SECTION 1: Identification

1.1. Identification

Product form: Substance
Substance name: Sodium Carbonate Anhydrous
CAS-No.: 497-19-8
Formula: Na₂CO₃
BIG no.: 10318

1.2. Recommended use and restrictions on use

Use of the substance/mixture: Oral Care; Pharmaceuticals
Laboratory Reagent

1.3. Supplier

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

2.1. Classification of the substance or mixture

GHS US classification
Serious eye damage/eye irritation Category 2
H319 Causes serious eye irritation

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling
Hazard pictograms (GHS US):

Signal word (GHS US): Warning
Hazard statements (GHS US): H319 - Causes serious eye irritation
Precautionary statements (GHS US):
P264 - Wash hands, forearms, and face thoroughly after handling.
P280 - Wear protective gloves, eye 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 which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type: Mono-constituent
Sodium Carbonate Anhydrous
Safety Data Sheet

Full text of hazard classes and H-statements: see section 16

3.2. Mixtures
Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

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.

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. Wash skin with plenty of water.

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. If eye irritation persists: Get medical advice/attention.


4.2. Most important symptoms and effects (acute and delayed)
Potential Adverse human health effects and symptoms: Practically non-toxic if swallowed (LD50 oral 2000/5000 mg/kg). Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg). Not irritant to skin. Slightly harmful by inhalation. Slightly irritating to respiratory organs. Causes serious eye irritation.


Symptoms/effects after skin contact: Not irritating.

Symptoms/effects after eye contact: Irritation of the eye tissue. Redness of the eye tissue. Lacrimation. Eye irritation.


Symptoms/effects upon intravenous administration: No effects known.


4.3. Immediate medical attention and special treatment, if necessary
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

5.2. Specific hazards arising from the chemical
Fire hazard: DIRECT FIRE HAZARD: Non combustible.
Explosion hazard: DIRECT EXPLOSION HAZARD: No direct explosion hazard.
Reactivity: Violent exothermic reaction with (some) metals. Reacts with (strong) oxidizers. Reacts on exposure to water (moisture) with (some) metals.

5.3. Special protective equipment and precautions for fire-fighters
Precautionary measures fire: Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighborhood close doors and windows.

Firefighting instructions: No specific fire-fighting instructions required.
Sodium Carbonate Anhydrous
Safety Data Sheet

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel


Emergency procedures: Ventilate spillage area. Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes. Avoid contact with skin and eyes.

Measures in case of dust release: In case of dust production: keep upwind. Dust production: have neighborhood 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: Ensure good ventilation of the work station. 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. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures: Observe normal hygiene standards. Keep container tightly closed. 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 in a well-ventilated place. Keep cool.


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

Information on mixed storage: KEEP SUBSTANCE AWAY FROM: (strong) acids. metal powders. Water/moisture.

Storage area: Store in a cool area. Store in a dry area. Keep container in a well-ventilated place. Keep out of direct sunlight. Keep only in the original container. 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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Sodium Carbonate Anhydrous (497-19-8)</th>
<th>DNEL</th>
<th>DNEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 mg/m³ (Acute - local effects, inhalation, general population)</td>
<td></td>
</tr>
</tbody>
</table>
8.2. Appropriate engineering controls

<table>
<thead>
<tr>
<th>Engineering controls</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure good ventilation of the work station.</td>
<td></td>
</tr>
<tr>
<td>Avoid release to the environment.</td>
<td></td>
</tr>
</tbody>
</table>

8.3. Individual protection measures/Personal protective equipment

**Personal protective equipment:**


**Materials for protective clothing:**

GIVE EXCELLENT RESISTANCE: nitrile rubber. 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

**Personal protective equipment symbol(s):**

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Powder. Granules.</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless to white</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>&gt; 11 (212.5 g/l, 20 °C)</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable (decomposes)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>2.52 - 2.53 (20 °C)</td>
</tr>
<tr>
<td>Specific gravity / density</td>
<td>2520 - 2530 kg/m³ (20 °C)</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>105.99 g/mol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Exothermically soluble in water. Soluble in glycerol. Water: 212.5 g/l (20 °C)</td>
</tr>
<tr>
<td>Log Pow</td>
<td>-6.19 (Estimated value)</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>&gt; 400 °C</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Sodium Carbonate Anhydrous
Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 9: Other information

9.2. Other information

Viscosity, dynamic: No data available
Explosion limits: Not applicable
Explosive properties: Not explosive.
Oxidizing properties: Not oxidising.

