

SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Name: All Weather® Twist-Stik® Livestock Markers

Product Code: 61040, 61061, 61062, 61065, 61066, 61072, 61076, 61086, 61087

Product Use: Crayon for livestock marking.


Manufacturer: LA-CO Industries, Inc.
1201 Pratt Boulevard
Elk Grove Village, IL.
60007-5746
E-mail Contact: customer_service@laco.com

Phone Number: (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 or dangerous substances is not expected when handling this product for its intended use.

Appearance, Color and Odor: Cylindrical crayon in a plastic tube, color specified on label, odor of mineral oil.

USA: This product is not a hazardous material as defined by 29 CFR1910.1200, OSHA Hazard Communication Evaluation. 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): see Section 8 for exposure controls**

Relevant Route(s) of Exposure: Skin contact.

Inhalation: Exposure to hazardous substances by inhalation is not expected with normal use of the marker. High temperatures may generate vapors which may cause irritation to the nose, throat and upper respiratory tract.

Ingestion: Not an expected route of occupational exposure. Acute oral toxicity of the component substances is low.

Skin: Normal use of marker will not result in harmful effects.

Eye: Not an expected route of occupational exposure.

SAFETY DATA SHEET

Section 2: Hazards Identification (continued)

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

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

Medical Conditions Aggravated by Exposure: Preexisting skin disorders may be aggravated by repeated exposure to the product.

Interactions With Other Chemicals: Not available

Potential Environmental Effects: Not available

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>
White mineral oil (petroleum)	8042-47-5	30 - 60	232-455-8	None*	None
Parrafin wax	8002-74-2	15 - 40	232-315-6	None*	None
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	10 - 30	265-155-0	Not applicable contains <3% DMSO extract by IP 346.	
Titanium dioxide	13463-67-7	1 - 4.5	236-675-5	None*	None

* This chemical substance is not classified in the Annex I of Directive 67/548/EEC.

Note: See Section 8 of this MSDS for exposure limit data for these ingredients.
See Section 16 for the full text of the R-phrases above.

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: No health effects expected. If irritation does occur, flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.

Ingestion: If irritation or discomfort occurs, obtain medical advice immediately.

SAFETY DATA SHEET**Section 5: Fire Fighting Measures**

Flammable Properties:	Product will burn if involved in a fire.
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. Firefighting foams are the extinguishing agent of choice for most flammable liquid fires. Use water spray to cool fire-exposed containers.
Unsuitable extinguishing Media:	Not available
Explosion Data:	
Sensitivity to Mechanical Impact:	Not applicable
Sensitivity to Static Discharge:	Not applicable
Specific Hazards arising from the Chemical:	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

Section 6: Accidental Release Measures

Personal Precautions:	No special requirements.
Environmental Precautions:	Prevent the product from entering sewers or waterways.
Methods for Containment:	No special methods required.
Methods for Clean-up:	Clean up spills immediately. Dispose of any contaminated, unusable product as described in Section 13 of this Safety Data Sheet.

Section 7: Handling and Storage

Handling:	Avoid contact with skin and eyes. Do not use near sources of extreme heat. Keep out of reach of children.
Storage:	Store in a cool, dry area, out of direct sunlight and away from heat, flames and ignition sources. Keep markers closed when not in use.

SAFETY DATA SHEET

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

Consult local authorities for acceptable exposure limits.

Measurable airborne concentrations of the component substances, listed in Section 3, are not expected when the markers are used for their intended purpose.

<u>Ingredient</u>	<u>ACGIH TLV</u> <u>(8-hr. TWA)</u> mg/m ³	<u>U.S. OSHA PEL</u> <u>(8-hr. TWA)</u> mg/m ³	<u>Ontario (Canada)</u> <u>TWAEV</u> mg/m ³	<u>UK OEL</u> <u>(8-hr. TWA)</u> mg/m ³
Paraffin wax	2 (fume)	2 (fume)	2 (fume)	2 (fume) 6 (fume) STEL

STEL = Short Term Exposure Limit

Exposure Controls

Engineering Controls: Not required for its intended use.
If product is overheated, provide adequate ventilation to keep vapor concentrations below the exposure limits listed above.

Personal Protection:

Eye/Face Protection: Not required for normal use.

Skin Protection: Not required for normal use.

Respiratory Protection: Not required for normal use

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements, European Standard EN529 or Canadian Standards Association (CSA) Standard Z94.4-2002 must be followed whenever workplace conditions warrant a respirator's use.

General Hygiene Measures: Do not ingest. Avoid contact with skin and eyes. Keep out of reach of children. Wash hands after handling.

