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: 03/11/2015 Version: 1.0

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

1.1. Product identifier

Product form : Mixture Product name : Thermomelt® HEAT

: Thermomelt® HEAT-STIK Markers 175 °F (79, 80 °C), 182 °F (83 °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

Acute Tox. 4 (Oral)H302Acute Tox. 4 (Dermal)H312Acute Tox. 4 (Inhalation:dust,mist)H332Full text of H-phrases: see section 16

2.2 Label elements

GHS-US labelling

Hazard pictograms (GHS-US)

Signal word (GHS-US) Hazard statements (GHS-US) Precautionary statements (GHS-US) GHS07

: Warning

- : H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled
- : P261 Avoid breathing 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
- P280 Wear eye protection, protective gloves
 - P301+P312 If swallowed: Call a POISON CENTER, a doctor if you feel unwell
 - P302+P352 If on skin: Wash with plenty of water
 - P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing
 - P312 Call a doctor, a POISON CENTER if you feel unwell
 - P321 Specific treatment (see First aid measures on this label)
 - P330 Rinse mouth
 - P362+P364 Take off contaminated clothing and wash it before reuse
 - P501 Dispose of contents/container to an authorised waste collection point

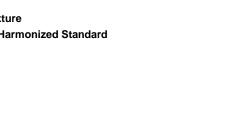
2.3. Other hazards

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
2'-methoxyacetoacetanilide	(CAS No) 92-15-9	75.63 - 84.03 in 175 °C 78.26 - 86.96 in 182 °C	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332

Full text of H-phrases: see section 16

SECTION 4: First aid measures			
4.1. Description of first aid measu	res		
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	: Immediately call a POISON CENTER or doctor/physician. Wash with plenty of 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	: Rinse mouth. 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	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.		
Symptoms/injuries after skin contact	 Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. 		
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating.		
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.		

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 su	ubstance 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	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	: Wear suitable gloves. In case of inadequate ventilation wear respiratory protection.		
Emergency procedures	: Evacuate unnecessary personnel.		
6.1.2. For emergency responders			
Protective equipment	: Wear suitable 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.			

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6.3. Methods and material for containment and cleaning up	
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For containment

- Methods for cleaning up
- : Contain and collect as any solid. Avoid generating dust.
 - : 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. Avoid breathing 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 incompatibilitie	7.2.	Conditions for safe storage	, including any incompatibilities
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Storage conditions	: Store in a dry, cool and well-ventilated place.
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 Markers 175 °F (79, 80 °C), 182 °F (83 °C)		
ACGIH	Not applicable	
OSHA	Not applicable	
2'-methoxyacetoacetanil	ide (92-15-9)	
2'-methoxyacetoacetanil ACGIH	de (92-15-9) Not applicable	

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	: Wear suitable gloves resistant to chemical penetration. Impermeable protective nitrile gloves.
Eye protection	: In case of dust production: protective goggles.
Respiratory protection	: Wear approved mask. 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

Physical state	: Solid
Appearance	: A solid crayon-like marker.
Colour	: light blue. Off-white. light yellow.
Odour	: odourless.
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: Varies per product
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 150 - 157 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
11/03/2015	EN (English)

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

: Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation:dust,mist: Harmful if inhaled.

Thermomelt® HEAT-STIK Markers 175 °F (79, 80 °C), 182 °F (83 °C)		
ATE CLP (oral)	1883.700 mg/kg bodyweight	
ATE CLP (dermal)	1265.000 mg/kg bodyweight	
ATE CLP (dust,mist)	1.725 mg/l/4h	
2'-methoxyacetoacetanilide (92-15-9)		
LD50 oral rat	1638 mg/kg male; 1635 mg/kg female	
ATE CLP (oral)	1638.000 mg/kg bodyweight	
ATE CLP (dermal)	1100.000 mg/kg bodyweight	
ATE CLP (dust,mist)	1.500 mg/l/4h	
Skin corrosion/irritation Serious eye damage/irritation	: Not classified : 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 advarce human health offects and symptoms		

Potential adverse human health effects and symptoms

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Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.
Symptoms/injuries after skin contact	 Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.
Likely routes of exposure	: Skin and eye contact;Inhalation

SECTION 12: Ecological information

12.1 Toxicity

2'-methoxyacetoacetanilide (92-15-9)		
LC50 fish 1	332 mg/l 96 h	
EC50 Daphnia 1	> 85 mg/l 96 h	
12.2 Persistence and degradability		

Persistence and degradability 12.2

2'-methoxyacetoacetanilide (92-15-9)	
Persistence and degradability	Readily biodegradable.
Biodegradation	59 % 28 d

12.3. **Bioaccumulative potential**

2'-methoxyacetoacetanilide (92-15-9)	methoxyacetoacetanilide (92-15-9)	
Log Pow	0.91	

Mobility in soil 12.4.

No additional information available

Other adverse effects 12.5.

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 by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

2'-methoxyacetoacetanilide (92-15-9)

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

15.2. International regulations

CANADA

2'-methoxyacetoacetanilide (92-15-9)

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

EU-Regulations

2'-methoxyacetoacetanilide (92-15-9) Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

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hermomelt® HEAT-STIK Markers 175 °F (79, 80 °C), 182 °F (83 °C)	
Il components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS). Il ingredients are listed in the Toxic Substances Control Act (TSCA). Il ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).	

No additional information available

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 chemincal Substances Information System; accessed at: <u>http://esis.jrc.ec.europa.eu/index.php?PGM=cla</u> .	
	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 Governement 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	: 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:

	Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
	Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
	Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
	Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
	H302	Harmful if swallowed
	H312	Harmful in contact with skin
	H332	Harmful if inhaled

SDS Prepared by: The Redstone Group, LLC 6397 Emerald Pkwy.

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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