


SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Name: Markal® Thermomelt® Heat Stik™ 175°C
Product Code: 86410, 87206, 87253
Product Use: Surface temperature indicator
Supplier: LA-CO Industries, Inc.
 1201 Pratt Boulevard
 Elk Grove Village, IL.
 60007-5746
 E-mail Contact: customer_service@laco.com
Phone: (847) 956-7600
Fax: (847) 956-9885
24-hour Emergency: CHEMTREC: (800) 424-9300

Section 2: Hazards Identification

Protective Clothing	NFPA Rating (USA)	EC Classification	WHMIS (Canada)	Transportation
Not Required for Normal Use		Not Classified as Dangerous	Not Controlled	Not Regulated

Emergency Overview: Exposure to hazardous substances is not expected when handling this article for its intended use. Hot, molten product can cause thermal burns.

Appearance, Color and Odor: Solid, brown stick in a labeled holder, odorless.

While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

USA: This product is not a hazardous material as defined by 29 CFR1910.1200, OSHA Hazard Communication Standard. This product meets the definition of an “article”.

Canada: This is not a controlled product under WHMIS. This product meets the definition of a “manufactured article” and is not subject to the regulations of the Hazardous Products Act.

European Communities (EC): This product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Potential Health Effects: **ACUTE (short term):**

Relevant Route(s) of Exposure: Skin contact.

Inhalation: Exposure to hazardous substances by inhalation is not expected with normal use of the product. Fumes generated from overheating the material may cause irritation to the respiratory tract.

Ingestion: Not an expected route of occupational exposure. Acute oral toxicity of the component substances is low. Acute oral toxicity of the primary component is reported to be >5000 mg/kg (rat).

Skin: Normal use of the stick will not result in harmful effects. Molten product can cause thermal burns.

Eye: Direct contact with the eyes may cause irritation. Fumes generated from overheating the material may cause irritation to the eyes.

CHRONIC (long term): see Section 11 for additional toxicological data

Long-term health effects are not expected with normal use of the product.

Medical Conditions Aggravated by Exposure: Not applicable

SAFETY DATA SHEET

Section 2: Hazards Identification, continued

Interactions With Other Chemicals: Not available

Potential Environmental Effects: Not available

Section 3: Composition / Information on Ingredients

Non-hazardous mixture of DM Hydantoin and hydrocarbon resin compounds.

Section 4: First Aid Measures

Inhalation: If symptoms are experienced remove source of contamination or move victim to fresh air and obtain medical advice.

Eye Contact: No effects expected. If irritation occurs, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.

Skin Contact: If irritation does occur, flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.
 For thermal burns: cool affected area with cold water; do not remove solidified material from the skin; seek medical attention.

Ingestion: If swallowed, call a Poison Control Centre or obtain medical advice immediately.

Section 5: Fire Fighting Measures

Flammable Properties: Product will burn if involved in a fire but does not ignite readily.
 [Flashpoint = 193°C]

Suitable extinguishing Media: For small fires, use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. For large fires, use carbon dioxide, dry chemical powder, alcohol-resistant foam or polymer foam. Use water spray to cool fire-exposed containers.

Unsuitable extinguishing Media: Do not use water jet on hot, molten product.

Explosion Data:

Sensitivity to Mechanical Impact: Not applicable

Sensitivity to Static Discharge: Not applicable

Specific Hazards arising from the Chemical: If involved in a fire, combustion may produce toxic and irritating fumes and gases.

Protective Equipment and precautions for firefighters: Self-contained breathing apparatus and protective clothing should be worn. Remove all unprotected personnel.

NFPA

Health: 1
Flammability: 1
Instability: 0

SAFETY DATA SHEET

Section 6: Accidental Release Measures

Personal Precautions:	Wear thermal protective gloves if needed to prevent skin contact with hot, molten material.
Environmental Precautions:	Prevent the product from entering sewers or waterways.
Methods for Containment:	Not applicable
Methods for Clean-up:	Pick up spilled product and collect for re-use or proper disposal. Dispose of any contaminated, unusable product as described in Section 13 of this SDS.

Section 7: Handling and Storage

Handling:	Keep out of reach of children. Avoid breathing any fumes from thermal decomposition. Avoid skin contact. Do not ingest. Do not use on foods or on surfaces in contact with food. Do not touch heated, molten product.
Storage:	Store out of direct sunlight and away from heat, flames and ignition sources.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

Measurable airborne concentrations of the component substances are not expected when the product is used for its intended purpose.

