

This safety data sheet was created pursuant to the requirements of:  
UK REACH Regulations (SI 2019/758 as amended)

**Supersedes date** 22-Jan-2020

**Revision date** 22-Jan-2020

**Revision Number** 3.02

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

### **1.1. Product identifier**

|                                           |                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code(s)</b>                    | 21783                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Safety data sheet number</b>           | 21783                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Product Name</b>                       | SODIUM METASILICATE PENTAHYDRATE                                                                                                                                                                                                                                                                                                                                                   |
| <b>Index No</b>                           | 014-010-00-8                                                                                                                                                                                                                                                                                                                                                                       |
| <b>EC Number</b>                          | 229-912-9                                                                                                                                                                                                                                                                                                                                                                          |
| <b>CAS No</b>                             | 10213-79-3                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Synonyms</b>                           | SIMET 5GS, METSO 510, DISODIUM TRIOXOSILICATE PENTAHYDRATE, METSO 520, NATRIUMMETASILIKAT 5-HYD 14-30, NATRIUMMETASILIKAT 5-HYDRAT M, NATRIUMMETASILIKAT 5-HYDRAT F, NATRIUMMETASILIKAT 5-HYD 18-60 MESH, SOD METASILICATE PENTAHYD MED 520, SOD METASILICATE PENT FINE SILM, SOD METASILICATE PENTAHYD MED SLO, SOD METASILICATE PENTAHYD QNO, SOD METASILICATE PENTAHYD FINE 510 |
| <b>Pure substance/mixture</b>             | Substance                                                                                                                                                                                                                                                                                                                                                                          |
| Contains SODIUM METASILICATE PENTAHYDRATE |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Formula</b>                            | $\text{Na}_2\text{SiO}_3 \cdot 5\text{H}_2\text{O}$                                                                                                                                                                                                                                                                                                                                |
| <b>Molecular weight</b>                   | 212.14 g/mol                                                                                                                                                                                                                                                                                                                                                                       |

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

|                        |                                                                                                               |
|------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>Recommended use</b> | Industrial use<br>Professional use<br>Consumer use<br>For further information, see attached Exposure Scenario |
|------------------------|---------------------------------------------------------------------------------------------------------------|

### **1.3. Details of the supplier of the safety data sheet**

#### **Supplier**

Univar Solutions UK Ltd  
Aquarius House  
6 Mid Point Business Park  
Bradford  
GBR

For further information, please contact

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| <b>E-mail address</b>                 | SDS.EMEA@univarsolutions.com      |
| <b>Non-Emergency Telephone Number</b> | +44 1274 267300 / +44 1274 267306 |

### **1.4. Emergency telephone number**

Emergency Telephone

SGS - +32 (0)3 575 55 55 (24h)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

|                                                  |                                    |
|--------------------------------------------------|------------------------------------|
| Corrosive to metals                              | Category 1 - (H290)                |
| Skin corrosion/irritation                        | Category 1 Sub-category B - (H314) |
| Serious eye damage/eye irritation                | Category 1 - (H318)                |
| Specific target organ toxicity — single exposure | Category 3 - (H335)                |
| Category 3 Respiratory irritation                |                                    |

**2.2. Label elements**

Contains SODIUM METASILICATE PENTAHYDRATE



**Signal word**  
Danger

**Hazard statements**

H314 - Causes severe skin burns and eye damage

H335 - May cause respiratory irritation

H290 - May be corrosive to metals

**Precautionary statements**

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P280 - Wear protective gloves/protective clothing and eye/face protection

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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

P310 - Immediately call a POISON CENTER or doctor

**Additional information**

This product requires child resistant fastenings if supplied to the general public. This product requires tactile warnings if supplied to the general public.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

| Chemical name       | Weight-%  | EC No (EU Index No)    | UK REACH registration number | Classification according to GB CLP (SI 2020/1567 as amended) | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|---------------------|-----------|------------------------|------------------------------|--------------------------------------------------------------|------------------------------------|----------|----------------------|
| SODIUM METASILICATE | 90 - 100% | 229-912-9 (014-010-00) | -                            | Skin Corr. 1B (H314)<br>Met. Corr. 1 (H290)                  | -                                  | -        | -                    |

|                            |  |     |  |                                       |  |  |  |
|----------------------------|--|-----|--|---------------------------------------|--|--|--|
| PENTAHYDRATE<br>10213-79-3 |  | -8) |  | STOT SE 3 (H335)<br>Eye Dam. 1 (H318) |  |  |  |
|----------------------------|--|-----|--|---------------------------------------|--|--|--|

**Full text of H- and EUH-phrases: see section 16**

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (UK REACH Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General advice</b>                     | Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. Development of symptoms may be delayed for 24 to 48 hours.                                                                                                                                                                                                                                                                                                            |
| <b>Inhalation</b>                         | Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical attention. |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.                                                                                                                                                                                                               |
| <b>Skin contact</b>                       | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Do not remove clothing if it sticks to the skin. Immediate medical attention is required.                                                                                                                                                                                                                                                                    |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.                                                                                                                                                                                                                                                                                                                                            |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Wear personal protective clothing (see section 8).                                                                                                                                        |

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

|                   |                                                                                                                                                                                                                                                     |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Symptoms</b>   | Burning sensation.                                                                                                                                                                                                                                  |
| <b>Inhalation</b> | Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. May cause respiratory irritation.                                                                                             |
| <b>Eyes</b>       | Burning sensation. Corrosive to the eyes and may cause severe damage including blindness.                                                                                                                                                           |
| <b>Dermal</b>     | Burning sensation. Skin corrosion/irritation.                                                                                                                                                                                                       |
| <b>Ingestion</b>  | Nausea Diarrhoea. Stomach pain Causes severe burns and corrosion of mouth, throat and oesophagus, with immediate pain and difficulty in swallowing Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation |

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

|                        |                                                                                                                                                                                                                                                                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Note to doctors</b> | Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## SECTION 5: Firefighting measures

**5.1. Extinguishing media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

**5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours. Product reacts with water. Keep away from heat, sparks and open flame. Reacts with some metals releasing flammable hydrogen.

**5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid generation of dust. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**6.3. Methods and material for containment and cleaning up**

**Methods for containment** Contain spill and move containers from spill area. Dam spills and pump to remove. Prevent dust generation by adding water to spilled product, then sweep up into a closed container for disposal.

**Methods for cleaning up** Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Clean contaminated surface thoroughly. For waste disposal, see section 13.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**

**Reference to other sections** See section 8 for more information. See section 13 for more information.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Avoid breathing vapours or mists. Avoid generation of dust. Keep away from heat,

sparks and open flame. Ensure that eyewash stations and safety showers are close to the workstation location.

**General hygiene considerations**

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas.

**7.2. Conditions for safe storage, including any incompatibilities****Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials. Suitable container/equipment material: Polyethylene (PE). Polypropylene. stainless steel. Unsuitable container/equipment material. Metals. Aluminium. Zinc. copper. Store away from incompatible materials. See section 10 for more information.

**7.3. Specific end use(s)****Specific use(s)**

See section 1 for more information.

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure Limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL) - Workers**

| Chemical name                                     | Oral | Dermal                 | Inhalation                     |
|---------------------------------------------------|------|------------------------|--------------------------------|
| SODIUM METASILICATE<br>PENTAHYDRATE<br>10213-79-3 |      | 1.49 mg/kg/day [4] [6] | 6.22 mg/m <sup>3</sup> [4] [6] |

[6] Long term.

**Derived No Effect Level (DNEL) - General Public**

| Chemical name                                     | Oral                   | Dermal                 | Inhalation                     |
|---------------------------------------------------|------------------------|------------------------|--------------------------------|
| SODIUM METASILICATE<br>PENTAHYDRATE<br>10213-79-3 | 0.74 mg/kg/day [4] [6] | 0.74 mg/kg/day [4] [6] | 1.55 mg/m <sup>3</sup> [4] [6] |

[6] Long term.

