Thermomelt® HEAT-STIK Marker 1750 °F (954 °C)

1. **Product identifier**
   - **Product form**: Mixture
   - **Trade name**: Thermomelt® HEAT-STIK Marker 1750 °F (954 °C)
   - **Synonyms**: Thermomelt® HEAT-STIK Marker 954 °C

2. **Relevant identified uses of the substance or mixture and uses advised against**
   - **Use of the substance/mixture**: Temperature indicator

3. **Details of the supplier of the safety data sheet**
   - LA-CO Industries, Inc.
   - 1201 Pratt Boulevard
   - Elk Grove Village, IL 60007
   - Phone: (847) 956-7600
   - Fax: (847) 956-9885
   - E-mail: customer_service@laco.com

4. **Emergency telephone number**

**SECTION 2: Hazards identification**

1. **Classification of the substance or mixture**
   - **Classification in accordance with the Globally Harmonized Standard**
     - Acute Tox. 4 (Inhalation:dust,mist) H332
     - STOT RE 1 H372
     - Aquatic Chronic 2 H411
   - Full text of H-phrases: see section 16

2. **Label elements**
   - **GHS-US labelling**
     - **Hazard pictograms (GHS-US)**
     - **Signal word (GHS-US)**: Danger
     - **Hazard statements (GHS-US)**: H332 - Harmful if inhaled, H372 - Causes damage to organs through prolonged or repeated exposure, H411 - Toxic to aquatic life with long lasting effects
     - **Precautionary statements (GHS-US)**: P260 - Do not breathe dust, fume, P264 - Wash hands thoroughly after handling, P270 - Do not eat, drink or smoke when using this product, P271 - Use only outdoors or in a well-ventilated area, P273 - Avoid release to the environment, P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing, P312 - Call a doctor if you feel unwell, P314 - Get medical advice/attention if you feel unwell, P391 - Collect spillage, P501 - Dispose of contents/container to an approved waste disposal plant

3. **Other hazards**
   - No additional information available

**SECTION 3: Composition/information on ingredients**

1. **Substance**
   - Not applicable
**Thermomelt® HEAT-STIK Marker 1750 °F (954 °C)**

**Safety Data Sheet**

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

according to Canadian Hazardous Products Regulations (HPR)

---

**3.2. Mixture**

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>% (w/w)</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>trisodium hexafluoroaluminate</td>
<td>(CAS No) 15096-52-3</td>
<td>68.62 - 72.23</td>
<td>Acute Tox. 4 (Inhalation), H332 STOT RE 1, H372 Aquatic Chronic 2, H411</td>
</tr>
<tr>
<td>Styrene, oligomers</td>
<td>(CAS No) 9003-53-6</td>
<td>7.70</td>
<td>Skin Irrit. 2, H315 Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

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**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**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- **First-aid measures after skin contact**: Wash skin with mild soap and water. Wash contaminated clothing before reuse.
- **First-aid measures after eye contact**: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **First-aid measures after ingestion**: Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

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

- **Symptoms/injuries**: Causes damage to organs through prolonged or repeated exposure.
- **Symptoms/injuries after inhalation**: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.

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

All treatments should be based on observed signs and symptoms of distress in the patient.

---

**SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

- **Unsuitable extinguishing media**: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

- **Fire hazard**: May intensify fire; oxidiser.
- **Reactivity**: No dangerous reactions known.

### 5.3. Advice for firefighters

- **Firefighting instructions**: Fight fire remotely due to the risk of explosion. Cool adjacent structures and containers with water spray to protect and prevent ignition. Do not allow run-off from fire fighting to enter drains or water courses. Exercise caution when fighting any chemical fire.
- **Protection during firefighting**: Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flame resistant/retardant clothing. Wear a self contained breathing apparatus.

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**SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

- **General measures**: Avoid creating or spreading dust. Avoid contact with skin and eyes.

#### 6.1.1. For non-emergency personnel

- **Protective equipment**: Dust impervious gloves. In case of inadequate ventilation wear respiratory protection.
- **Emergency procedures**: Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- **Protective equipment**: Dust impervious gloves. Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment.
- **Emergency procedures**: Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment. Do not discharge into drains or the environment. Prevent entry to sewers and public waters.
6.3. Methods and material for containment and cleaning up

For containment:
- Contain and collect any solid. Avoid generating dust.

For cleaning up:
- Take up in non-combustible absorbent material and shove into container for disposal. Minimize generation of dust.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling:
- Use only outdoors or in a well-ventilated area. Do not breathe dust, fume.

Hygiene measures:
- Do not eat, drink or smoke when using this product. 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

Storage conditions:
- Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.

Incompatible products:

Incompatible materials:
- Sources of ignition.

7.3. Specific end use(s)

Temperature indicator.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th></th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermomelt® HEAT-STIK Marker 1750 °F (954 °C)</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Styrene, oligomers (9003-53-6)</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Trisodium hexafluoroaluminate (15096-52-3)</td>
<td>Not applicable</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls:
- Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air). Provide local exhaust ventilation of closed transfer systems to minimize exposures.

Personal protective equipment:
- Avoid all unnecessary exposure.

Hand protection:
- It is a good industrial hygiene practice to minimize skin contact. In case of repeated or prolonged contact wear gloves. Dust impervious gloves.

Eye protection:
- In case of dust production: protective goggles.

