


MATERIAL SAFETY DATA SHEET

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

Section 1: Product and Company Information

<u>Product Name:</u>	PRO-LINE® Liquid Paint Marker Finesline and Microlines
<u>Product Code:</u>	96871, 96857, 96888, 96892 (white); 96872, 96858, 96889, 96893 (yellow); 96873, 96860, 96890, 96894 (black); 96874, 96859, 96891, 96895 (red); 96875 (blue); 96876 (green); 96877 (orange); 96878 (ppaint); 96879 (light green); 96861 (assorted colors)
<u>Product Use:</u>	Marker for metal, suitable for wood, glass, plastic rubber and more with marking range -50°F to 150°F (-46C to 66°C).
<u>Manufacturer:</u>	LA-CO Industries, Inc. 1201 Pratt Boulevard Elk Grove Village, IL. 60007-5746
<u>Phone Number:</u>	(847) 956-7600
<u>Fax:</u>	(847) 956-9885
<u>24-hour Emergency:</u>	CHEMTREC: (800) 424-9300

Section 2: Composition and Ingredient Information

Hazardous/Dangerous Ingredients:

Chemical Name	CAS No.	Wt. %	EINECS / ELINCS	Symbol	Risk Phrases
1-methoxypropan-2-ol	107-98-2	74 - 81	203-539-1	None	R10

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.

MATERIAL SAFETY DATA SHEET**Section 3: Hazards Identification****Preparation Hazards and Classification:**

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. This product contains a small amount of a liquid preparation which contains dangerous ingredients however, there is no expected release of the liquid during use of the product and there is a barrier preventing exposure of the user and the environment.

Appearance, Color and Odor:

Marker containing colored paint. Ether-like odor.

Primary Route(s) of Exposure:

Normal use of this marker will not result in exposure to hazardous substances. The paint contained inside the marker has components which are considered hazardous by inhalation of vapors, eye and skin contact.

Potential Health Effects:

ACUTE (short term): see Section 8 for exposure controls

Inhalation: Inhalation of hazardous vapors is not expected with normal use of the marker. Concentrated vapors may be irritating or harmful.

Ingestion: Not an expected route of exposure with normal use of the marker. Paint may be harmful if swallowed.

Skin: Normal use of marker will not result in harmful effects. Paint may cause mild irritation to sensitive individuals.

Eye: Not an expected route of exposure with normal use of the marker. Concentrated vapors may cause mild irritation.

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

Chronic effects are not expected with normal use of the marker.

Medical Conditions

Not available

Aggravated by Exposure:**Section 4: First Aid Measures****Inhalation:**

If symptoms are experienced remove source of contamination or move victim to fresh air. Obtain medical advice.

Eye Contact:

If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the chemical is removed. If irritation persists, obtain medical advice.

Skin Contact:

If irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

Ingestion:

If irritation or discomfort occurs, obtain medical advice immediately.

MATERIAL SAFETY DATA SHEET

Section 5: Fire Fighting Measures

- Extinguishing Media:** Dry chemical powder, alcohol resistant fire-fighting foams, and water spray.
- Unusual Fire and Explosion Hazards:** Flashpoint of the paint : 31°C
 Sensitivity to mechanical impact: Not sensitive
 Sensitivity to static discharge: Not sensitive
- Fire Fighting Instructions:** Fight fire from a safe distance or protected location. Approach fire from upwind to avoid toxic decomposition products. Self-contained breathing apparatus and protective clothing should be worn.
- Hazardous Combustion Products:** Combustion may produce carbon dioxide, carbon monoxide, toxic and irritating gases.

Section 6: Accidental Release Measures

- Personal Precautions:** Avoid contact with skin and eyes.
- Environmental Precautions:** Bulk releases are not anticipated under normal conditions. Prevent the paint from entering sewers or waterways.
- Methods for Containment:** Stop the leak if it is safe to do so. Prevent the paint from entering sewers or waterways.
- Methods for Clean-up:** Soak up any spilled paint with an inert absorbent material. Place the contaminated absorbent in a sealed container and dispose according to local regulations.

Section 7: Handling and Storage

- Handling** This product contains ingredients which are flammable. Do not use near ignition sources (e.g. sparks, open flames, extremely hot surfaces, welding operations). Keep away from extreme heat. Keep marker closed when not in use. Keep away from children. Avoid contact with skin and eyes.
- Storage:** Store in a cool, well-ventilated area, out of direct sunlight and away from heat and ignition sources. Keep markers tightly closed when not in use.

Section 8: Exposure Controls and Personal Protection

Exposure Limits

<u>Ingredient</u>	<u>ACGIH TLV (8-hr. TWA)</u>	<u>U.S. OSHA PEL (8-hr. TWA)</u>	<u>Ontario (Canada) TWA_{EV}</u>	<u>UK OEL (8-hr. TWA)</u>
1-methoxypropan-2-ol	100 ppm 150 ppm STEL	100 ppm TWA; 360 mg/m ³ TWA 150 ppm STEL; 540 mg/m ³ STEL	100 ppm TWA; 365 mg/m ³ TWA 150 ppm STEL; 550 mg/m ³ STEL	100 ppm TWA; 375 mg/m ³ TWA, Skin 150 ppm STEL; 560 mg/m ³ STEL

MATERIAL SAFETY DATA SHEET

Exposure Controls

Engineering Controls: Provide adequate ventilation to keep vapor concentrations below the exposure limits listed above.

Personal Protection:

Respiratory Protection: Not required for normal use.

Skin Protection: Not required for normal use. Wear gloves when needed to prevent skin contact.

Eye Protection: Not required for normal use.

Other Protective Equipment: Not required.