**Predicted No Effect Concentration (PNEC)**

| Chemical name                       | Freshwater | Freshwater<br>(intermittent release) | Marine water | Marine water<br>(intermittent release) | Air |
|-------------------------------------|------------|--------------------------------------|--------------|----------------------------------------|-----|
| SODIUM METASILICATE<br>PENTAHYDRATE | 7.5 mg/l   | 7.5 mg/l                             | 1 mg/l       |                                        |     |

| Chemical name | Freshwater | Freshwater<br>(intermittent release) | Marine water | Marine water<br>(intermittent release) | Air |
|---------------|------------|--------------------------------------|--------------|----------------------------------------|-----|
| 10213-79-3    |            |                                      |              |                                        |     |

| Chemical name                                     | Freshwater<br>sediment | Marine sediment | Sewage treatment | Soil | Food chain |
|---------------------------------------------------|------------------------|-----------------|------------------|------|------------|
| SODIUM METASILICATE<br>PENTAHYDRATE<br>10213-79-3 |                        |                 | 1000 mg/l        |      |            |

**8.2. Exposure controls****Engineering controls**

Avoid generation of dust. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure adequate ventilation. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal protective equipment****Eye/face protection**

Tight sealing safety goggles. Face protection shield. Use eye protection according to EN 166.

**Hand protection**

Wear suitable gloves. Impervious gloves. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374.

| Gloves              |                                                |                 |                    |
|---------------------|------------------------------------------------|-----------------|--------------------|
| Duration of contact | PPE - Glove material                           | Glove thickness | Break through time |
|                     | Butyl rubber                                   |                 |                    |
|                     | Chlorinated polyethylene (CPE)                 |                 |                    |
|                     | Rubber (natural, latex)                        |                 |                    |
|                     | Nitrile rubber                                 |                 |                    |
|                     | Polyvinyl chloride (PVC)                       |                 |                    |
|                     | Styrene/butadiene rubber                       |                 |                    |
|                     | Nitrile/butadiene rubber ("nitrile" or "NBR"). |                 |                    |
|                     | Neoprene gloves                                |                 |                    |

**Skin and body protection**

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

**Respiratory protection****Recommended filter type:**

In case of inadequate ventilation wear respiratory protection.  
Dust filter P3 (for especially fine dust/powder).

**General hygiene considerations**

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|                 |                          |
|-----------------|--------------------------|
| Physical state  | Solid                    |
| Appearance      | Crystalline powder       |
| Colour          | white                    |
| Odour           | Odourless.               |
| Odour threshold | No information available |

| <u>Property</u>                         | <u>Values</u>               | <u>Remarks • Method</u>           |
|-----------------------------------------|-----------------------------|-----------------------------------|
| Melting point / freezing point          | 72 °C                       |                                   |
| Initial boiling point and boiling range |                             | No information available.         |
| Flammability                            |                             | No information available.         |
| Flammability Limit in Air               |                             | No information available.         |
| Upper flammability or explosive limits  |                             |                                   |
| Lower flammability or explosive limits  |                             |                                   |
| Flash point                             |                             | No information available.         |
| Autoignition temperature                |                             | No information available.         |
| Decomposition temperature               |                             | No information available.         |
| pH                                      | 12                          | pH (diluted solution): 12.0 @ 1%. |
| pH (as aqueous solution)                |                             | No information available.         |
| Kinematic viscosity                     |                             | No information available.         |
| Dynamic viscosity                       |                             | No information available.         |
| Water solubility                        | Soluble in water            |                                   |
| Solubility(ies)                         | Insoluble in: Acids Ethanol |                                   |
| Partition coefficient                   |                             | No information available.         |
| Vapour pressure                         | < 0.01 hPa                  | @ 20 °C.                          |
| Relative density                        | 0.85 - 1.05                 |                                   |
| Bulk density                            | 1750 kg/m <sup>3</sup>      | @ 20 °C                           |
| Liquid Density                          | No information available    | No information available.         |
| Relative vapour density                 |                             | No information available.         |
| Particle characteristics                |                             | No information available.         |
| Particle Size                           | No information available    |                                   |
| Particle Size Distribution              | No information available    |                                   |
| Explosive properties                    | No information available    |                                   |
| Oxidising properties                    | No information available    |                                   |

**9.2. Other information**

|                  |              |
|------------------|--------------|
| Molecular weight | 212.14 g/mol |
|------------------|--------------|

**SECTION 10: Stability and reactivity****10.1. Reactivity**

|            |         |
|------------|---------|
| Reactivity | Metals. |
|------------|---------|

**10.2. Chemical stability**

|           |              |
|-----------|--------------|
| Stability | Hygroscopic. |
|-----------|--------------|

**Explosion data**

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

**10.3. Possibility of hazardous reactions**

|                                    |                                                                                          |
|------------------------------------|------------------------------------------------------------------------------------------|
| Possibility of hazardous reactions | Reacts with water. Reacts with heat. Corrosive to metal. Exothermic reaction with acids. |
|------------------------------------|------------------------------------------------------------------------------------------|

**10.4. Conditions to avoid**

|                     |                                                                                                                                                 |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Conditions to avoid | Exposure to air or moisture over prolonged periods. Avoid generation of dust. Keep away from open flames, hot surfaces and sources of ignition. |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|

**10.5. Incompatible materials**

|                        |                                                                                 |
|------------------------|---------------------------------------------------------------------------------|
| Incompatible materials | Strong acids. Oxidising agents. Halogens. Metals. Water. Protect from moisture. |
|------------------------|---------------------------------------------------------------------------------|

**10.6. Hazardous decomposition products**

|                                  |                  |
|----------------------------------|------------------|
| Hazardous decomposition products | Flammable gases. |
|----------------------------------|------------------|

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information**

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract. |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.                                                                                                                                                                                                                                                                                                  |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.          |

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Redness. Burning. May cause blindness. Coughing and/ or wheezing.

**Acute toxicity****Numerical measures of toxicity****Component Information**

| Chemical name                    | Oral LD50                 | Dermal LD50          | Inhalation LC50        |
|----------------------------------|---------------------------|----------------------|------------------------|
| SODIUM METASILICATE PENTAHYDRATE | 1152 - 1349 mg/kg ( Rat ) | > 5000 mg/kg ( Rat ) | > 2.06 mg/l ( Rat ) 4h |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes severe skin burns and eye damage.

**SODIUM METASILICATE PENTAHYDRATE (10213-79-3)**

| Method                                               | Species | Exposure route | Effective dose | Exposure time | Results   |
|------------------------------------------------------|---------|----------------|----------------|---------------|-----------|
| OECD Test No. 404: Acute Dermal Irritation/Corrosion | Rabbit  | Dermal         |                | 4 hours       | Corrosive |

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye damage. Causes burns.

**SODIUM METASILICATE PENTAHYDRATE (10213-79-3)**

| Method | Species | Exposure route | Effective dose | Exposure time | Results   |
|--------|---------|----------------|----------------|---------------|-----------|
|        | Rabbit  | eye            |                | 0.17 minutes  | Corrosive |

**Respiratory or skin sensitisation** Based on available data the classification criteria are not met.



## SODIUM METASILICATE PENTAHYDRATE (10213-79-3)

| Method                                | Species | Exposure route | Results                                  |
|---------------------------------------|---------|----------------|------------------------------------------|
| OECD Test No. 429: Skin Sensitization | Mouse   | Dermal         | No sensitisation responses were observed |

**Germ cell mutagenicity**

Based on available data the classification criteria are not met.

## Component Information

## SODIUM METASILICATE PENTAHYDRATE (10213-79-3)

| Method                                                                                       | Species       | Results  |
|----------------------------------------------------------------------------------------------|---------------|----------|
| OECD Test No. 471: Bacterial Reverse Mutation Test                                           | Bacteria      | Negative |
| OECD Test No. 476: In Vitro Mammalian Cell Gene Mutation Tests using the Hprt and xprt genes | in vitro      | Negative |
| OECD Test No. 475: Mammalian Bone Marrow Chromosome Aberration Test                          | Mouse in vivo | Negative |

**Carcinogenicity**

Based on available data the classification criteria are not met.

**Reproductive toxicity**

Based on available data the classification criteria are not met.

## SODIUM METASILICATE PENTAHYDRATE (10213-79-3)

| Method | Species | Results                  |
|--------|---------|--------------------------|
|        | Rat     | NOAEL P > 159 mg/kg      |
|        | Mouse   | NOAEL > 200 mg/kg bw/day |
|        | Mouse   | NOAEL 12.5 mg/kg bw/day  |

**STOT - single exposure**

May cause respiratory irritation.

**STOT - repeated exposure**

Based on available data the classification criteria are not met.

## Component Information

## SODIUM METASILICATE PENTAHYDRATE (10213-79-3)

| Method                                                                 | Species | Exposure route | Effective dose | Exposure time | Results |
|------------------------------------------------------------------------|---------|----------------|----------------|---------------|---------|
| OECD Test No. 408: Repeated Dose 90-Day Oral Toxicity Study in Rodents | Rat     | Oral           | 227 mg/kg      | 3 months      | NOAEL   |

**Aspiration hazard**

Based on available data the classification criteria are not met.