Respiratory protection:
- Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Use air-purifying respirator equipped with particulate filtering cartridges.

Thermal hazard protection:
- Flame retardant clothing should be used when handling in molten state.

Other information:
- Do not eat, drink or smoke when using this product.

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>A solid crayon-like marker.</td>
</tr>
<tr>
<td>Colour</td>
<td>white.</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless.</td>
</tr>
<tr>
<td>Odour threshold</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>
</tbody>
</table>
Melting point: 954 °C / 1750 °F
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapour pressure: No data available
Relative vapour density at 20 °C: No data available
Relative density: > 1
Solubility: In water, material is partially soluble.
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidising properties: No data available
Explosive limits: No data available

VOC content: 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity
No dangerous reactions known.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Avoid creating or spreading dust. Direct sunlight. Keep away from sources of ignition.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Burning produces irritating, toxic and noxious fumes. Thermal decomposition generates: Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Inhalation: dust, mist: Harmful if inhaled.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermomelt® HEAT-STIK Marker 1750 °F (954 °C)</td>
<td>ATE CLP (dust,mist)</td>
<td>2.077 mg/l/4h</td>
</tr>
<tr>
<td>trisodium hexafluoroaluminate (15096-52-3)</td>
<td>LD50 oral rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>ATE CLP (dust,mist)</td>
<td>1.500 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified

Styrene, oligomers (9003-53-6)

IARC group: 3 - Not classifiable

Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Thermomelt® HEAT-STIK Marker 1750 °F (954 °C)

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Specific target organ toxicity (repeated exposure) : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms

Symptoms/injuries after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.

Likely routes of exposure : Skin and eyes contact; inhalation.

SECTION 12: Ecological information

12.1 Toxicity

Ecology - water : Toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>trisodium hexafluoroaluminate (15096-52-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Thermomelt® HEAT-STIK Marker 1750 °F (954 °C)

Persistence and degradability : May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

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

In accordance with DOT and TDG

Transport document description : UN3077 Environmentally hazardous substances, solid, n.o.s. (trisodium hexafluoroaluminate), 9, III

UN-No. (DOT) : UN3077

Proper Shipping Name (DOT) : Environmentally hazardous substances, solid, n.o.s. (trisodium hexafluoroaluminate)

Department of Transportation (DOT) Hazard Classes : 9 - Class 9 (Miscellaneous dangerous materials)

Packing group (DOT) : III - Minor Danger

ADR

Transport document description : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (trisodium hexafluoroaluminate), 9, III, (E)

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (trisodium hexafluoroaluminate)

Packing group (ADR) : III

Class (ADR) : 9 - Miscellaneous dangerous substances and articles

Transport by sea

UN-No. (IMDG) : UN 3077

Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (trisodium hexafluoroaluminate)

Class (IMDG) : 9 - Miscellaneous dangerous substances and articles

Packing group (IMDG) : III

Air transport

UN-No. (IATA) : UN 3077

Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (trisodium hexafluoroaluminate)
Thermomelt® HEAT-STIK Marker 1750 °F (954 °C)
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
according to Canadian Hazardous Products Regulations (HPR)

Class (IATA) : 9 - Miscellaneous Dangerous Goods
Packing group (IATA) : III

SECTION 15: Regulatory information

15.1. US Federal regulations

Styrene, oligomers (9003-53-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag
XU - XU indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e., Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

trisodium hexafluoroaluminate (15096-52-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Styrene, oligomers (9003-53-6)
Listed on the Canadian DSL (Domestic Substances List) inventory.

trisodium hexafluoroaluminate (15096-52-3)
Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

Styrene, oligomers (9003-53-6)
Listed on the EU NLP (No Longer Polymers) inventory
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

trisodium hexafluoroaluminate (15096-52-3)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Thermomelt® HEAT-STIK Marker 1750 °F (954 °C)
All ingredients are listed in the Toxic Substances Control Act (TSCA).
All components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS).
All ingredients are listed in the Domestic Substances List (DSL).

15.3. US State regulations

trisodium hexafluoroaluminate (15096-52-3)
U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Indication of changes : Original Document.
Abbreviations and acronyms:

- ACGIH (American Conference of Government Industrial Hygienists).
- CAS (Chemical Abstracts Service) number.
- CLP: Classification, Labelling, Packaging.
- EC50: Environmental Concentration associated with a response by 50% of the test population.
- GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
- LD50: Lethal Dose for 50% of the test population.
- OSHA: Occupational Safety & Health Administration.
- PBT: Persistent, Bioaccumulative, Toxic.
- STEL: Short Term Exposure Limits.
- TSCA: Toxic Substances Control Act.
- TWA: Time Weight Average.

Other information:

- None.

NFPA health hazard: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard: 1 - Must be preheated before ignition can occur.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Inhalation)</th>
<th>Acute toxicity (inhal.), Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4 (Inhalation:dust,mist)</td>
<td>Acute toxicity (inhalation:dust,mist) Category 4</td>
</tr>
<tr>
<td>Aquatic Chronic 2</td>
<td>Hazardous to the aquatic environment — Chronic Hazard, Category 2</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation, Category 2A</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Specific target organ toxicity — Repeated exposure, Category 1</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

SDS Prepared by: The Redstone Group, LLC
6397 Emerald Pkwy.
Suite 200
Dublin, OH USA 43016
T 614-923-7472
www.redstonegrp.com

LACO NA GHS SDS

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.