Hygiene Measures: Avoid breathing vapors. Keep container tightly closed when not in use. Keep out of reach of children.

Section 9: Physical and Chemical Properties

<u>Physical State:</u>	Liquid paint absorbed in a marker.	<u>Vapor Pressure:</u> <u>(mm Hg @ 20°C)</u>	Not available
<u>Appearance:</u>	Marker is available in white, yellow, red, black, orange and blue paints.	<u>Vapor Density:</u> <u>(Air = 1)</u>	Not available
<u>pH:</u>	Not available	<u>Solubility in Water:</u>	Paint is miscible with water
<u>Relative Density:</u> <u>(water = 1)</u>	Of the paint: 0.98 1.2 g/mL	<u>Water / Oil distribution</u> <u>coefficient:</u>	Not available
<u>Boiling Point:</u>	Of the paint: 120°C	<u>Odor Type:</u>	Ether-like, sweet odor.
<u>Freezing Point:</u>	Not available	<u>Odor Threshold:</u>	Not available
<u>Viscosity:</u>	Not available	<u>Evaporation Rate:</u> <u>(n-Butyl Acetate = 1)</u>	Not available
<u>Oxidizing Properties:</u>	Not available	<u>Auto Ignition</u> <u>Temperature (°C):</u>	Of the paint: 250°C
<u>Flash Point and Method:</u>	Of the paint: 31°C	<u>Flammability Limits (%):</u>	Lower: 1.7 vol. % Upper: 11.5 vol. %
<u>VOC (wt %):</u>	6.5 - 8.0%	<u>Partition Coefficient (n-</u> <u>octanol/water):</u>	Not available

MATERIAL SAFETY DATA SHEET

Section 10: Stability and Reactivity

<u>Stability:</u>	Stable at normal room temperature.
<u>Conditions to Avoid:</u>	Open flames, sparks, static discharge, heat and other ignition sources.
<u>Incompatible Materials:</u>	Incompatible with strong oxidizing agents.
<u>Hazardous Decomposition Products:</u>	Carbon monoxide and carbon dioxide.
<u>Possibility of Hazardous Reactions:</u>	Hazardous polymerization will not occur.
<u>Other Reactivity Concerns:</u>	Not available

Section 11: Toxicological Information

Acute Toxicity Data

<u>Ingredient</u>	<u>LD₅₀ Oral</u> (mg/kg)	<u>LD₅₀ Dermal</u> (mg/kg)	<u>LC₅₀ Inhalation</u> (4 hrs.)
1-methoxypropan-2-ol	5 200 (rat)	13 000 (rabbit)	54.6 mg/L/4 hour (rat) 24 mg/L/1 hour (rat)

Chronic Toxicity Data

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

<u>Ingredient</u>	<u>ACGIH</u>	<u>IARC</u>	<u>NTP</u>
1-methoxypropan-2-ol	Not listed	Not listed	Not listed

ACGIH: (American Conference of Governmental Industrial Hygienists)

IARC: (International Agency for Research on Cancer)

NTP: (National Toxicity Program)

<u>Irritation:</u>	Normal use of marker will not result in harmful effects. Concentrated vapors may cause mild eye irritation and irritation to the upper respiratory tract. Contact with the skin may cause irritation in sensitive individuals.
<u>Sensitization:</u>	Not applicable
<u>Neurological Effects:</u>	Not applicable
<u>Teratogenicity:</u>	Not applicable
<u>Reproductive Toxicity:</u>	Not applicable
<u>Mutagenicity (Genetic Effects):</u>	Not applicable
<u>Toxicologically Synergistic Materials:</u>	Not available



MATERIAL SAFETY DATA SHEET

Section 12: Ecological Information

<u>Ecotoxicity:</u>	Not available
<u>Mobility:</u>	Not available
<u>Persistence and degradability:</u>	Not available
<u>Bioaccumulative potential:</u>	Not available
<u>Other adverse effects:</u>	Not available

Section 13: Disposal Considerations

<u>Waste Disposal Method:</u>	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.
<u>USA:</u>	Dispose of in accordance with local, state and federal laws and regulations. RCRA Code: None
<u>Canada:</u>	Dispose of in accordance with local, provincial and federal laws and regulations.
<u>EC:</u>	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>U.S. Hazardous Materials Regulation (DOT 49CFR):</u>	Not regulated
<u>Canadian Transportation of Dangerous Goods (TDG):</u>	Not regulated
<u>ADR/RID:</u>	Not regulated
<u>IMDG:</u>	Not regulated
<u>Marine Pollutants:</u>	Not applicable
<u>ICAO/IATA :</u>	Not regulated

MATERIAL SAFETY DATA SHEET**Section 15: Regulatory Information****NFPA Hazard Rating****USA**

TSCA Status: All ingredients in the product are listed on the TSCA inventory.

SARA Title III:

Sec. 302/304: None

Sec: 311/312: None

Sec. 313: None

CERCLA RQ: None

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 : Propylene glycol methyl ether is listed on the following State Right-to-Know Lists: 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

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

NPRI Substances (National Pollutant Release Inventory): The ingredient listed in this product is not a NRPI reportable substance.

EC Classification for the Substance/Preparation:

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

Risk Phrases: None

Safety Phrases: S2: Keep out of reach of children.
S24: Avoid contact with skin.

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

Full Text of R-phrases appearing in Section 2: R10: Flammable

Preparation Information:

Preparation Date: June 1, 2006

Revision Date: Not applicable, new MSDS

Revision Summary: Not applicable

Prepared by: LEHDER Environmental Services Limited
704 Mara Street, Suite 210, Pt. Edward, ON
N7V 1X4
www.lehder.com

Phone: (519) 336-4101

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.