**Other adverse effects**

No information available.

**SECTION 12: Ecological information****12.1. Toxicity****Ecotoxicity**

Not considered to be harmful to aquatic life.

## SODIUM METASILICATE PENTAHYDRATE (10213-79-3)

| Method | Species | Endpoint type | Effective dose | Exposure time | Results |
|--------|---------|---------------|----------------|---------------|---------|
|--------|---------|---------------|----------------|---------------|---------|

|                                                                                                              |                         |       |            |            |  |
|--------------------------------------------------------------------------------------------------------------|-------------------------|-------|------------|------------|--|
|                                                                                                              | Brachydanio rerio       | LC50  | 210 mg/L   | 96 hours   |  |
|                                                                                                              | Daphnia magna           | EC50  | 1700 mg/L  | 48 hours   |  |
|                                                                                                              | Pseudomonas putida      | EC0   | >1000 mg/L | 30 minutes |  |
|                                                                                                              | Desmodesmus subspicatus | EbC50 | 207 mg/L   | 72 hours   |  |
| OECD Test No. 209:<br>Activated Sludge,<br>Respiration Inhibition Test<br>(Carbon and Ammonium<br>Oxidation) | activated sludge        | EC50  | >100 mg/L  | 3 hours    |  |

**12.2. Persistence and degradability**

**Persistence and degradability** Not applicable.

**12.3. Bioaccumulative potential**

**Bioaccumulation** Not likely to bioaccumulate.

**12.4. Mobility in soil**

**Mobility in soil** Expected to be relatively immobile in soil.

**12.5. Results of PBT and vPvB assessment**

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

**12.6. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

**Waste from residues/unused products** Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

**Contaminated packaging** Do not reuse empty containers.

**SECTION 14: Transport information****IATA**

14.1 UN number or ID number UN3253  
 14.2 UN proper shipping name DISODIUM TRIOXOSILICATE  
 14.3 Transport hazard class(es) 8  
 14.4 Packing group III  
 14.5 Environmental hazards No  
 14.6 Special precautions for user  
     Special Provisions A803  
     ERG Code 8L

**IMDG**

14.1 UN number or ID number UN3253  
 UN proper shipping name DISODIUM TRIOXOSILICATE  
 14.3 Transport hazard class(es) 8  
 14.4 Packing group III  
 14.5 Environmental hazards No

**14.6 Special precautions for user****Special Provisions**

None

**EmS-No**

F-A, S-B

**14.7 Maritime transport in bulk according to IMO instruments**

No information available

**RID****14.1 UN number or ID number**

UN3253

**14.2 UN proper shipping name**

DISODIUM TRIOXOSILICATE

**14.3 Transport hazard class(es)**

8

**14.4 Packing group**

III

**14.5 Environmental hazards**

No

**14.6 Special precautions for user****Special Provisions**

None

**Classification code**

C6

**ADR****14.1 UN number or ID number**

UN3253

**14.2 UN proper shipping name**

DISODIUM TRIOXOSILICATE

**14.3 Transport hazard class(es)**

8

**14.4 Packing group**

III

**14.5 Environmental hazards**

No

**14.6 Special precautions for user****Special Provisions**

None

**Classification code**

C6

**Tunnel restriction code**

(E)

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

This product does not contain substances subject to restriction (UK REACH - Annex XVII).

**Product restricted per REACH Annex XVII:** 3**Persistent Organic Pollutants**

Not applicable

**Export Notification requirements**

Not applicable

**Named dangerous substances per COMAH Regulations 2015 (as amended)**

Not applicable

**The Ozone-Depleting Substances Regulations 2015**

Not applicable

**The Biocidal Products Regulations 2001 (as amended)**

Not applicable

**The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)**

Not applicable

**Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)**

Not applicable

**International Inventories****TSCA**

Contact supplier for inventory compliance status

**DSL/NDL**

Contact supplier for inventory compliance status

**EINECS/ELINCS**

Contact supplier for inventory compliance status

|       |                                                  |
|-------|--------------------------------------------------|
| ENCS  | Contact supplier for inventory compliance status |
| IECSC | Contact supplier for inventory compliance status |
| KECI  | Contact supplier for inventory compliance status |
| PICCS | Contact supplier for inventory compliance status |
| AIIC  | Contact supplier for inventory compliance status |
| NZIoC | Contact supplier for inventory compliance status |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AIIC** - Australian Inventory of Industrial Chemicals  
**NZIoC** - New Zealand Inventory of Chemicals

**15.2. Chemical safety assessment**

**Chemical Safety Report** No information available

**SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H290 - May be corrosive to metals  
 H314 - Causes severe skin burns and eye damage  
 H318 - Causes serious eye damage  
 H335 - May cause respiratory irritation

**Legend**

SVHC: Substances of Very High Concern for Authorisation:

**Legend Section 8: Exposure controls/personal protection**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |
| +       | Sensitisers                 |      |                                  |

Revision Note \*\*\*Indicates updated data since last publication SDS sections updated 1 8 9 11 12

**Classification procedure**

|                                                                 |                    |
|-----------------------------------------------------------------|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used        |
| Acute oral toxicity                                             | Calculation method |
| Acute dermal toxicity                                           | Calculation method |
| Acute inhalation toxicity - gas                                 | Calculation method |
| Acute inhalation toxicity - vapour                              | Calculation method |
| Acute inhalation toxicity - dust/mist                           | Calculation method |
| Skin corrosion/irritation                                       | Calculation method |
| Serious eye damage/eye irritation                               | Calculation method |
| Respiratory sensitisation                                       | Calculation method |
| Skin sensitisation                                              | Calculation method |
| Mutagenicity                                                    | Calculation method |
| Carcinogenicity                                                 | Calculation method |
| Reproductive toxicity                                           | Calculation method |
| STOT - single exposure                                          | Calculation method |
| STOT - repeated exposure                                        | Calculation method |
| Acute aquatic toxicity                                          | Calculation method |
| Chronic aquatic toxicity                                        | Calculation method |
| Aspiration hazard                                               | Calculation method |
| Ozone                                                           | Calculation method |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)  
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
European Chemicals Agency (ECHA) (ECHA\_API)  
Environmental Protection Agency  
Acute Exposure Guideline Level(s) (AELG(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Prepared By** Amy Whitfield

**Supersedes date** 22-Jan-2020

**Revision date** 22-Jan-2020

**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)  
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

## Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

|                                       |                                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Chemical name</b>                  | SODIUM METASILICATE                                                                       |
| <b>Pure substance/mixture</b>         | Substance                                                                                 |
| <b>REACH registration number</b>      | 01-2119449811-37-XXXX                                                                     |
| <b>CAS No</b>                         | 10213-79-3                                                                                |
| <b>EC No (EU Index No)</b>            | 229-912-9                                                                                 |
| <b>Supplier</b>                       | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>GBR |
| <b>Non-Emergency Telephone Number</b> | +44 1274 267300 / +44 1274 267306                                                         |
| <b>E-mail address</b>                 | SDS.EMEA@univarsolutions.com                                                              |

### Section 1 - Title

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Title</b>                               | Manufacture of substance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Type</b>                                | Worker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Main user group</b>                     | Industrial uses: Uses of substances as such or in preparations at industrial sites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Environmental release category(ies)</b> | ERC1 - Manufacture of substances                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Process category(ies)</b>               | PROC2 - Use in closed, continuous process with occasional controlled exposure<br>PROC3 - Use in closed batch process (synthesis or formulation)<br>PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises<br>PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)<br>PROC7 - Industrial spraying<br>PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities<br>PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities<br>PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)<br>PROC15 - Use as laboratory reagent<br>PROC22 - Potentially closed processing operations with minerals/metals at elevated temperature; industrial setting<br>PROC23 - Open processing and transfer operations with minerals/metals at elevated temperature<br>PROC24 - High (mechanical) energy work-up of substances bound in materials and/or articles |
| <b>Sector(s) of use</b>                    | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

