

Thermomelt® HEAT-STIK Marker 625 °F (329 °C)

LA-CO Industries, Inc.

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
according to Canadian Hazardous Products Regulations (HPR)
Date of issue: 09/23/2014
Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : Thermomelt® HEAT-STIK Marker 625 °F (329 °C)

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

Use of the substance/mixture : Temperature indicator

1.3. Details of the supplier of the safety data sheet

LA-CO Industries, Inc.
1201 Pratt Boulevard
Elk Grove Village, IL. 60007-5746
Phone: (847) 956-7600
Fax: (847) 956-9885
E-mail: customer_service@laco.com



1.4. Emergency telephone number

Emergency number : 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with the Globally Harmonized Standard

Ox. Sol. 3 H272

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS03

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H272 - May intensify fire; oxidiser
Precautionary statements (GHS-US) : P210 - Keep away from heat, sparks, open flames. - No smoking
P220 - Keep/Store away from combustible materials
P221 - Take any precaution to avoid mixing with combustible materials
P280 - Wear eye protection, protective gloves
P370+P378 - In case of fire: Use carbon dioxide (CO₂), dry extinguishing powder, foam, Water spray to extinguish
P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	% (w/w)	GHS-US classification
potassium nitrate	(CAS No) 7757-79-1	95.24	Ox. Sol. 3, H272

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.
- 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 : Not expected to present a significant hazard under anticipated conditions of normal use.

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

- Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray. Sand.
- 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.
- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
- 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : No open flames. No smoking. Avoid contact with skin and eyes. Remove ignition sources.

6.1.1. For non-emergency personnel

- Protective equipment : Chemical goggles or safety glasses. In case of inadequate ventilation wear respiratory protection.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Chemical goggles or safety glasses. 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.

6.3. Methods and material for containment and cleaning up

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

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Hazardous waste due to potential risk of explosion.
Precautions for safe handling : Take any precaution to avoid mixing with combustibles/...
Hygiene measures : 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

- Technical measures : Proper grounding procedures to avoid static electricity should be followed.
Storage conditions : Keep in fireproof place. Keep container tightly closed and in a well-ventilated place.
Incompatible products : Strong acids. Strong oxidizers. Strong bases.
Incompatible materials : Sources of ignition. combustible materials.
Prohibitions on mixed storage : Keep away from incompatible materials.
Storage area : Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

Temperature indicator.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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ACGIH	Not applicable
OSHA	Not applicable
potassium nitrate (7757-79-1)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

- Appropriate engineering controls : Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air). Eyewash stations. Either local exhaust or general room ventilation is usually required.
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 : In case of insufficient ventilation, wear suitable respiratory equipment. Use air-purifying respirator equipped with particulate filtering cartridges.
Thermal hazard protection : Flame retardant clothing should be used when handling in molten state.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid
Appearance : A solid crayon-like marker.
Colour : Gray.
Odour : odourless.
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : 625 °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

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Relative density	: No data available
Solubility	: No data available
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	: May intensify fire; oxidiser.
Explosive limits	: No data available

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

May intensify fire; oxidiser.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Sparks. Overheating. Open flame.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids. combustible materials.

10.6. Hazardous decomposition products

Burning produces irritating, toxic and noxious fumes. Nitrogen oxides. Potassium oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

potassium nitrate (7757-79-1)	
LD50 oral rat	> 2000 mg/kg No mortality observed
LD50 dermal rat	> 5000 mg/kg No mortality observed
LC50 inhalation rat (mg/l)	> 0.527 mg/l/4h No mortality observed

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

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

Likely routes of exposure : Skin and eye contact;Inhalation

SECTION 12: Ecological information

12.1 Toxicity

potassium nitrate (7757-79-1)	
LC50 fish 1	1378 mg/l
EC50 Daphnia 1	490 mg/l 24 h

12.2. Persistence and degradability

No additional information available

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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 : UN1486 Potassium nitrate, 5.1, III
UN-No.(DOT) : UN1486
Proper Shipping Name (DOT) : Potassium nitrate
Department of Transportation (DOT) Hazard Classes : 5.1 - Oxidiser
Packing group (DOT) : III - Minor Danger

ADR

Transport document description : UN 1486 POTASSIUM NITRATE, 5.1, III, (E)
Proper Shipping Name (ADR) : POTASSIUM NITRATE
Packing group (ADR) : III
Class (ADR) : 5.1 - Oxidizing substances

Transport by sea

UN-No. (IMDG) : UN 1486
Proper Shipping Name (IMDG) : POTASSIUM NITRATE
Class (IMDG) : 5.1 - Oxidizing substances
Packing group (IMDG) : III

Air transport

UN-No.(IATA) : UN 1486
Proper Shipping Name (IATA) : POTASSIUM NITRATE
Class (IATA) : 5 - Oxidizing substances
Packing group (IATA) : III

SECTION 15: Regulatory information

15.1. US Federal regulations

potassium nitrate (7757-79-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

potassium nitrate (7757-79-1)

Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

potassium nitrate (7757-79-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

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All components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS).
All ingredients are listed in the Toxic Substances Control Act (TSCA).
All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

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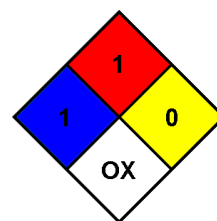
15.3. US State regulations

potassium nitrate (7757-79-1)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

- Indication of changes : Original Document.
- Data sources : ACGIH 2000.
Canadian Centre for Occupational Health and Safety. Accessed at:
http://www.ccohs.ca/oshanswers/legisl/whmis_classifi.html.
ESIS (European chemical Substances Information System; accessed at:
<http://esis.jrc.ec.europa.eu/index.php?PGM=cla>.
European Chemicals Agency (ECHA) Registered Substances list. Accessed at
<http://echa.europa.eu/>. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to
Chemical Protective Clothing", Fifth Edition.
National Fire Protection Association; Fire Protection Guide to Hazardous Materials; 10th
edition.
OSHA 29CFR 1910.1200 Hazard Communication Standard.
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE
COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and
mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending
Regulation (EC) No 1907/2006.
TSCA Chemical Substance Inventory. Accessed at
<http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.
- Abbreviations and acronyms : ACGIH (American Conference of Government Industrial Hygienists).
ATE: Acute Toxicity Estimate.
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 : 1 - Exposure could cause irritation but only minor residual
injury even if no treatment 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.
- NFPA specific hazard : OX - This denotes an oxidizer, a chemical which can
greatly increase the rate of combustion/fire.



Full text of H-phrases:

Ox. Sol. 3	Oxidising Solids, Category 3
H272	May intensify fire; oxidiser

SDS Prepared by: The Redstone Group, LLC
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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