - Do not allow to enter sewers/ surface or ground water
  - Prevent the spreading of the product into the environment by diking with sand or other absorbent material
  - Contact the authorities in the event of a large product spillage to water courses or sewage systems of if spillage has contaminated soil.
- 6.3 Methods and material for containment and cleaning up
  - Remove with liquid-absorbing material for example sand
  - Remove last traces by diluting with plenty of (warm) water.
- 6.4 Reference to other sections
  - See Section 8

#### SECTION 7 Handling and storage

- 7.1 Precautions for safe handling
  - Avoid contact with eyes, skin and clothing
  - Wear protective clothing as per section 8
  - Eye wash facilities should be readily available
- 7.2 Conditions for safe storage, including any incompatibilities
  - Keep packing/ storage vessel closed
  - Protect from freezing
  - Keep away from acid
  - Compatible materials: (Stainless) steel
  - Incompatible with metals: Zinc, Tin, Aluminum, Copper and their alloys
- 7.3 Specific end use(s)

- See Section 1.2

#### SECTION 8 Exposure controls/personal protection

- 8.1 Control parameters
  - No particular measures required
- 8.2 Exposure controls
  - Engineering methods to prevent or control exposure are preferred.
  - Handle in accordance with good industrial hygiene and safety practice.
  - If ventilation is insufficient wear dust mask or chemical respirator whichever is appropriate



- Wear chemical resistant gloves
- Wear tightly fitting safety goggles/ faceshield.
- Wear suitable protective clothing
- Avoid inhalation of spray

### SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

### SECTION 9 Physical and chemical properties (....)

- Appearance: Viscous liquid colourless to translucent
- Odour: Odourless
- pH: (value) 1% solutions ranges from from 11 to 13
- Melting point/Range: 0 to -12 °C
- Boiling Point/Range: 100 °C
- Density: 1.30- 1.60 kg/l
- Solubility in water: Soluble
- Viscosity: Viscosity 10 to 10,000 mPas at 20 deg C
- 9.2 Other information
  - No information available

### SECTION 10 Stability and reactivity

- 10.1 Reactivity
  - See Section 10.3
- 10.2 Chemical stability
  - Stable under normal conditions
- 10.3 Possibility of hazardous reactions
  - Aqueous solutions will react with aluminium, zinc, tin, copper and their alloys evolving hydrogen gas which can form an explosive mixture with air.
  - Exothermic reaction if in contact with acids
- 10.4 Conditions to avoid
  - Avoid contact in concentrated form with acids.
- 10.5 Incompatible materials
  - Avoid contact with aluminum,zinc,tin, copper and their alloys
- 10.6 Hazardous Decomposition Products
  - No information available

#### **SECTION 11** Toxicological information

Acute Toxicity : The hazard of sodium silicates by all routes comes from its alkalinity

11.1 Information on toxicological effects

- LD50 (oral, rat) 3,400 mg/kg
- LD50 (dermal rat) > 5000 mg/kg
- LC50 (Inhalation rat) 2060 mg/m<sup>3</sup>
- Inhalation : Irritation of the respiratory system
- Skin contact : Causes skin irritation
- Eye contact: Causes serious eye irritation
- Carcinogenicity No structural alerts
- Mutagenicity No evidence of genotoxicity. In vitro/in vivo negative
- Sensitization:Not sensitising
- Reproductive toxicity Effects on fertility: NOAEL (rat) > 159 mg/kg/bw/d.
  - Developmental toxicity: NOAEL (mouse) > 200 mg/kg/bw/d

### SECTION 12 Ecological information

- 12.1 Toxicity
  - LC50 (Brachydanio rerio) 1108 mg/l (96 hr)
  - EC50 (Daphnia magna) 1700 mg/l (48 hr)

### SECTION 12 Ecological information (....)

- EC50 (scenedesmus subspicatus) biomass 207 mg/l (72 hr)
- EC50 (scenedesmus subspicatus) growth rate > 345.4 mg/l (72 hr)
- 12.2 Persistence and degradability
  - Inorganic
  - Soluble silicates upon dilution rapidly depolymerise into molecular species indistinguishable from natural dissolved silica. They combine with ions like Ca, Mg, Fe, Al and others to end up as insoluble compounds similar to constituents of natural soils.
- 12.3 Bioaccumulation Potential
  - Inorganic
  - The product is not bioaccumlating
- 12.4 Mobility in soil
  - Not applicable
- 12.5 Results of PBT and vPvB assessment
  - Not Classified as PBT/vPvB by current EU criteria.
- 12.6 Other Adverse Effects
  - The alkalinity of this marterial will have a local effect on ecosystems sensitive to changes in pH.

#### **SECTION 13** Disposal considerations

- 13.1 Waste treatment methods
  - Dispose of waste packaging and residues in accordance with local authority requirements

#### **SECTION 14** Transport information

- 14.1 UN Number
  - UN No.: None
- 14.2 UN Proper Shipping Name
  - Proper Shipping Name: None
- 14.3 Transport hazard class(es)
  - Hazard Class: None
- 14.4 Packing group
  - Packing Group: None
- 14.5 Environmental hazards
  - No information available
- 14.6 Special precautions for user
  - See Section 7.2
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC code
  - Not applicable

#### SECTION 15 Regulatory information

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

- TSCA Inventory: Included
- Australian Inventory of Chemicals Substances (AICS): Included
- DSL/NDSL Inventory: Included

## SECTION 15 Regulatory information (....)

15.2 Chemical Safety Assessment

### SECTION 16 Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- H315: Causes skin irritation. H319: Causes serious eye irritation.

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its accuracy, reliability or completeness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. It is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use.

This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

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