SAFETY DATA SHEET

Section 9: Physical and Chemical Properties

Physical State:	Solid	Flash Point & method:	204°C (400°F)
Appearance, Color and Odor:	Crayon in a cylindrical, plastic twist-up holder; various colors; odor of mineral oil.	Autoignition Temperature:	Not available
Odor Threshold:	Not available	Flammability Limits in Air:	Not available
pH:	Not applicable	Vapor Pressure:	Not applicable
Specific Gravity: (water = 1)	>1	Vapor Density: (Air = 1)	Not applicable
Partition coefficient: (n-octanol/water)	Not available	Evaporation Rate: (n-Butyl Acetate = 1)	Not applicable
Solubility:	Insoluble in water. Soluble in organic solvents.	Boiling Point/Range:	Not available
Viscosity:	Not applicable	Melting Point:	Not available
Decomposition Temperature:	Not available	VOC Content:	0% w/w

Section 10: Stability and Reactivity

Chemical Stability:	Stable at normal room temperature.
Conditions to Avoid:	Avoid extreme heat and open flames.
Incompatible Materials:	Incompatible with strong oxidizing agents.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.

Section 11: Toxicological Information

Acute Toxicity Data

<u>Component substance</u>	<u>LD₅₀ Oral</u> (mg/kg)	<u>LD₅₀ Dermal</u> (mg/kg)	<u>LC₅₀ Inhalation</u> (4 hrs.)
White mineral oil (petroleum)	>5 000 (rat)	Not available	Not applicable
Parrafin wax	>3 750 (rat)	>3 600 (rabbit)	Not applicable
Distillates (petroleum), hydrotreated heavy naphthenic	>5 000 (rat)	>2 000 (rabbit)	Not available
Titanium dioxide	>10 000 (rat)	Not available	Not available

SAFETY DATA SHEET

Section 11: Toxicological Information (continued)

Chronic Toxicity Data

Carcinogenicity:

Distillates (petroleum), hydrotreated heavy naphthenic, has less than 3% DMSO extract as measured by IP 346. This product is not required to be labeled according to the European Directive 67/548/EEC.

IARC has listed exposure to powdered Titanium dioxide in Group 2B, based on limited evidence of human carcinogenicity from long-term inhalation exposure to high concentrations of pigmentary (powdered) or ultra-fine titanium dioxide. Inhalation of titanium dioxide is not expected for this solid, composite product.

ACGIH A4, Not classifiable as a human carcinogen.

<u>Component substance</u>	<u>ACGIH</u>	<u>IARC</u>	<u>NTP</u>
White mineral oil (petroleum)	Not listed	Not listed	Not listed
Paraffin wax	Not listed	Not listed	Not listed
Distillates (petroleum), hydrotreated heavy naphthenic	Not listed	Not listed	Not listed
Titanium dioxide	A4	2B – Not applicable for this product	Not listed

ACGIH: (American Conference of Governmental Industrial Hygienists)

IARC: (International Agency for Research on Cancer)

NTP: (National Toxicity Program)

Irritation: Normal use of marker will not result in harmful effects.

Corrosivity: Not available

Sensitization: Not applicable with normal use of the marker.

Neurological Effects: Not applicable with normal use of the marker.

Genetic Effects: Not available

Reproductive Effects: Not applicable with normal use of the marker.

Developmental Effects: Not applicable with normal use of the marker.

Target Organ Effects: Not applicable

Section 12: Ecological Information

Ecotoxicity: Not available

Persistence/Degradability: Not available

Bioaccumulation/Accumulation: Not available

Mobility: Not available

Other adverse effects: Not available

SAFETY DATA SHEET

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.

USA: Dispose of in accordance with local, state and federal laws and regulations.

Canada: Dispose of in accordance with local, provincial and federal laws and regulations.

EC: Waste must be disposed of in accordance with relevant EC Directives and national, regional and local environmental control regulations. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

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 ingredients in the product are listed on the TSCA inventory.

SARA Title III

Sec. 302/304: None

Sec. 311/312: Not applicable

Sec. 313: Not applicable

CERCLA RQ: Not applicable

California Prop 65: This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

State Right-to-Know Lists : State right to know lists: Paraffin wax, Titanium dioxide: Massachusetts, New Jersey, Pennsylvania.

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
(for workplace exposures)

New Substance Notification Regulations: All ingredients in the product are listed, as required, on Canada's Domestic Substances List (DSL).

NPRI Substances: White mineral oil (8042-47-5) is a NPRI reportable substance, Part 5 substance.

SAFETY DATA SHEET**EC Classification for the
Substance/Preparation**

European Inventories: White mineral oil (CAS 8042-47-5), Paraffin wax (CAS 8002-74-4) are listed in the Inventory of Cosmetic Ingredients Directive (INCI).

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

Section 16: Other Information

**Full Text of R-phrases appearing in
Section 2:** Not applicable

Preparation Information:

Prepared by: LEHDER Environmental Services Limited (519) 336-4101
www.lehder.com

Preparation date: June 26, 2008

Revision Date: Not applicable

Revision Summary: Not applicable

Disclaimer: 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.

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.