### Section 2 - Operational conditions and risk management measures

#### Section 2.1 - Control of environmental exposure

**Environmental release category(ies)** - ERC1 - Manufacture of substances

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

| Control of worker exposure                                                         |                                                                                                                                                                                     |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Title</b>                                                                       | General measures applicable to all activities                                                                                                                                       |
| <b>Covers concentrations up to</b>                                                 | 100%                                                                                                                                                                                |
| <b>Physical form of product</b>                                                    | Solid or Solid in solution                                                                                                                                                          |
| <b>Technical conditions and measures to control dispersion from source towards</b> | Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)<br>Avoid contact with contaminated tools and objects<br>Ensure operatives are trained to |

|                                                                                       |                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| the worker                                                                            | minimise exposures Operate activity away from sources of substance emission or release<br>Provide extract ventilation to points where emissions occur                                                                                                                  |
| Conditions and measures related to personal protection, hygiene and health evaluation | Wear suitable gloves (tested to EN 374) and eye protection Wear suitable respiratory protection (conforming to EN 140 with Type A filter or better) and gloves (type EN 374) if regular skin contact likely                                                            |
| Organisational measures to prevent /limit releases, dispersion and exposure           | Assumes a good basic standard of occupational hygiene is implemented Ensure operatives are trained to minimise exposures Clean equipment and the work area every day<br>Supervision in place to check that the RMMs in place are being used correctly and OCs followed |

### **Section 3 - Exposure estimation**

#### **Environmental release category(ies) - ERC1 - Manufacture of substances**

##### **Predicted No Effect Concentration (PNEC)**

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

##### **Derived No Effect Level (DNEL):**

**Remarks** Qualitative approach used to conclude safe use

### **Section 4 - Guidance to check compliance with the exposure scenario**

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.  
Qualitative approach used to conclude safe use. Risk management measures are based on qualitative risk characterization.  
Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

|                                       |                                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Chemical name</b>                  | SODIUM METASILICATE                                                                       |
| <b>Pure substance/mixture</b>         | Substance                                                                                 |
| <b>REACH registration number</b>      | 01-2119449811-37-XXXX                                                                     |
| <b>CAS No</b>                         | 10213-79-3                                                                                |
| <b>EC No (EU Index No)</b>            | 229-912-9                                                                                 |
| <b>Supplier</b>                       | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>GBR |
| <b>Non-Emergency Telephone Number</b> | +44 1274 267300 / +44 1274 267306                                                         |
| <b>E-mail address</b>                 | SDS.EMEA@univarsolutions.com                                                              |

### Section 1 - Title

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Title</b>                               | Formulation & (re)packing of substances and mixtures ( Solid )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Type</b>                                | Worker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Main user group</b>                     | Industrial uses: Uses of substances as such or in preparations at industrial sites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Environmental release category(ies)</b> | ERC2 - Formulation of preparations (mixtures) ERC3 - Formulation in materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Process category(ies)</b>               | PROC1 - Use in closed process, no likelihood of exposure<br>PROC2 - Use in closed, continuous process with occasional controlled exposure<br>PROC3 - Use in closed batch process (synthesis or formulation)<br>PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises<br>PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)<br>PROC7 - Industrial spraying<br>PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities<br>PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities<br>PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)<br>PROC10 - Roller application or brushing<br>PROC13 - Treatment of articles by dipping and pouring<br>PROC14 - Production of preparations or articles by tableting, compression, extrusion, pelettising<br>PROC15 - Use as laboratory reagent<br>PROC23 - Open processing and transfer operations with minerals/metals at elevated temperature |
| <b>Product category(ies)</b>               | PC1 - Adhesives, sealants PC4 - Anti-freeze and de-icing products PC8 - Biocidal Products (e.g. disinfectants, pest control) PC9a - Coatings and paints, thinners, paint removers PC14 - Metal surface treatment products, including galvanic and electroplating products PC15 - Non-metal-surface treatment products PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents PC23 - Leather tanning, dye, finishing, impregnation and care products PC24 - Lubricants, greases, release products PC32 - Polymer preparations and compounds PC34 - Textile dyes, finishing and impregnating products PC35 - Washing and cleaning products (including solvent based products) PC39 - Cosmetics, personal care products                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Sector(s) of use</b>                    | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites<br>SU2a - Mining (without offshore industries) SU2b - Offshore industries SU4 - Manufacture of food products SU5 - Manufacture of textiles, leather, fur SU6b - Manufacture of pulp, paper and paper products SU7 - Printing and reproduction of recorded media SU9 - Manufacture of fine chemicals SU13 - Manufacture of other non-metallic mineral products SU14 - Manufacture of basic metals, including alloys SU15 - Manufacture of fabricated metal products, except machinery and equipment SU18 - Manufacture of furniture SU19 - Building and construction work SU20 - Health services SU23 - Recycling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



## Section 2 - Operational conditions and risk management measures

### Section 2.1 - Control of environmental exposure

**Environmental release category(ies)** - ERC2 - Formulation of preparations (mixtures)  
- ERC3 - Formulation in materials

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

| Control of worker exposure                                                             |                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title                                                                                  | General measures applicable to all activities                                                                                                                                                                                                                                                                                                |
| Covers concentrations up to                                                            | 100%                                                                                                                                                                                                                                                                                                                                         |
| Physical form of product                                                               | Solid                                                                                                                                                                                                                                                                                                                                        |
| Technical conditions and measures to control dispersion from source towards the worker | Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)<br>Avoid contact with contaminated tools and objects<br>Ensure operatives are trained to minimise exposures<br>Operate activity away from sources of substance emission or release<br>Provide extract ventilation to points where emissions occur |
| Conditions and measures related to personal protection, hygiene and health evaluation  | Wear suitable gloves (tested to EN 374) and eye protection<br>Wear suitable respiratory protection (conforming to EN 140 with Type A filter or better) and gloves (type EN 374) if regular skin contact likely                                                                                                                               |
| Organisational measures to prevent /limit releases, dispersion and exposure            | Assumes a good basic standard of occupational hygiene is implemented<br>Ensure operatives are trained to minimise exposures<br>Clean equipment and the work area every day<br>Supervision in place to check that the RMMs in place are being used correctly and OCs followed                                                                 |

## Section 3 - Exposure estimation

**Environmental release category(ies)** - ERC2 - Formulation of preparations (mixtures)  
- ERC3 - Formulation in materials

**Predicted No Effect Concentration (PNEC)**

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

**Derived No Effect Level (DNEL):**

**Remarks** Qualitative approach used to conclude safe use

## Section 4 - Guidance to check compliance with the exposure scenario

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.  
Qualitative approach used to conclude safe use. Risk management measures are based on qualitative risk characterization.  
Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

|                                       |                                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Chemical name</b>                  | SODIUM METASILICATE                                                                       |
| <b>Pure substance/mixture</b>         | Substance                                                                                 |
| <b>REACH registration number</b>      | 01-2119449811-37-XXXX                                                                     |
| <b>CAS No</b>                         | 10213-79-3                                                                                |
| <b>EC No (EU Index No)</b>            | 229-912-9                                                                                 |
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### Section 1 - Title

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Title</b>                               | Formulation & (re)packing of substances and mixtures ( liquid )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Type</b>                                | Worker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Main user group</b>                     | Industrial uses: Uses of substances as such or in preparations at industrial sites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Environmental release category(ies)</b> | ERC2 - Formulation of preparations (mixtures) ERC3 - Formulation in materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Process category(ies)</b>               | PROC1 - Use in closed process, no likelihood of exposure<br>PROC2 - Use in closed, continuous process with occasional controlled exposure<br>PROC3 - Use in closed batch process (synthesis or formulation)<br>PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises<br>PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)<br>PROC7 - Industrial spraying<br>PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities<br>PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities<br>PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)<br>PROC10 - Roller application or brushing<br>PROC13 - Treatment of articles by dipping and pouring<br>PROC14 - Production of preparations or articles by tableting, compression, extrusion, pelettising<br>PROC15 - Use as laboratory reagent |
| <b>Product category(ies)</b>               | PC1 - Adhesives, sealants PC4 - Anti-freeze and de-icing products PC8 - Biocidal Products (e.g. disinfectants, pest control) PC9a - Coatings and paints, thinners, paint removers PC14 - Metal surface treatment products, including galvanic and electroplating products PC15 - Non-metal-surface treatment products PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents PC23 - Leather tanning, dye, finishing, impregnation and care products PC24 - Lubricants, greases, release products PC32 - Polymer preparations and compounds PC34 - Textile dyes, finishing and impregnating products PC35 - Washing and cleaning products (including solvent based products) PC39 - Cosmetics, personal care products                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Sector(s) of use</b>                    | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites SU4 - Manufacture of food products SU5 - Manufacture of textiles, leather, fur SU9 - Manufacture of fine chemicals SU13 - Manufacture of other non-metallic mineral products SU14 - Manufacture of basic metals, including alloys SU15 - Manufacture of fabricated metal products, except machinery and equipment SU20 - Health services                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### Section 2 - Operational conditions and risk management measures

