





SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Name: Markal® Thermomelt® Heat Stik™ 313°F/156°C
Product Code: 86643
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
		 Harmful	 D2A	Not Regulated

Emergency Overview: May be harmful if swallowed or absorbed through the skin. Hot, molten product can cause thermal burns.

Appearance, Color and Odor: Solid, violet 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 a hazardous material as defined by 29 CFR1910.1200, OSHA Hazard Communication Standard.

Canada: This is a controlled product under WHMIS.

European Communities (EC): This product is classified as dangerous according to Directive 1999/45/EC and its amendments. Harmful.

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.

Skin: May cause irritation if in prolonged contact with the skin. May cause an allergic skin reaction. Molten product can cause thermal burns. Component substances may be absorbed through the skin.

Eye: Not an expected route of occupational exposure. Direct contact with the eyes may cause serious irritation or eye damage. Fumes generated from overheating the material may cause irritation to the eyes.

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

Primary component substance is suspected of damaging fertility if swallowed or absorbed through the skin.

Medical Conditions Aggravated by Exposure: Preexisting skin disorders may be aggravated by repeated exposures to the components in the stick.

SAFETY DATA SHEET

Section 2: Hazards Identification, continued

Interactions With Other Chemicals: Not available

Potential Environmental Effects: Harmful to aquatic organisms.

Section 3: Composition / Information on Ingredients

Hazardous Ingredients:

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Wt.%</u>	<u>EINECS / ELINCS</u>	<u>Symbol</u>	<u>Risk Phrases</u>
4,4'-isopropylidenediphenol (BPA)	80-05-7	60 - 95	201-245-8	Xn Xi	Repr. Cat. 3; R62 R37 - 41 - R43 - R52

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: If irritation occurs, flush contaminated eye(s) with lukewarm, gently flowing water for several minutes. If irritation persists, obtain medical advice.

Skin Contact: If on skin, wash immediately with non-abrasive soap and plenty of water for at least 5 minutes. If irritation develops, 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 strongly heated or involved in a fire.
 [Flashpoint = 410°F/210°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. Prevent contact with the skin and eyes. Avoid breathing any fumes. Do not ingest. Do not use on foods. 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 chemical protective gloves. 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 contact with the skin. Keep out of reach of children. Avoid breathing fumes. Do not ingest. 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:	410°F/210°C
Appearance, Color and Odor:	Violet 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 313°F/156°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 (>220°C) may release harmful and/or irritating fumes and vapors.
Possibility of Hazardous Reactions:	Not applicable

Section 11: Toxicological Information

<u>Acute Toxicity Data</u>	Acute toxicity data is not available for the marking preparations inside the sticks. Exposure to acutely toxic and harmful substances by the user is not expected when the stick is used for its intended purpose.
<u>Other Toxicity Data</u>	
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:	Data not available for the mixture. Primary component substance, BPA, causes serious irritation and eye damage when in direct contact with the eyes.
Corrosivity:	Not applicable
Sensitization:	Primary component substance may cause an allergic skin reaction.
Neurological Effects:	Not applicable
Genetic Effects:	Not applicable
Reproductive Effects:	Primary component substance BPA is suspected of damaging fertility. BPA has caused reduced fertility in experiments with animals.
Developmental Effects:	Not applicable
Target Organ Effects:	Not applicable

Section 12: Ecological Information

Ecotoxicity:	BPA is classified as harmful to aquatic organisms. Do not release to the environment.
Persistence/Degradability:	Not available
Bioaccumulation/Accumulation:	Not available
Mobility:	Not available

Section 13: Disposal Considerations

Waste Disposal Method:	<p>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.</p> <p>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.</p> <p>Waste must be disposed of in accordance with relevant EC Directives and national, regional and local environmental control regulations.</p>
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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: 4,4'-Isopropylidenediphenol; 1% de minimis.

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: D2A: Material causing other toxic effects, due reproductive effects.
(for workplace exposures) D2B: due to skin sensitization and eye irritation.

New Substance Notification Regulations: All component substances are listed on Canada's Domestic Substances List (DSL).
Bisphenol A is a CEPA, High priority chemical for Human health.

NPRI Substances: Bisphenol A, Part 1, Group 1 Substance (2010)

EC Classification for the Substance/Preparation

European Inventories: All component substances are listed in EINECS.

Symbol:



Harmful

Risk phrases: Repr. Cat. 3; R62: Possible risk of impaired fertility.
R41: Risk of serious damage to eyes.
R43: May cause sensitization by skin contact.
R52: Harmful to aquatic organisms.

Safety phrases: S2: Keep out of the reach of children.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37: Wear suitable protective clothing and gloves.
S46: If swallowed, seek medical advice immediately and show this container or label.
S61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

SAFETY DATA SHEET**Section 16: Other Information**

Text of R-phrases in Section 3:

R62: Possible risk of impaired fertility.
R37: Irritating to respiratory system.
R41: Risk of serious damage to eyes.
R43: May cause sensitization by skin contact.
R52: Harmful to aquatic organisms.

Preparation Information:

Revision Date: February 25, 2011

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