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

1.1. Product identifier
Product form : Substance
Substance name : Sodium Carbonate Monohydrate
EC-No. : 207-838-8
CAS-No. : 5968-11-6
Formula : Na₂CO₃ + H₂O

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

1.2.1. Relevant identified uses
Use of the substance/mixture : Pharmaceuticals
Laboratory Reagent

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer
Jost Chemical Co.
8150 Lackland Rd.
63114 Saint Louis, Missouri
T 314-428-4300 - F 314-428-4366
sds@jostchemical.com - www.jostchemical.com

Distributor
JOST CHEMICAL EUROPE SPRL
rue du Bois Portal n° 30/1-3
B - 5300 Andenne - BELGIQUE
T +32 85-552655 - F +32 85-552654
info@jostchemical.com

1.4. Emergency telephone number
Emergency number : For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
United States and Canada: 1-800-424-9300 / +1 703-527-3887
Global: +1 703-741-5970

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Serious eye damage/eye irritation, Category 2
H319
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms (CLP) : GHS07

Signal word (CLP) : Warning
Hazard statements (CLP) : H319 - Causes serious eye irritation.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards
PBT: not yet assessed
vPvB: not yet assessed

SECTION 3: Composition/information on ingredients

3.1. Substances
Substance type : Mono-constituent
SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general:

First-aid measures after inhalation:
- Remove person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact:
- Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists. Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.

First-aid measures after eye contact:
- Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion:

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

Symptoms/effects after inhalation:
- AFTER INHALATION OF DUST: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. EXPOSURE TO HIGH CONCENTRATIONS: Respiratory difficulties.

Symptoms/effects after skin contact:

Symptoms/effects after eye contact:
- Irritation of the eye tissue. Serious damage to eyes.

Symptoms/effects after ingestion:

Symptoms/effects upon intravenous administration:
- No effects known.

Chronic symptoms:

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

5.2. Special hazards arising from the substance or mixture

Fire hazard:
- DIRECT FIRE HAZARD: Non combustible.

Explosion hazard:
- No data available on direct explosion hazard. No data available on indirect explosion hazard.

Hazardous decomposition products in case of fire:
- Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

Precautionary measures fire:
- Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions:
- No specific fire-fighting instructions required.

Protection during firefighting:
- Heat/fire exposure: compressed air/oxygen apparatus. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Sodium Carbonate Monohydrate
Safety Data Sheet
according to Regulation (EC) No. 453/2010

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel


Measures in case of dust release: In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment: Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.

Methods for cleaning up: Mechanically recover the product. Prevent dust cloud formation. Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Avoid raising dust. Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Hygiene measures: Observe normal hygiene standards. Keep container tightly closed. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

Storage conditions: Store in a clean, dry warehouse in the original unopened containers. Store locked up. Store in a well-ventilated place. Keep cool.


Heat and ignition sources: KEEP SUBSTANCE AWAY FROM: heat sources.

Information on mixed storage: KEEP SUBSTANCE AWAY FROM: (strong) acids. metals. water/moisture.

Storage area: Store in a dry area. Keep container in a well-ventilated place. Meet the legal requirements.

Special rules on packaging: SPECIAL REQUIREMENTS: closing, watertight. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials: MATERIAL TO AVOID: aluminium. zinc.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Sodium Carbonate Monohydrate (5968-11-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL/DMEL (Workers)</td>
</tr>
<tr>
<td>Long-term - local effects, inhalation</td>
</tr>
<tr>
<td>DNEL/DMEL (General population)</td>
</tr>
<tr>
<td>Acute - local effects, inhalation</td>
</tr>
<tr>
<td>DNEL</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protective equipment:

Materials for protective clothing:
GIVE GOOD RESISTANCE: butyl rubber. PVC

Hand protection:
Gloves

Eye protection:
Safety glasses. In case of dust production: protective goggles. Safety glasses

Skin and body protection:
Protective clothing

Respiratory protection:
Dust production: dust mask with filter type P1. [In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Molecular mass : 124 g/mol
Colour : Colourless.
Odour : Odourless.
Odour threshold : No data available
pH : 11.6 (5 %)
Relative evaporation rate (butylacetate=1) : No data available
Melting point : 100 °C
Freezing point : Not applicable
Boiling point : Not applicable
Flash point : Not applicable
Auto-ignition temperature : Not applicable
Decomposition temperature : No data available
Flammability (solid, gas) : Non flammable.
Vapour pressure : No data available
Relative vapour density at 20 °C : Not applicable
Relative density : 2.3
Density : 2250 kg/m³
Solubility : Exothermically soluble in water. Soluble in glycerol.
Water: 33 g/100ml
Log Pow : -6.19 (Estimated value)
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : Not explosive.
Oxidising properties : Not oxidising.
Explosive limits : Not applicable
9.2. Other information
VOC content : 0 %
Other properties : Hygroscopic. Substance has basic reaction.

SECTION 10: Stability and reactivity
10.1. Reactivity
With pressure build-up may cause closed container to burst. Violent exothermic reaction with (some) metals. Reacts on exposure to water (moisture) with (some) metals.

10.2. Chemical stability
Hygroscopic. Absorbs the atmospheric CO2.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

10.6. Hazardous decomposition products
Violent exothermic reaction with (some) acids: release of harmful gases/vapours (carbon dioxide).

SECTION 11: Toxicological information
11.1. Information on toxicological effects

Acute toxicity (oral): Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal): Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation): Not classified (Based on available data, the classification criteria are not met)

Sodium Carbonate Monohydrate (5968-11-6)
LD50 oral rat: > 4090 mg/kg (Rat)
LD50 dermal rabbit: > 2000 mg/kg (16 CFR 1500. 40, 24 h, Rabbit, Experimental value)
LC50 inhalation rat (mg/l): 2.3 mg/l (2 h; anhydrous product)

Causes serious eye damage.
Serious eye damage/irritation: Causes serious eye irritation.