#### Section 2.1 - Control of environmental exposure

**Environmental release category(ies)** - ERC2 - Formulation of preparations (mixtures)

- ERC3 - Formulation in materials

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

| <b>Control of worker exposure</b>                                                      |                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title                                                                                  | General measures applicable to all activities                                                                                                                                                                                                                                                                                                |
| Covers concentrations up to                                                            | 100%                                                                                                                                                                                                                                                                                                                                         |
| Physical form of product                                                               | Solid in solution                                                                                                                                                                                                                                                                                                                            |
| Technical conditions and measures to control dispersion from source towards the worker | Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)<br>Avoid contact with contaminated tools and objects<br>Ensure operatives are trained to minimise exposures<br>Operate activity away from sources of substance emission or release<br>Provide extract ventilation to points where emissions occur |
| Conditions and measures related to personal protection, hygiene and health evaluation  | Wear suitable gloves (tested to EN 374) and eye protection<br>Wear suitable respiratory protection (conforming to EN 140 with Type A filter or better) and gloves (type EN 374) if regular skin contact likely                                                                                                                               |
| Organisational measures to prevent /limit releases, dispersion and exposure            | Assumes a good basic standard of occupational hygiene is implemented<br>Ensure operatives are trained to minimise exposures<br>Clean equipment and the work area every day<br>Supervision in place to check that the RMMs in place are being used correctly and OCs followed                                                                 |

### **Section 3 - Exposure estimation**

**Environmental release category(ies) - ERC2 - Formulation of preparations (mixtures)  
- ERC3 - Formulation in materials**

**Predicted No Effect Concentration (PNEC)**

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

**Derived No Effect Level (DNEL):**

**Remarks** Qualitative approach used to conclude safe use

### **Section 4 - Guidance to check compliance with the exposure scenario**

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.  
Qualitative approach used to conclude safe use. Risk management measures are based on qualitative risk characterization.  
Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

|                                       |                                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Chemical name</b>                  | SODIUM METASILICATE                                                                       |
| <b>Pure substance/mixture</b>         | Substance                                                                                 |
| <b>REACH registration number</b>      | 01-2119449811-37-XXXX                                                                     |
| <b>CAS No</b>                         | 10213-79-3                                                                                |
| <b>EC No (EU Index No)</b>            | 229-912-9                                                                                 |
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| <b>Non-Emergency Telephone Number</b> | +44 1274 267300 / +44 1274 267306                                                         |
| <b>E-mail address</b>                 | SDS.EMEA@univarsolutions.com                                                              |

### Section 1 - Title

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Title</b>                               | Industrial use ( Solid )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Type</b>                                | Worker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Main user group</b>                     | Industrial uses: Uses of substances as such or in preparations at industrial sites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Environmental release category(ies)</b> | ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles<br>ERC5 - Industrial use resulting in inclusion into or onto a matrix<br>ERC6b - Industrial use of reactive processing aids<br>ERC6d - Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers<br>ERC7 - Industrial use of substances in closed systems                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Process category(ies)</b>               | PROC1 - Use in closed process, no likelihood of exposure<br>PROC2 - Use in closed, continuous process with occasional controlled exposure<br>PROC3 - Use in closed batch process (synthesis or formulation)<br>PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises<br>PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)<br>PROC7 - Industrial spraying<br>PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities<br>PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities<br>PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)<br>PROC10 - Roller application or brushing<br>PROC13 - Treatment of articles by dipping and pouring<br>PROC14 - Production of preparations or articles by tableting, compression, extrusion, pelettising<br>PROC15 - Use as laboratory reagent<br>PROC17 - Lubrication at high energy conditions and in partly open process<br>PROC23 - Open processing and transfer operations with minerals/metals at elevated temperature<br>PROC24 - High (mechanical) energy work-up of substances bound in materials and/or articles<br>PROC26 - Handling of solid inorganic substances at ambient temperature |
| <b>Product category(ies)</b>               | PC1 - Adhesives, sealants<br>PC3 - Air care products<br>PC8 - Biocidal Products (e.g. disinfectants, pest control)<br>PC9a - Coatings and paints, thinners, paint removers<br>PC14 - Metal surface treatment products, including galvanic and electroplating products<br>PC15 - Non-metal-surface treatment products<br>PC18 - Ink and toners<br>PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents<br>PC21 - Laboratory chemicals<br>PC24 - Lubricants, greases, release products<br>PC25 - Metal working fluids<br>PC32 - Polymer preparations and compounds<br>PC34 - Textile dyes, finishing and impregnating products<br>PC35 - Washing and cleaning products (including solvent based products)<br>PC37 - Water treatment chemicals<br>PC39 - Cosmetics, personal care products                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Sector(s) of use</b>                    | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites<br>SU2a - Mining (without offshore industries)<br>SU2b - Offshore industries<br>SU4 - Manufacture of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

food products SU5 - Manufacture of textiles, leather, fur SU6b - Manufacture of pulp, paper and paper products SU7 - Printing and reproduction of recorded media SU11 - Manufacture of rubber products SU12 - Manufacture of plastics products, including compounding and conversion SU13 - Manufacture of other non-metallic mineral products SU14 - Manufacture of basic metals, including alloys SU15 - Manufacture of fabricated metal products, except machinery and equipment SU16 - Manufacture of computer, electronic and optical products, electrical equipment SU17 - General manufacturing SU18 - Manufacture of furniture SU19 - Building and construction work SU20 - Health services SU23 - Recycling

## Section 2 - Operational conditions and risk management measures

### Section 2.1 - Control of environmental exposure

**Environmental release category(ies)** - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

- ERC5 - Industrial use resulting in inclusion into or onto a matrix
- ERC6b - Industrial use of reactive processing aids
- ERC6d - Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers
- ERC7 - Industrial use of substances in closed systems

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

| Control of worker exposure                                                             |                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title                                                                                  | General measures applicable to all activities                                                                                                                                                                                                                                                                                                |
| Covers concentrations up to                                                            | 100%                                                                                                                                                                                                                                                                                                                                         |
| Physical form of product                                                               | Solid                                                                                                                                                                                                                                                                                                                                        |
| Technical conditions and measures to control dispersion from source towards the worker | Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)<br>Avoid contact with contaminated tools and objects<br>Ensure operatives are trained to minimise exposures<br>Operate activity away from sources of substance emission or release<br>Provide extract ventilation to points where emissions occur |
| Conditions and measures related to personal protection, hygiene and health evaluation  | Wear suitable gloves (tested to EN 374) and eye protection<br>Wear suitable respiratory protection (conforming to EN 140 with Type A filter or better) and gloves (type EN 374) if regular skin contact likely                                                                                                                               |
| Organisational measures to prevent /limit releases, dispersion and exposure            | Assumes a good basic standard of occupational hygiene is implemented<br>Ensure operatives are trained to minimise exposures<br>Clean equipment and the work area every day<br>Supervision in place to check that the RMMs in place are being used correctly and OCs followed                                                                 |

## Section 3 - Exposure estimation

**Environmental release category(ies)** - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

- ERC5 - Industrial use resulting in inclusion into or onto a matrix
- ERC6b - Industrial use of reactive processing aids
- ERC6d - Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers
- ERC7 - Industrial use of substances in closed systems

**Predicted No Effect Concentration (PNEC)**

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

**Derived No Effect Level (DNEL):**

**Remarks**

Qualitative approach used to conclude safe use

**Section 4 - Guidance to check compliance with the exposure scenario**

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

Qualitative approach used to conclude safe use. Risk management measures are based on qualitative risk characterization.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

|                                       |                                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Chemical name</b>                  | SODIUM METASILICATE                                                                       |
| <b>Pure substance/mixture</b>         | Substance                                                                                 |
| <b>REACH registration number</b>      | 01-2119449811-37-XXXX                                                                     |
| <b>CAS No</b>                         | 10213-79-3                                                                                |
| <b>EC No (EU Index No)</b>            | 229-912-9                                                                                 |
| <b>Supplier</b>                       | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>GBR |
| <b>Non-Emergency Telephone Number</b> | +44 1274 267300 / +44 1274 267306                                                         |
| <b>E-mail address</b>                 | SDS.EMEA@univarsolutions.com                                                              |

