

Thermomelt® HEAT-STIK Marker 400 °F (204 °C), 413 °F (212 °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: 09/22/2014
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Version: 2.0

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

1.1. Product identifier

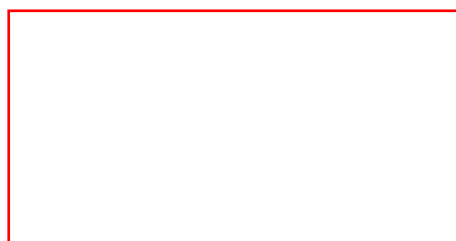
Product form : Mixture
Trade name : Thermomelt® HEAT-STIK Marker 400 °F (204 °C), 413 °F (212 °C)

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

Eye Dam. 1 H318
STOT SE 3 H335

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

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

GHS07

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H318 - Causes serious eye damage
H335 - May cause respiratory irritation

Precautionary statements (GHS-US) :

P261 - Avoid breathing dust, fume
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, protective gloves
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a doctor
P312 - Call a poison center/doctor/... if you feel unwell
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
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

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3.2. Mixture

Name	Product identifier	% (w/w)	GHS-US classification
4-hydroxybenzoic acid	(CAS No) 99-96-7	72.65 : 400 °F 82.65 : 413 °F	Eye Dam. 1, H318 STOT SE 3, H335
adipic acid	(CAS No) 124-04-9	5.95 : 400 °F	Eye Irrit. 2A, H319

Full text of 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 : 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 with plenty of soap and water.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- 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 after inhalation : May cause respiratory irritation.
- Symptoms/injuries after eye contact : Causes serious eye damage.

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 : No specific fire or explosion hazard.
- Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.
- 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 : Avoid contact with skin and eyes. Avoid creating or spreading dust.

6.1.1. For non-emergency personnel

- Protective equipment : Chemical goggles or safety glasses. protective gloves. 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. Use neoprene or rubber gloves. Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Do not discharge into drains or 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.

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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 : Avoid breathing dust, fume. Use only outdoors or in a well-ventilated area.
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

Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use.
Incompatible products : Strong acids. Strong oxidizers. Strong bases.

7.3. Specific end use(s)

Temperature indicator.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Thermomelt® HEAT-STIK Marker 400 °F (204 °C), 413 °F (212 °C)		
ACGIH	Not applicable	
OSHA	Not applicable	
adipic acid (124-04-9)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
ACGIH	Remark (ACGIH)	URT irr; ANS impair
OSHA	Not applicable	
Canada (Quebec)	VEMP (mg/m ³)	5 mg/m ³
4-hydroxybenzoic acid (99-96-7)		
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). Either local exhaust or general room ventilation is usually required. Eyewash stations.
Hand protection : It is a good industrial hygiene practice to minimize skin contact. Wear suitable gloves. rubber.
Eye protection : Chemical goggles or safety glasses.
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.

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 : Variable.
Odour : odourless.
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : 204 °C / 400 °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

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Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: > 1 (estimated)
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

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid creating or spreading dust. Contact with incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids.

10.6. Hazardous decomposition products

Burning produces irritating, toxic and noxious fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

adipic acid (124-04-9)	
LD50 oral rat	5560 mg/kg
LD50 dermal rabbit	7940 ml/kg
LC50 inhalation rat (mg/l)	> 7.7 mg/l/4h
ATE CLP (oral)	5560.000 mg/kg bodyweight

4-hydroxybenzoic acid (99-96-7)	
LD50 oral rat	5000 mg/kg No mortality observed
LD50 dermal rabbit	> 2000 mg/kg No mortality observed
LC50 inhalation rat (mg/l)	>= 0.47 mg/l/4h No mortality observed
ATE CLP (oral)	5000.000 mg/kg bodyweight

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

4-hydroxybenzoic acid (99-96-7)	
NOAEL (chronic, oral, animal/male, 2 years)	1050 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	1050 mg/kg bodyweight

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified

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adipic acid (124-04-9)

NOAEL (oral, rat, 90 days)	750 mg/kg bodyweight/day
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Aspiration hazard : Not classified

Potential adverse human health effects and symptoms

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after eye contact : Causes serious eye damage.

Likely routes of exposure : Skin and eye contact;Inhalation

SECTION 12: Ecological information

12.1 Toxicity

adipic acid (124-04-9)

LC50 fish 1	>= 1000 mg/l 96 h
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EC50 Daphnia 1	46 mg/l 48 h
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4-hydroxybenzoic acid (99-96-7)

LC50 fish 1	92.8 mg/l 96 h
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EC50 Daphnia 1	90 mg/l 24 h
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12.2. Persistence and degradability

adipic acid (124-04-9)

Persistence and degradability	Readily biodegradable.
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Biodegradation	90 % 5 d
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4-hydroxybenzoic acid (99-96-7)

Biodegradation	87.7 % 28 d
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12.3. Bioaccumulative potential

adipic acid (124-04-9)

BCF fish 1	3.162
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Log Pow	0.093
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4-hydroxybenzoic acid (99-96-7)

Log Pow	0.878
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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

Not considered a dangerous good for transport regulations

Proper Shipping Name (ADR) : Not applicable

Transport hazard class(es) (ADR) :

Transport by sea

Transport hazard class(es) (IMDG) :

Air transport

Transport hazard class(es) (IATA) :

SECTION 15: Regulatory information

15.1. US Federal regulations

adipic acid (124-04-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory	
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RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb
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4-hydroxybenzoic acid (99-96-7)

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

15.2. International regulations

CANADA

adipic acid (124-04-9)

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

4-hydroxybenzoic acid (99-96-7)

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

EU-Regulations

adipic acid (124-04-9)

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

4-hydroxybenzoic acid (99-96-7)

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 on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).
All ingredients are listed in the Toxic Substances Control Act (TSCA).

15.3. US State regulations

adipic acid (124-04-9)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

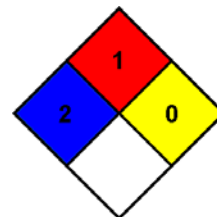
Indication of changes	: Added. Product.
Data sources	: ACGIH 2000. Canadian Centre for Occupational Health and Safety. Accessed at: http://www.ccohs.ca/oshanswers/legisl/whmis_classifi.html . ESIS (European chemical Substances Information System; accessed at: http://esis.jrc.ec.europa.eu/index.php?PGM=cla . 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.

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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-statements:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation

SDS Prepared by: The Redstone Group, LLC
6077 Frantz Rd.
Suite 206
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