1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name  Sesqui™ Sodium Sesquicarbonate

Other means of identification

Product Code(s)  533-96-0

Synonyms  Trisodium Hydrogendicarbonate, Sesqui

Recommended use of the chemical and restrictions on use

Recommended Use:  Industrial cleaner ingredient, bath salt ingredient, water softener, diaper rinse ingredient, pH adjustment, water treatment, food additive, food and dairy plant sanitizers

Restrictions on Use:  See section 16 for more information

Manufacturer Address  Tronox Alkali Wyoming Corporation
1735 Market Street
Philadelphia, PA 19103
Tel: +1 877-362-2248 or +1 215-299-6904
www.tronox.com

Emergency telephone number  1 307 / 872 2452 (Plant - Green River, WY)
(303) 595-9048 (Medical - U.S. - Call Collect)

For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status  This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Serious eye damage/eye irritation | Category 2 |
GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Warning

Hazard Statements
H319 - Causes serious eye irritation

Precautionary Statements - Prevention
P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear eye protection/ face protection

Precautionary Statements - Response
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

Hazards not otherwise classified (HNOC)
No hazards not otherwise classified were identified.

Other Information
May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula
NaHCO₃·Na₂CO₃

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Sesquicarbonate</td>
<td>533-96-0</td>
<td>100</td>
</tr>
</tbody>
</table>

Synonyms are provided in Section 1.

4. FIRST AID MEASURES

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin Contact
Wash skin with soap and water. Get medical attention if irritation develops and persists.

Inhalation
Remove person to fresh air. If signs/symptoms continue, get medical attention.

Ingestion
Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
Most important symptoms and effects, both acute and delayed: None known.

Indication of immediate medical attention and special treatment needed, if necessary: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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

Specific Hazards Arising from the Chemical Hazardous Combustion Products: None in particular

Explosion data

- Sensitivity to Mechanical Impact: Not sensitive.
- Sensitivity to Static Discharge: Not sensitive.

Hazardous Combustion Products: Fumes of sodium oxide.

Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Sweep up to prevent slipping hazard. For personal protection see section 8.

Other: For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

Environmental Precautions: Keep material out of lakes, streams, ponds, and sewer drains. See Section 12 for additional Ecological Information.

Methods for Containment: Vacuum or shovel waste into a drum and label contents for disposal. Avoid dust formation.

Methods for cleaning up: Pick up and transfer to properly labeled containers. Keep in suitable and closed containers for disposal. Dispose of waste as indicated in Section 13.

7. HANDLING AND STORAGE

Handling: Keep away from incompatible products (acids). Provide appropriate exhaust ventilation at places where dust is formed. Reference to other sections.

Storage: Keep in a dry, cool and well-ventilated place. Keep away from heat and strong Odor. Keep away from incompatible products (acids).

Incompatible products: Except under controlled conditions: Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies Local nuisance dust standards apply

Appropriate engineering controls

Engineering measures: Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.
Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.
Skin and Body Protection Wear suitable protective clothing. Protective shoes or boots.
Hand Protection Protective gloves
Respiratory Protection In case of inadequate ventilation wear respiratory protection.
Hygiene measures Handle in accordance with good industrial hygiene and safety practice.
General information If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White, odorless, needle-shaped particles</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Color</td>
<td>White to off white</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>9.9 (1% solution)</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Decomposes on heating</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>2.12</td>
</tr>
<tr>
<td>Water solubility</td>
<td>17.1 % @ 25 °C</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Decomposes on heating</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Non-oxidizing</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>0.74 g/cm³</td>
</tr>
<tr>
<td>$K_{st}$</td>
<td>0 bar m/s</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity None under normal use conditions.
Chemical Stability Stable.
Possibility of Hazardous Reactions None under normal processing.
Hazardous polymerization Hazardous polymerization does not occur.
Conditions to avoid Avoid contact with acids, Heat, Humid air, strong odor.
11. TOXICOLOGICAL INFORMATION

Product Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Oral</td>
<td>&gt; 2000 mg/kg (rat)</td>
</tr>
<tr>
<td>LD50 Dermal</td>
<td>No information available</td>
</tr>
<tr>
<td>LC50 Inhalation</td>
<td>&gt; 5.03 mg/L 4 hr (rat)</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>Irritating to eyes.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Non-irritating (rabbit)</td>
</tr>
<tr>
<td>Sensitization</td>
<td>Non-sensitizing.</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms

No information available.

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

Chronic toxicity

No known effect.

Mutagenicity

Not mutagenic.

Carcinogenicity

Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).

Reproductive toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Aspiration hazard

No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Persistence and degradability

Biodegradability does not pertain to inorganic substances.

Bioaccumulation

Does not bioaccumulate.

Mobility

Dissociates into ions.

Other Adverse Effects

None known.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

This material, as supplied, is not a hazardous waste according to state and federal regulations (40 CFR 261). Dispose of in accordance with local regulations.

Contaminated Packaging

Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT

NOT REGULATED
15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories
- Acute health hazard: Yes
- Chronic health hazard: No
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
This product does not contain any substances regulated by state right-to-know regulations

International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA (United States)</th>
<th>DSL (Canada)</th>
<th>EINECS/ELINCS (Europe)</th>
<th>ENCS (Japan)</th>
<th>China (IECSC)</th>
<th>KECL (Korea)</th>
<th>PICCS (Philippines)</th>
<th>AICS (Australia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Sesquicarbonate 533-96-0 (100)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

WHMIS Hazard Class
D2B - Toxic materials, Eye irritation
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

NFPA/HMIS Ratings Legend
Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Product Certifications
This product meets the chemical testing specifications defined in the Food Chemicals Codex (FCC), 8th Edition.

This product is certified to NSF/ANSI Standard 60 for use in drinking water treatment at the specified maximum use limit. The MUL (maximum use level) for sodium sesquicarbonate is 100 mg/L under NSF/ANSI Standard 60.

Revision date: 2015-03-30
Revision note: Minor change

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Prepared By:
Tronox Limited

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End of Safety Data Sheet