### Section 1 - Title

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Title</b>                               | Industrial use ( liquid )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Type</b>                                | Worker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Main user group</b>                     | Industrial uses: Uses of substances as such or in preparations at industrial sites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Environmental release category(ies)</b> | ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles<br>ERC5 - Industrial use resulting in inclusion into or onto a matrix<br>ERC6b - Industrial use of reactive processing aids<br>ERC6d - Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers<br>ERC7 - Industrial use of substances in closed systems                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Process category(ies)</b>               | PROC1 - Use in closed process, no likelihood of exposure<br>PROC2 - Use in closed, continuous process with occasional controlled exposure<br>PROC3 - Use in closed batch process (synthesis or formulation)<br>PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises<br>PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)<br>PROC6 - Calendaring operations<br>PROC7 - Industrial spraying<br>PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities<br>PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities<br>PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)<br>PROC10 - Roller application or brushing<br>PROC13 - Treatment of articles by dipping and pouring<br>PROC14 - Production of preparations or articles by tableting, compression, extrusion, pelettising<br>PROC15 - Use as laboratory reagent<br>PROC17 - Lubrication at high energy conditions and in partly open process<br>PROC24 - High (mechanical) energy work-up of substances bound in materials and/or articles |
| <b>Product category(ies)</b>               | PC1 - Adhesives, sealants<br>PC8 - Biocidal Products (e.g. disinfectants, pest control)<br>PC9a - Coatings and paints, thinners, paint removers<br>PC14 - Metal surface treatment products, including galvanic and electroplating products<br>PC15 - Non-metal-surface treatment products<br>PC18 - Ink and toners<br>PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents<br>PC21 - Laboratory chemicals<br>PC24 - Lubricants, greases, release products<br>PC25 - Metal working fluids<br>PC32 - Polymer preparations and compounds<br>PC34 - Textile dyes, finishing and impregnating products<br>PC35 - Washing and cleaning products (including solvent based products)<br>PC37 - Water treatment chemicals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Sector(s) of use</b>                    | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites<br>SU4 - Manufacture of food products<br>SU5 - Manufacture of textiles, leather, fur<br>SU11 - Manufacture of rubber products<br>SU12 - Manufacture of plastics products, including compounding and conversion<br>SU13 - Manufacture of other non-metallic mineral products<br>SU14 - Manufacture of basic metals, including alloys<br>SU15 - Manufacture of fabricated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

metal products, except machinery and equipment SU16 - Manufacture of computer, electronic and optical products, electrical equipment SU17 - General manufacturing SU18 - Manufacture of furniture SU19 - Building and construction work SU20 - Health services

## **Section 2 - Operational conditions and risk management measures**

### **Section 2.1 - Control of environmental exposure**

**Environmental release category(ies)** - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

- ERC5 - Industrial use resulting in inclusion into or onto a matrix
- ERC6b - Industrial use of reactive processing aids
- ERC6d - Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers
- ERC7 - Industrial use of substances in closed systems

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

| <b>Control of worker exposure</b>                                                      |                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title                                                                                  | General measures applicable to all activities                                                                                                                                                                                                                                                                                                |
| Covers concentrations up to                                                            | 100%                                                                                                                                                                                                                                                                                                                                         |
| Physical form of product                                                               | Solid in solution                                                                                                                                                                                                                                                                                                                            |
| Technical conditions and measures to control dispersion from source towards the worker | Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)<br>Avoid contact with contaminated tools and objects<br>Ensure operatives are trained to minimise exposures<br>Operate activity away from sources of substance emission or release<br>Provide extract ventilation to points where emissions occur |
| Conditions and measures related to personal protection, hygiene and health evaluation  | Wear suitable gloves (tested to EN 374) and eye protection<br>Wear suitable respiratory protection (conforming to EN 140 with Type A filter or better) and gloves (type EN 374) if regular skin contact likely                                                                                                                               |
| Organisational measures to prevent /limit releases, dispersion and exposure            | Assumes a good basic standard of occupational hygiene is implemented<br>Ensure operatives are trained to minimise exposures<br>Clean equipment and the work area every day<br>Supervision in place to check that the RMMs in place are being used correctly and OCs followed                                                                 |

## **Section 3 - Exposure estimation**

**Environmental release category(ies)** - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

- ERC5 - Industrial use resulting in inclusion into or onto a matrix
- ERC6b - Industrial use of reactive processing aids
- ERC6d - Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers
- ERC7 - Industrial use of substances in closed systems

**Predicted No Effect Concentration (PNEC)**

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

**Derived No Effect Level (DNEL):**

**Remarks** Qualitative approach used to conclude safe use



## **Section 4 - Guidance to check compliance with the exposure scenario**

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

Qualitative approach used to conclude safe use. Risk management measures are based on qualitative risk characterization.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

|                                       |                                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Chemical name</b>                  | SODIUM METASILICATE                                                                       |
| <b>Pure substance/mixture</b>         | Substance                                                                                 |
| <b>REACH registration number</b>      | 01-2119449811-37-XXXX                                                                     |
| <b>CAS No</b>                         | 10213-79-3                                                                                |
| <b>EC No (EU Index No)</b>            | 229-912-9                                                                                 |
| <b>Supplier</b>                       | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>GBR |
| <b>Non-Emergency Telephone Number</b> | +44 1274 267300 / +44 1274 267306                                                         |
| <b>E-mail address</b>                 | SDS.EMEA@univarsolutions.com                                                              |

### Section 1 - Title

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Title</b>                               | Professional use ( Solid )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Type</b>                                | Worker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Main user group</b>                     | Professional uses: Public domain (administration, education, entertainment, services, craftsmen)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Environmental release category(ies)</b> | ERC8a - Wide dispersive indoor use of processing aids in open systems ERC8b - Wide dispersive indoor use of reactive substances in open systems ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC8d - Wide dispersive outdoor use of processing aids in open systems ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Process category(ies)</b>               | PROC1 - Use in closed process, no likelihood of exposure<br>PROC2 - Use in closed, continuous process with occasional controlled exposure<br>PROC3 - Use in closed batch process (synthesis or formulation)<br>PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises<br>PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)<br>PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities<br>PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities<br>PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)<br>PROC10 - Roller application or brushing<br>PROC11 - Non industrial spraying<br>PROC13 - Treatment of articles by dipping and pouring<br>PROC15 - Use as laboratory reagent<br>PROC19 - Hand-mixing with intimate contact and only PPE available<br>PROC21 - Low energy manipulation of substances bound in materials and/or articles<br>PROC23 - Open processing and transfer operations with minerals/metals at elevated temperature<br>PROC24 - High (mechanical) energy work-up of substances bound in materials and/or articles<br>PROC25 - Other hot work operations with metals<br>PROC26 - Handling of solid inorganic substances at ambient temperature |
| <b>Product category(ies)</b>               | PC1 - Adhesives, sealants PC9a - Coatings and paints, thinners, paint removers PC9b - Fillers, putties, plasters, modelling clay PC9c - Finger paints PC15 - Non-metal-surface treatment products PC19 - Intermediate PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents PC21 - Laboratory chemicals PC31 - Polishes and wax blends PC32 - Polymer preparations and compounds PC34 - Textile dyes, finishing and impregnating products PC35 - Washing and cleaning products (including solvent based products) PC39 - Cosmetics, personal care products                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Sector(s) of use</b>                    | SU22 - Professional uses SU2a - Mining (without offshore industries) SU5 - Manufacture of textiles, leather, fur SU6b - Manufacture of pulp, paper and paper products SU7 - Printing and reproduction of recorded media SU13 - Manufacture of other non-metallic mineral                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

products SU15 - Manufacture of fabricated metal products, except machinery and equipment  
SU16 - Manufacture of computer, electronic and optical products, electrical equipment  
SU18 - Manufacture of furniture  
SU19 - Building and construction work  
SU23 - Recycling