SECTION 10: Stability and reactivity

10.1. Reactivity

Violent exothermic reaction with (some) metals. Reacts with (strong) oxidizers. 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/vapors (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
Acute toxicity (inhalation): Not classified

**Sodium Carbonate Anhydrous (497-19-8)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>2800 mg/kg (Rat, Male/female, Experimental value)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg (16 CFR 1500. 40, 24 h, Rabbit, Experimental value)</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>2.3 mg/l (2 h, Rat, Male, Experimental value)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified (Based on available data, the classification criteria are not met)

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization: Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity: Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity: Not classified (Lack of data)

Reproductive toxicity: Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity – single exposure: Not classified

**Sodium Carbonate Anhydrous (497-19-8)**

NOAEL (oral/rat): >= 245 mg/kg body weight (24 h)

Specific target organ toxicity – repeated exposure: Not classified (Lack of data)

Aspiration hazard: Not classified

Viscosity, kinematic: No data available

Potential Adverse human health effects and symptoms: Practically non-toxic if swallowed (LD50 oral 2000/5000 mg/kg). Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg). Not irritant to skin. Slightly harmful by inhalation. Slightly irritant to respiratory organs. Causes serious eye irritation.
Sodium Carbonate Anhydrous
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations


Symptoms/effects after skin contact: Not irritating.

Symptoms/effects after eye contact: Irritation of the eye tissue. Redness of the eye tissue. Lacrimation. Eye irritation.


Symptoms/effects upon intravenous administration: No effects known.


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.


Ecology - water: Slightly harmful to fishes. Slightly harmful to algae. Slightly harmful to crustacea. pH shift.

<table>
<thead>
<tr>
<th>Sodium Carbonate Anhydrous (497-19-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
</tr>
<tr>
<td>300 mg/l (Other, 96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
</tr>
<tr>
<td>200 - 227 mg/l (Other, 48 h, Ceriodaphnia sp., Semi-static system, Fresh water, Experimental value)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
Sodium Carbonate Anhydrous (497-19-8): Biodegradability: not applicable.

Biochemical oxygen demand (BOD): Not applicable (inorganic)

Chemical oxygen demand (COD): Not applicable (inorganic)

ThOD: Not applicable (inorganic)

12.3. Bioaccumulative potential
Sodium Carbonate Anhydrous (497-19-8): Log Pow -6.19 (Estimated value)

Bioaccumulative potential: Not bioaccumulative.

12.4. Mobility in soil

12.5. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods
Regional legislation (waste): LWCA (the Netherlands): KGA category 05.

Waste treatment methods: Dispose of contents/container in accordance with licensed collector’s sorting instructions.

Product/Packaging disposal recommendations: Do not discharge into drains or the 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. May be discharged to wastewater treatment installation.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated

Transportation of Dangerous Goods
Proper Shipping Name (Transportation of Dangerous Goods) : Not regulated for transport

Transport by sea
Proper Shipping Name (IMDG) : Not regulated for transport

Air transport
Proper Shipping Name (IATA) : Not regulated for transport

SECTION 15: Regulatory information

15.1. US Federal regulations
Sodium Carbonate Anhydrous (497-19-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA
Sodium Carbonate Anhydrous (497-19-8)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations
No additional information available

National regulations
No additional information available

15.3. US State regulations
California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Full text of H-phrases:

H319 Causes serious eye irritation
Sodium Carbonate Anhydrous
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>NFPA hazard hazard</th>
<th>NFPA fire hazard</th>
<th>NFPA reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.</td>
<td>0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.</td>
<td>0 - Material that in themselves are normally stable, even under fire conditions.</td>
</tr>
</tbody>
</table>

Hazard Rating
Health : 2 Moderate Hazard - Temporary or minor injury may occur
Flammability : 0 Minimal Hazard - Materials that will not burn
Physical : 2 Moderate Hazard - Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.

SDS US (GHS HazCom 2012)

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.