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

1.1. Product identifier

Product form: Substance
Physical state: Solid
Substance name: SODIUM poly[(NAPHTHALENEFORMALDEHYDE) SULFONATE]
Product code: CXSO054
Formula: \((C11H5NaO4S)^n\)
Synonyms: POLY[(NAPHTHALENE-FORMALDEHYDE)SULFONATE, SODIUM SALT]
Chemical family: POLYORGANOSULFONATE SALT

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

Use of the substance/mixture: Chemical intermediate
For research and industrial use only

1.3. Details of the supplier of the safety data sheet

GELEST, INC.
11 East Steel Road
Morrisville, PA 19067
USA
T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST
info@gelest.com - www.gelest.com

1.4. Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)
Not classified

2.2. Label elements

GHS-US labeling
No labeling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance type: Mono-constituent
Name: SODIUM poly[(NAPHTHALENEFORMALDEHYDE) SULFONATE]
CAS No: 9084-06-4

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde-naphthalenesulfonic acid polymer sodium salt</td>
<td>(CAS No) 9084-06-4</td>
<td>60 - 100</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: If exposed or concerned: get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.

First-aid measures after inhalation: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact: IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes.
First-aid measures after eye contact: IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing.

First-aid measures after ingestion: IF SWALLOWED: Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Get medical attention if you feel unwell.

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

Symptoms/injuries after inhalation: May cause respiratory irritation.
Symptoms/injuries after skin contact: May cause skin irritation.
Symptoms/injuries after eye contact: Direct contact with eyes is likely to be irritating.
Symptoms/injuries after ingestion: May cause gastrointestinal irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media


5.2. Special hazards arising from the substance or mixture

Fire hazard: Not flammable.
Explosion hazard: Product is not explosive.
Reactivity: No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

Firefighting instructions: Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment. Prevent human exposure to fire, fumes, smoke and products of combustion.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

Protective equipment: Wear protective equipment as described in Section 8.

6.1.2. For emergency responders

Protective equipment: Wear suitable protective clothing, gloves and eyes or face protection.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Sweep or shovel spills into appropriate container for disposal. Place in a suitable container for disposal in accordance with the waste regulations (See Section 13).

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Avoid breathing dust. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

No additional information available

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls: Provide adequate general and local exhaust ventilation, especially in confined areas.
Personal protective equipment: Gloves. Protective goggles.
Hand protection: Use gloves appropriate to the work environment.
### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Powder.</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>258.22 g/mol</td>
</tr>
<tr>
<td>Color</td>
<td>Tan to brown.</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Refractive index</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</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>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under use and storage conditions as recommended in Section 7.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Strong oxidizing agents.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Organic acid vapors. Sodium oxide fumes.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

**Formaldehyde-naphthalenesulfonic acid polymer sodium salt (9084-06-4)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>3800 mg/kg</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>3800.000 mg/kg body weight</td>
</tr>
</tbody>
</table>

06/23/2015 EN (English US) SDS ID: CXSO0054
SODIUM poly[(NAPHTHALENEFORMALDEHYDE) SULFONATE] Safety Data Sheet

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified
Symptoms/injuries after inhalation: May cause respiratory irritation.
Symptoms/injuries after skin contact: May cause skin irritation.
Symptoms/injuries after eye contact: Direct contact with eyes is likely to be irritating.
Symptoms/injuries after ingestion: May cause gastrointestinal irritation.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: No information available.

12.2. Persistence and degradability
Persistence and degradability: No information available.

12.3. Bioaccumulative potential
No additional information available.

12.4. Mobility in soil
No additional information available.

12.5. Other adverse effects
Effect on ozone layer: No additional information available.
Effect on the global warming: No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

14.1. UN number
Not regulated for transport.

14.2. UN proper shipping name
Proper Shipping Name (DOT): Not regulated for transport.

14.3. Additional information
Other information: No supplementary information available.

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>SODIUM poly[(NAPHTHALENEFORMALDEHYDE) SULFONATE] (9084-06-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA Section 311/312 Hazard Classes</td>
</tr>
<tr>
<td>Formaldehyde-naphthalenesulfonic acid polymer sodium salt (9084-06-4)</td>
</tr>
</tbody>
</table>

15.2. International regulations

<table>
<thead>
<tr>
<th>SODIUM poly[(NAPHTHALENEFORMALDEHYDE) SULFONATE] (9084-06-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory</td>
</tr>
</tbody>
</table>

06/23/2015 EN (English US) SDS ID: CXS0054
SODIUM poly[(NAPHTHALENEFORMALDEHYDE) SULFONATE]
Safety Data Sheet

Formaldehyde-naphthalenesulfonic acid polymer sodium salt (9084-06-4)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

<table>
<thead>
<tr>
<th>SODIUM poly<a href="9084-06-4">(NAPHTHALENEFORMALDEHYDE) SULFONATE</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California - Proposition 65 - Carcinogens List</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Developmental Toxicity</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</td>
</tr>
</tbody>
</table>

Formaldehyde-naphthalenesulfonic acid polymer sodium salt (9084-06-4)

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<thead>
<tr>
<th></th>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>No significance risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No significance risk level</td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Indication of changes: Revision 1.0: New SDS Created.

NFPA health hazard: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard: 0 - Materials that will not burn.
NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating
Health: 0 Minimal Hazard - No significant risk to health
Flammability: 0 Minimal Hazard
Physical: 0 Minimal Hazard

Author: ANF.
Date of issue: 05/07/2012  Revision date: 06/04/2015  Version: 1.0

SDS US (GHS HazCom 2012) - Custom

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

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