Exposure Controls

Engineering Controls:	Not required for normal use.
Personal Protection:	
Eye/Face Protection:	No special requirements. Wear protective equipment appropriate for the workplace conditions where this product is used.
Skin Protection:	Wear thermal protective gloves when needed to prevent burns.
Respiratory Protection:	No special requirements. Wear protective equipment appropriate for the workplace conditions where this product is used.
General Hygiene Measures:	Avoid breathing fumes. Do not ingest. Avoid contact with the skin. Keep out of reach of children. Wash hands at the end of every work shift and before eating, drinking, smoking or using the toilet.

Section 9: Physical and Chemical Properties

Physical State:	Solid.	Flash Point & method:	193°C
Appearance, Color and Odor:	Brown stick in a labeled holder, odorless.	Autoignition Temperature:	Not available
Odor Threshold:	Not available	Flammability Limits in Air:	Not available
pH:	Not applicable	Vapor Pressure:	Not available
Relative density:	>1 (estimated)	Vapor Density:	Not applicable
Partition coefficient:	Not available	Evaporation Rate:	Not applicable
Solubility:	Insoluble in water	Boiling Point/Range:	Not available
Viscosity:	Not applicable	Melting Point:	Approximately 175°C
Decomposition Temperature:	Not available	VOC Content:	0% (w/w)

SAFETY DATA SHEET

Section 10: Stability and Reactivity

Chemical Stability:	Stable at normal room temperature.
Conditions to Avoid:	Do not use in conditions of extreme heat or near open flames. Avoid contact with other substances; contamination of product may affect its melting point.
Incompatible Materials:	Incompatible with strong acids, strong bases and oxidizing agents.
Hazardous Decomposition Products:	Heating to decomposition may release highly toxic fumes including volatile acidic vapors.
Possibility of Hazardous Reactions:	Not applicable

Section 11: Toxicological Information

Acute Toxicity Data Acute toxicity data is not available for the marking preparations inside the sticks. Exposure to toxic and harmful substances by the user is not expected when the stick is used for its intended purpose.

Other Toxicity Data

Carcinogenicity:	Normal use of this product will not result in exposure to any component that is considered a human carcinogen by IARC (International Agency for Research on Cancer), ACGIH (American Conference of Governmental Industrial Hygienists, OSHA or NTP (National Toxicology Program).
Irritation:	Component substances are not classified as irritants.
Corrosivity:	Not applicable
Sensitization:	Not applicable
Neurological Effects:	Not applicable
Genetic Effects:	Not applicable
Reproductive Effects:	Not applicable
Developmental Effects:	Not applicable
Target Organ Effects:	Not applicable

Section 12: Ecological Information

Ecotoxicity:	Not available
Persistence/Degradability:	Not available
Bioaccumulation/Accumulation:	Not available
Mobility:	Not available

Section 13: Disposal Considerations

Waste Disposal Method: Do NOT dump into any sewers, on the ground or into any body of water. Store material for disposal as indicated in Section 7 Handling and Storage.
 The conditions of use, storage and disposal of this product are beyond our control and may be beyond our knowledge. For this and other reasons, LA-CO Industries, Inc. does not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

Waste must be disposed of in accordance with relevant EC Directives and national, regional and local environmental control regulations.

SAFETY DATA SHEET

Section 14: Transport Information:

U.S. Hazardous Materials Regulation (DOT 49CFR):	Not regulated
Canadian Transportation of Dangerous Goods (TDG):	Not regulated
ADR/RID:	Not regulated
IMDG:	Not regulated
Marine Pollutants:	Not applicable
ICAO/IATA:	Not regulated

Section 15: Regulatory Information

USA

TSCA Status: All component substances are listed on the TSCA inventory.

SARA Title III

Sec. 302/304: None
 Sec. 311/312: None
 Sec. 313: Not applicable
 CERCLA RQ: Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

WHMIS Classification: Not controlled. Product meets the definition of a "manufactured article" and is not subject to the regulations of the Hazardous Products Act.
(for workplace exposures)

New Substance Notification Regulations: All component substances are listed on Canada's Domestic Substances List (DSL).

NPRI Substances: Contains no NPRI reportable substances.

EC Classification for the Substance/Preparation

European Inventories: All component substances are listed in EINECS.

Symbol: This product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Section 16: Other Information

Preparation Information:

Revision Date: February 25, 2011

Manufacturer Disclaimer: The information contained herein is based on data available to us and is accurate and reliable to the best of our knowledge and belief. However, LA-CO Industries, Inc. makes no representations as to its completeness or accuracy. Information is supplied on condition that persons receiving such information will make their own determination as to its suitability for their purposes prior to use. In no event will LA-CO Industries, Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon the information contained herein.

Prepared by: LEHDER Environmental Services Limited (519) 336-4101
 www.lehder.com
 While LEHDER Environmental Services Limited believes that the data set forth herein is accurate, as of the date hereof, LEHDER makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation and verification.