Sodium Thiosulfate, 0.05N (0.05M)
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 07/10/2013 Revision date: 04/18/2018 Supersedes: 04/18/2018 Version: 1.1

SECTION 1: Identification

1.1. Identification
Product form : Mixtures
Product name : Sodium Thiosulfate, 0.05N (0.05M)
Product code : LC25050

1.2. Recommended use and restrictions on use
Use of the substance/mixture : For laboratory and manufacturing use only.
Recommended use : Laboratory chemicals
Restrictions on use : Not for food, drug or household use

1.3. Supplier
LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number
Emergency number : CHEMTREC: 1-800-424-9300 or +1-703-741-5970

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Not classified

2.2. GHS Label elements, including precautionary statements
Not classified as a hazardous chemical.
Other hazards not contributing to the classification : None.

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>98.74</td>
<td>Not classified</td>
</tr>
<tr>
<td>Sodium Thiosulfate, Pentahydrate</td>
<td>(CAS-No.) 10102-17-7</td>
<td>1.24</td>
<td>Not classified</td>
</tr>
<tr>
<td>Sodium Carbonate, Anhydrous</td>
<td>(CAS-No.) 497-19-8</td>
<td>0.02</td>
<td>Skin Irrit. 2, H315, Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

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

SECTION 4: First-aid measures

4.1. Description of first aid measures
First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)
Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.
4.3. Immediate medical attention and special treatment, if necessary
None.

SECTION 5: Fire-fighting measures
5.1. Suitable (and unsuitable) extinguishing media
Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical
Fire hazard: Not flammable.
Explosion hazard: Not available.
Reactivity: None.

5.3. Special protective equipment and precautions for fire-fighters
Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
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: None.
6.1.1. For non-emergency personnel
Protective equipment: Safety glasses.
Emergency procedures: Evacuate unnecessary personnel.
6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.
6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.
6.3. Methods and material for containment and cleaning up
For containment: Dam up the liquid spill.
Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Hygiene measures: Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container closed when not in use.
Incompatible materials: Direct sunlight.

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

Sodium Thiosulfate, Pentahydrate (10102-17-7)
Not applicable

Water (7732-18-5)
Not applicable
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### Sodium Carbonate, Anhydrous (497-19-8)
Not applicable

#### 8.2. Appropriate engineering controls

**Appropriate engineering controls**: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

#### 8.3. Individual protection measures/Personal protective equipment

**Personal protective equipment:**
Safety glasses.

**Hand protection:**
Wear protective gloves.

**Eye protection:**
Chemical goggles or safety glasses

**Respiratory protection:**
Respiratory protection not required in normal conditions

**Other information:**
Do not eat, drink or smoke during use.

## 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>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear, colorless liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>None.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</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>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>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Miscible with water.</td>
</tr>
<tr>
<td>Log Pow</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>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

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9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
None.

10.2. Chemical stability
Not established.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong oxidizers. Strong acids.

10.6. Hazardous decomposition products
Sulfur compounds. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Skin and eye contact
Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Compound</th>
<th>Route</th>
<th>LD50 (mg/kg)</th>
<th>ATE US (mg/kg body weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Thiosulfate, Pentahydrate (10102-17-7)</td>
<td>oral rat</td>
<td>5000</td>
<td>5000</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>oral rat</td>
<td>≥ 90000</td>
<td>90000</td>
</tr>
<tr>
<td>Sodium Carbonate, Anhydrous (497-19-8)</td>
<td>oral rat</td>
<td>4090</td>
<td>4090</td>
</tr>
</tbody>
</table>

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
Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity
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<table>
<thead>
<tr>
<th>Substance</th>
<th>LC50 fish 1</th>
<th>EC50 Daphnia 1</th>
<th>LC50 fish 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Thiosulfate, Pentahydrate (10102-17-7)</td>
<td>≥10000 mg/l</td>
<td>265 mg/l</td>
<td>740 mg/l</td>
</tr>
<tr>
<td>Sodium Carbonate, Anhydrous (497-19-8)</td>
<td>900 mg/l</td>
<td>130 mg/l</td>
<td>450 mg/l</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Thiosulfate, 0.05N (0.05M)</td>
<td>Not established.</td>
</tr>
<tr>
<td>Sodium Thiosulfate, Pentahydrate (10102-17-7)</td>
<td>Not established.</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>Not established.</td>
</tr>
<tr>
<td>Sodium Carbonate, Anhydrous (497-19-8)</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

**12.3. Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Thiosulfate, 0.05N (0.05M)</td>
<td>Not established.</td>
</tr>
<tr>
<td>Sodium Thiosulfate, Pentahydrate (10102-17-7)</td>
<td>Log Pow -4.35</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>Not established.</td>
</tr>
<tr>
<td>Sodium Carbonate, Anhydrous (497-19-8)</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

**12.4. Mobility in soil**

No additional information available

**12.5. Other adverse effects**

Other information: Avoid release to the environment.

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

**SECTION 14: Transport information**

Department of Transportation (DOT)

In accordance with DOT

Not regulated

**SECTION 15: Regulatory information**

**15.1. US Federal regulations**

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

#### CANADA

**Sodium Thiosulfate, Pentahydrate (10102-17-7)**

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

No additional information available

#### National regulations

**Sodium Thiosulfate, Pentahydrate (10102-17-7)**

Not listed on the Canadian IDL (Ingredient Disclosure List)

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

Listed on the Canadian IDL (Ingredient Disclosure List)

### 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

Revision date : 04/18/2018

Other information : None.

Full text of H-phrases: see section 16:

<table>
<thead>
<tr>
<th>H315</th>
<th>Causes skin irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
</tbody>
</table>

NFPA health hazard:

- 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard:

- 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity:

- 0 - Material that in themselves are normally stable, even under fire conditions.

**Hazard Rating**

- **Health**: 0 Minimal Hazard - No significant risk to health
- **Flammability**: 0 Minimal Hazard - Materials that will not burn
- **Physical**: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

**Personal protection**

- **A**
  - Safety glasses

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