## Section 2 - Operational conditions and risk management measures

### Section 2.1 - Control of environmental exposure

**Environmental release category(ies)** - ERC8a - Wide dispersive indoor use of processing aids in open systems

- ERC8b - Wide dispersive indoor use of reactive substances in open systems
- ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix
- ERC8d - Wide dispersive outdoor use of processing aids in open systems
- ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

| Control of worker exposure                                                             |                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title                                                                                  | General measures applicable to all activities                                                                                                                                                                                                                                                                                                |
| Covers concentrations up to                                                            | 100%                                                                                                                                                                                                                                                                                                                                         |
| Physical form of product                                                               | Solid                                                                                                                                                                                                                                                                                                                                        |
| Technical conditions and measures to control dispersion from source towards the worker | Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)<br>Avoid contact with contaminated tools and objects<br>Ensure operatives are trained to minimise exposures<br>Operate activity away from sources of substance emission or release<br>Provide extract ventilation to points where emissions occur |
| Conditions and measures related to personal protection, hygiene and health evaluation  | Wear suitable gloves (tested to EN 374) and eye protection<br>Wear suitable respiratory protection (conforming to EN 140 with Type A filter or better) and gloves (type EN 374) if regular skin contact likely                                                                                                                               |
| Organisational measures to prevent /limit releases, dispersion and exposure            | Assumes a good basic standard of occupational hygiene is implemented<br>Ensure operatives are trained to minimise exposures<br>Clean equipment and the work area every day<br>Supervision in place to check that the RMMs in place are being used correctly and OCs followed                                                                 |

## Section 3 - Exposure estimation

**Environmental release category(ies)** - ERC8a - Wide dispersive indoor use of processing aids in open systems

- ERC8b - Wide dispersive indoor use of reactive substances in open systems
- ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix
- ERC8d - Wide dispersive outdoor use of processing aids in open systems
- ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix

**Predicted No Effect Concentration (PNEC)**

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

**Derived No Effect Level (DNEL):**

**Remarks** Qualitative approach used to conclude safe use

## Section 4 - Guidance to check compliance with the exposure scenario

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

Qualitative approach used to conclude safe use. Risk management measures are based on qualitative risk characterization. Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

|                                       |                                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Chemical name</b>                  | SODIUM METASILICATE                                                                       |
| <b>Pure substance/mixture</b>         | Substance                                                                                 |
| <b>REACH registration number</b>      | 01-2119449811-37-XXXX                                                                     |
| <b>CAS No</b>                         | 10213-79-3                                                                                |
| <b>EC No (EU Index No)</b>            | 229-912-9                                                                                 |
| <b>Supplier</b>                       | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>GBR |
| <b>Non-Emergency Telephone Number</b> | +44 1274 267300 / +44 1274 267306                                                         |
| <b>E-mail address</b>                 | SDS.EMEA@univarsolutions.com                                                              |

### Section 1 - Title

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Title</b>                               | Professional use ( liquid )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Type</b>                                | Worker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Main user group</b>                     | Professional uses: Public domain (administration, education, entertainment, services, craftsmen)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Environmental release category(ies)</b> | ERC8a - Wide dispersive indoor use of processing aids in open systems ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC8d - Wide dispersive outdoor use of processing aids in open systems ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix ERC9a - Wide dispersive indoor use of substances in closed systems ERC9b - Wide dispersive outdoor use of substances in closed systems                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Process category(ies)</b>               | PROC1 - Use in closed process, no likelihood of exposure<br>PROC2 - Use in closed, continuous process with occasional controlled exposure<br>PROC3 - Use in closed batch process (synthesis or formulation)<br>PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises<br>PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)<br>PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities<br>PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities<br>PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)<br>PROC10 - Roller application or brushing<br>PROC11 - Non industrial spraying<br>PROC13 - Treatment of articles by dipping and pouring<br>PROC14 - Production of preparations or articles by tableting, compression, extrusion, pelettising<br>PROC15 - Use as laboratory reagent<br>PROC19 - Hand-mixing with intimate contact and only PPE available<br>PROC20 - Heat and pressure transfer fluids in dispersive, professional use but closed systems<br>PROC21 - Low energy manipulation of substances bound in materials and/or articles<br>PROC24 - High (mechanical) energy work-up of substances bound in materials and/or articles<br>PROC25 - Other hot work operations with metals<br>PROC26 - Handling of solid inorganic substances at ambient temperature |
| <b>Product category(ies)</b>               | PC1 - Adhesives, sealants PC8 - Biocidal Products (e.g. disinfectants, pest control) PC9a - Coatings and paints, thinners, paint removers PC9c - Finger paints PC14 - Metal surface treatment products, including galvanic and electroplating products PC15 - Non-metal-surface treatment products PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents PC21 - Laboratory chemicals PC31 - Polishes and wax blends PC32 - Polymer preparations and compounds PC35 - Washing and cleaning products (including solvent based products)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

**Sector(s) of use** SU22 - Professional uses SU4 - Manufacture of food products SU13 - Manufacture of other non-metallic mineral products SU14 - Manufacture of basic metals, including alloys SU20 - Health services

## **Section 2 - Operational conditions and risk management measures**

### **Section 2.1 - Control of environmental exposure**

**Environmental release category(ies)** - ERC8a - Wide dispersive indoor use of processing aids in open systems

- ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix
- ERC8d - Wide dispersive outdoor use of processing aids in open systems
- ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix
- ERC9a - Wide dispersive indoor use of substances in closed systems
- ERC9b - Wide dispersive outdoor use of substances in closed systems

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

| <b>Control of worker exposure</b>                                                      |                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title                                                                                  | General measures applicable to all activities                                                                                                                                                                                                                                                                                                |
| Covers concentrations up to                                                            | 100%                                                                                                                                                                                                                                                                                                                                         |
| Physical form of product                                                               | Solid in solution                                                                                                                                                                                                                                                                                                                            |
| Technical conditions and measures to control dispersion from source towards the worker | Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)<br>Avoid contact with contaminated tools and objects<br>Ensure operatives are trained to minimise exposures<br>Operate activity away from sources of substance emission or release<br>Provide extract ventilation to points where emissions occur |
| Conditions and measures related to personal protection, hygiene and health evaluation  | Wear suitable gloves (tested to EN 374) and eye protection<br>Wear suitable respiratory protection (conforming to EN 140 with Type A filter or better) and gloves (type EN 374) if regular skin contact likely                                                                                                                               |
| Organisational measures to prevent /limit releases, dispersion and exposure            | Assumes a good basic standard of occupational hygiene is implemented<br>Ensure operatives are trained to minimise exposures<br>Clean equipment and the work area every day<br>Supervision in place to check that the RMMs in place are being used correctly and OCs followed                                                                 |

## **Section 3 - Exposure estimation**

**Environmental release category(ies)** - ERC8a - Wide dispersive indoor use of processing aids in open systems

- ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix
- ERC8d - Wide dispersive outdoor use of processing aids in open systems
- ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix
- ERC9a - Wide dispersive indoor use of substances in closed systems
- ERC9b - Wide dispersive outdoor use of substances in closed systems

**Predicted No Effect Concentration (PNEC)**

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

**Derived No Effect Level (DNEL):**

**Remarks** Qualitative approach used to conclude safe use

## **Section 4 - Guidance to check compliance with the exposure scenario**

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

Qualitative approach used to conclude safe use. Risk management measures are based on qualitative risk characterization. Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

|                                       |                                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Chemical name</b>                  | SODIUM METASILICATE                                                                       |
| <b>Pure substance/mixture</b>         | Substance                                                                                 |
| <b>REACH registration number</b>      | 01-2119449811-37-XXXX                                                                     |
| <b>CAS No</b>                         | 10213-79-3                                                                                |
| <b>EC No (EU Index No)</b>            | 229-912-9                                                                                 |
| <b>Supplier</b>                       | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>GBR |
| <b>Non-Emergency Telephone Number</b> | +44 1274 267300 / +44 1274 267306                                                         |
| <b>E-mail address</b>                 | SDS.EMEA@univarsolutions.com                                                              |

### Section 1 - Title

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Title</b>                               | Consumer use ( Solid )                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Type</b>                                | Consumer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Main user group</b>                     | Consumer uses: Private households (= general public = consumers)                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Environmental release category(ies)</b> | ERC8a - Wide dispersive indoor use of processing aids in open systems ERC8b - Wide dispersive indoor use of reactive substances in open systems ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC8d - Wide dispersive outdoor use of processing aids in open systems ERC8e - Wide dispersive outdoor use of reactive substances in open systems ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix                            |
| <b>Product category(ies)</b>               | PC1 - Adhesives, sealants PC3 - Air care products PC8 - Biocidal Products (e.g. disinfectants, pest control) PC9a - Coatings and paints, thinners, paint removers PC9b - Fillers, putties, plasters, modelling clay PC9c - Finger paints PC15 - Non-metal-surface treatment products PC31 - Polishes and wax blends PC34 - Textile dyes, finishing and impregnating products PC35 - Washing and cleaning products (including solvent based products) PC39 - Cosmetics, personal care products |
| <b>Sector(s) of use</b>                    | SU21 - Consumer uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