Sodium Carbonate Monohydrate (5968-11-6)
NOAEL (oral, rat): >= 245 mg/kg bodyweight (24 h)
STOT-repeated exposure: Not classified (Lack of data)
Aspiration hazard: Not classified (Lack of data)
Potential adverse human health effects and symptoms: Practically non-toxic if swallowed (LD50 oral 2000/5000 mg/kg). Slightly irritant to skin. Causes serious eye irritation.

SECTION 12: Ecological information
12.1. Toxicity
Ecology - general: Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008. Before neutralisation, the product may represent a danger to aquatic organisms.
Ecology - air: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water: Slightly harmful to crustacea. Slightly harmful to fishes. Mild water pollutant (surface water).
Dangerous for the environment: Not classified
Chronic aquatic toxicity: Not classified

Sodium Carbonate Monohydrate (5968-11-6)
LC50 fish 1: 300 mg/l (96 h, Lepomis macrochirus)
EC50 Daphnia 1: 265 mg/l (48 h, Daphnia magna)
12.2. Persistence and degradability

**Sodium Carbonate Monohydrate (5968-11-6)**

<table>
<thead>
<tr>
<th>Persistence and degradability</th>
<th>Biodegradability: not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Chemical oxygen demand (COD)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>ThOD</td>
<td>Not applicable</td>
</tr>
<tr>
<td>BOD (% of ThOD)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

**Sodium Carbonate Monohydrate (5968-11-6)**

<table>
<thead>
<tr>
<th>Log Pow</th>
<th>-6.19 (Estimated value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulative potential</td>
<td>Not bioaccumulative.</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

**Sodium Carbonate Monohydrate (5968-11-6)**

| Ecology - soil                 | Low potential for adsorption in soil. |

12.5. Results of PBT and vPvB assessment

**Sodium Carbonate Monohydrate (5968-11-6)**

<table>
<thead>
<tr>
<th>PBT</th>
<th>not yet assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>vPvB</td>
<td>not yet assessed</td>
</tr>
</tbody>
</table>

12.6. Other adverse effects

No additional information available

**SECTION 13: Disposal considerations**

13.1. Waste treatment methods

<table>
<thead>
<tr>
<th>Regional legislation (waste)</th>
<th>LWCA (the Netherlands): KGA category 05.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste treatment methods</td>
<td>Dispose of contents/container in accordance with licensed collector’s sorting instructions.</td>
</tr>
<tr>
<td>Product/Packaging disposal recommendations</td>
<td>Treat using the best available techniques before discharge into drains or the aquatic environment. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Remove to an authorized dump (Class I). Precipitate/make insoluble.</td>
</tr>
</tbody>
</table>

**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

| UN-No. (ADR)                  | Not applicable |
| UN-No. (IMDG)                 | Not applicable |
| UN-No. (IATA)                 | Not applicable |
| UN-No. (ADN)                  | Not applicable |
| UN-No. (RID)                  | Not applicable |

14.2. UN proper shipping name

| Proper Shipping Name (ADR)    | Not regulated for transport |
| Proper Shipping Name (IMDG)   | Not regulated for transport |
| Proper Shipping Name (IATA)   | Not regulated for transport |
| Proper Shipping Name (ADN)    | Not regulated for transport |
| Proper Shipping Name (RID)    | Not regulated for transport |

14.3. Transport hazard class(es)

**ADR**

| Transport hazard class(es) (ADR) | Not applicable |

**IMDG**

| Transport hazard class(es) (IMDG) | Not applicable |
### Sodium Carbonate Monohydrate

**Safety Data Sheet**

according to Regulation (EC) No. 453/2010

---

#### 14.4. Packing group

<table>
<thead>
<tr>
<th>Class/Group</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing group (ADR)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Packing group (IMDG)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Packing group (IATA)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Packing group (ADN)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Packing group (RID)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

#### 14.5. Environmental hazards

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerous for the environment</td>
<td>No</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>No</td>
</tr>
<tr>
<td>Other information</td>
<td>No supplementary information available</td>
</tr>
</tbody>
</table>

#### 14.6. Special precautions for user

<table>
<thead>
<tr>
<th>Mode of Transportation</th>
<th>Not subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overland transport</td>
<td>Not subject</td>
</tr>
<tr>
<td>Transport by sea</td>
<td>Not subject</td>
</tr>
<tr>
<td>Air transport</td>
<td>Not subject</td>
</tr>
<tr>
<td>Inland waterway transport</td>
<td>Not subject</td>
</tr>
<tr>
<td>Rail transport</td>
<td>Not subject</td>
</tr>
</tbody>
</table>

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

---

#### SECTION 15: Regulatory information

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

**15.1.1. EU-Regulations**

- No REACH Annex XVII restrictions
- Sodium Carbonate Monohydrate is not on the REACH Candidate List
- Sodium Carbonate Monohydrate is not on the REACH Annex XIV List

- VOC content: 0 %
- Directive 2012/18/EU (SEVESO III)

**15.1.2. National regulations**

- Listed on the United States TSCA (Toxic Substances Control Act) inventory

**15.2. Chemical safety assessment**

- No chemical safety assessment has been carried out

---

#### SECTION 16: Other information

**Indication of changes:**

This sheet was updated (refer to the date at the top of this page).

**Full text of H- and EUH-statements:**

<table>
<thead>
<tr>
<th>H- and EUH-statement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*