### Section 2 - Operational conditions and risk management measures

#### Section 2.1 - Control of environmental exposure

**Environmental release category(ies)** - ERC8a - Wide dispersive indoor use of processing aids in open systems

- ERC8b - Wide dispersive indoor use of reactive substances in open systems
- ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix
- ERC8d - Wide dispersive outdoor use of processing aids in open systems
- ERC8e - Wide dispersive outdoor use of reactive substances in open systems
- ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix

|                |                                                                                                                                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Remarks</b> | As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed. |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|

#### Control of consumer exposure

|                          |                                                                              |
|--------------------------|------------------------------------------------------------------------------|
| Physical form of product | Solid                                                                        |
| Risk management measures | Wear suitable protective clothing Avoid contact with eyes, skin and clothing |

### Section 3 - Exposure estimation



Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems

- ERC8b - Wide dispersive indoor use of reactive substances in open systems

- ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix

- ERC8d - Wide dispersive outdoor use of processing aids in open systems

- ERC8e - Wide dispersive outdoor use of reactive substances in open systems

- ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix

Predicted No Effect Concentration  
(PNEC)

|         |                                                                                                                                  |
|---------|----------------------------------------------------------------------------------------------------------------------------------|
| Remarks | As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed. |
|---------|----------------------------------------------------------------------------------------------------------------------------------|

Derived No Effect Level (DNEL):

|         |                                                |
|---------|------------------------------------------------|
| Remarks | Qualitative approach used to conclude safe use |
|---------|------------------------------------------------|

#### Section 4 - Guidance to check compliance with the exposure scenario

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

Qualitative approach used to conclude safe use. Risk management measures are based on qualitative risk characterization.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

|                                       |                                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Chemical name</b>                  | SODIUM METASILICATE                                                                       |
| <b>Pure substance/mixture</b>         | Substance                                                                                 |
| <b>REACH registration number</b>      | 01-2119449811-37-XXXX                                                                     |
| <b>CAS No</b>                         | 10213-79-3                                                                                |
| <b>EC No (EU Index No)</b>            | 229-912-9                                                                                 |
| <b>Supplier</b>                       | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>GBR |
| <b>Non-Emergency Telephone Number</b> | +44 1274 267300 / +44 1274 267306                                                         |
| <b>E-mail address</b>                 | SDS.EMEA@univarsolutions.com                                                              |

### Section 1 - Title

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Title</b>                               | Consumer use ( liquid )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Type</b>                                | Consumer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Main user group</b>                     | Consumer uses: Private households (= general public = consumers)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Environmental release category(ies)</b> | ERC8a - Wide dispersive indoor use of processing aids in open systems ERC8b - Wide dispersive indoor use of reactive substances in open systems ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC8d - Wide dispersive outdoor use of processing aids in open systems ERC8e - Wide dispersive outdoor use of reactive substances in open systems ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix ERC9a - Wide dispersive indoor use of substances in closed systems ERC9b - Wide dispersive outdoor use of substances in closed systems |
| <b>Product category(ies)</b>               | PC1 - Adhesives, sealants PC3 - Air care products PC8 - Biocidal Products (e.g. disinfectants, pest control) PC9a - Coatings and paints, thinners, paint removers PC9b - Fillers, putties, plasters, modelling clay PC15 - Non-metal-surface treatment products PC35 - Washing and cleaning products (including solvent based products) PC39 - Cosmetics, personal care products                                                                                                                                                                                                                          |
| <b>Sector(s) of use</b>                    | SU21 - Consumer uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

### Section 2 - Operational conditions and risk management measures

#### Section 2.1 - Control of environmental exposure

**Environmental release category(ies)** - ERC8a - Wide dispersive indoor use of processing aids in open systems

- ERC8b - Wide dispersive indoor use of reactive substances in open systems
- ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix
- ERC8d - Wide dispersive outdoor use of processing aids in open systems
- ERC8e - Wide dispersive outdoor use of reactive substances in open systems
- ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix
- ERC9a - Wide dispersive indoor use of substances in closed systems
- ERC9b - Wide dispersive outdoor use of substances in closed systems

|                |                                                                                                                                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Remarks</b> | As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed. |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|

| Control of consumer exposure |                                                                              |
|------------------------------|------------------------------------------------------------------------------|
| Physical form of product     | Liquid                                                                       |
| Risk management measures     | Wear suitable protective clothing Avoid contact with eyes, skin and clothing |

### Section 3 - Exposure estimation

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems

- ERC8b - Wide dispersive indoor use of reactive substances in open systems

- ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix

- ERC8d - Wide dispersive outdoor use of processing aids in open systems

- ERC8e - Wide dispersive outdoor use of reactive substances in open systems

- ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix

- ERC9a - Wide dispersive indoor use of substances in closed systems

- ERC9b - Wide dispersive outdoor use of substances in closed systems

Predicted No Effect Concentration  
(PNEC)

Remarks

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

Derived No Effect Level (DNEL):

Remarks

Qualitative approach used to conclude safe use

### Section 4 - Guidance to check compliance with the exposure scenario

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

Qualitative approach used to conclude safe use. Risk management measures are based on qualitative risk characterization.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

|                                       |                                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Chemical name</b>                  | SODIUM METASILICATE                                                                       |
| <b>Pure substance/mixture</b>         | Substance                                                                                 |
| <b>REACH registration number</b>      | 01-2119449811-37-XXXX                                                                     |
| <b>CAS No</b>                         | 10213-79-3                                                                                |
| <b>EC No (EU Index No)</b>            | 229-912-9                                                                                 |
| <b>Supplier</b>                       | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>GBR |
| <b>Non-Emergency Telephone Number</b> | +44 1274 267300 / +44 1274 267306                                                         |
| <b>E-mail address</b>                 | SDS.EMEA@univarsolutions.com                                                              |

### Section 1 - Title

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Title</b>                               | Consumer use                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Type</b>                                | Consumer                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Main user group</b>                     | Consumer uses: Private households (= general public = consumers)                                                                                                                                                                                                                                                                                                                                         |
| <b>Environmental release category(ies)</b> | ERC10a - Wide dispersive outdoor use of long-life articles and materials with low release<br>ERC10b - Wide dispersive outdoor use of long-life articles and materials with high or intended release<br>ERC11a - Wide dispersive indoor use of long-life articles and materials with low release<br>ERC11b - Wide dispersive indoor use of long-life articles and materials with high or intended release |
| <b>Article categories</b>                  | AC1a - Passenger cars and motor cycles AC1b - Other vehicles: Railway, aircraft, vessels, boats, trucks, and associated transport equipment AC2 - Machinery, mechanical appliances, electrical/electronic articles AC4 - Stone, plaster, cement, glass and ceramic articles AC5 - Fabrics, textiles and apparel AC6 - Leather articles AC31 - Scented clothes                                            |
| <b>Sector(s) of use</b>                    | SU21 - Consumer uses                                                                                                                                                                                                                                                                                                                                                                                     |

### Section 2 - Operational conditions and risk management measures

#### Section 2.1 - Control of environmental exposure

**Environmental release category(ies)** - ERC10a - Wide dispersive outdoor use of long-life articles and materials with low release  
 - ERC10b - Wide dispersive outdoor use of long-life articles and materials with high or intended release  
 - ERC11a - Wide dispersive indoor use of long-life articles and materials with low release  
 - ERC11b - Wide dispersive indoor use of long-life articles and materials with high or intended release

**Remarks** As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### Section 3 - Exposure estimation

**Environmental release category(ies)** - ERC10a - Wide dispersive outdoor use of long-life articles and materials with low release  
- ERC10b - Wide dispersive outdoor use of long-life articles and materials with high or intended release  
- ERC11a - Wide dispersive indoor use of long-life articles and materials with low release  
- ERC11b - Wide dispersive indoor use of long-life articles and materials with high or intended release

**Predicted No Effect Concentration  
(PNEC)**

|                |                                                                                                                                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Remarks</b> | As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed. |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|

**Derived No Effect Level (DNEL):**

|                |                                                |
|----------------|------------------------------------------------|
| <b>Remarks</b> | Qualitative approach used to conclude safe use |
|----------------|------------------------------------------------|

## **Section 4 - Guidance to check compliance with the exposure scenario**

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.  
Qualitative approach used to conclude safe use. Risk management measures are based on qualitative risk characterization.  
Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.