

Material Safety Data Sheet

IMPORTANT NOTICE: This Material Safety Data Sheet (MSDS) is issued by LA-CO Industries, Inc. (LA-CO) in accordance with the U.S. OSHA Hazard Communication Standard, Canadian WHMIS Controlled Products Regulations, British CHIP regulation 6, Australian NMRCWHS and ANSI Z400.1-1993 guidelines. The information contained herein must not be altered, deleted or added to, with the exception of adding supplier/importer information in the space provided. LA-CO has no objection to its MSDS being copied if: a) the copy is made for safety-related purposes; and b) no alterations or amendments are made to the text or format of the MSDS, with the exception of adding supplier/importer information in the space provided. LA-CO does not guaranty the accuracy of any MSDS for our products which: a) is not prepared by LA-CO; b) is not authorized by LA-CO; c) is not in the format originally supplied by LA-CO; or d) has otherwise been amended or altered by a third party, with the exception of adding supplier/importer information in the space provided. Official LA-CO MSDS's reside on its web site at www.laco.com.

Section 1 Product and Company Identification

Product Name: **PRO-LINE (Fineline and Microfine) Paint Marker**
PRO-MAX Paint Marker

Revision #: 1.2

Date Prepared: May 16, 2002

Date Revised: October 13, 2005

Manufacturer:

LA-CO INDUSTRIES, Inc. *Markal Co.*

1201 Pratt Blvd.

Elk Grove Village, IL, USA 60007-5746

Information Telephone: 847-956-7600

Emergency Telephone: Call CHEMTREC
USA 800-424-9300

International (Call Collect) 1-703-527-3887

Chemical Formula: Mixture

CAS No.: Not Applicable. Derivation: Not Applicable.

Synonyms: Not Applicable.

General Use: Paint Marker

Supplier/Importer:

Section 2 Composition/Information on Ingredients

<u>Ingredient</u>	<u>CAS No.</u>	<u>%</u>
1-Methoxy-Propanol-2	107-98-2	≤ 81

(For Section 2 footnotes: See Section 15)

Section 3 Hazards Identification

EMERGENCY OVERVIEW: WARNING: Contains 1-methoxy-propanol-2. Flammable. Keep away from heat, sparks, and flame. KEEP OUT OF REACH OF CHILDREN. FOR INDUSTRIAL USE ONLY.

POTENTIAL HEALTH EFFECTS

Primary Exposure Routes: Eyes, Skin, Ingestion, Inhalation

Acute Effects

Eyes: May cause eye irritation.

Skin: May irritate sensitive skin.

Ingestion: May be harmful if swallowed.

Inhalation: May be irritating if inhaled.

Chronic Effects

Eyes: None known

Skin: None known

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Ingestion: None known

Inhalation: None known

Carcinogenicity: Not Applicable.

Target Organ Effects: Liver and kidney effects.

Medical Conditions Aggravated by Long-Term Exposure: Not Determined.

Other Information: None known

Section 4

First Aid

Eye Contact: Immediately flush eyes with water for at least 15 minutes while holding eye lids open. Have victim roll eyes for more thorough flushing. Get medical attention.

Skin Contact: Remove contaminated clothing. Flush skin with water or wash with soap and water. Consult physician if irritation develops.

Ingestion: NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. Rinse mouth with water. Give victim water to dilute.

Inhalation: Remove victim to fresh air. Give oxygen if breathing is difficult. Give artificial respiration if breathing has stopped. Get medical attention.

Other Information: None known

Section 5

Fire Fighting Measures

Flash Point (method): 88°F / 31°C (DIN EN 456)

LEL: 1.8% **UEL:** 16% for 1-Methoxy-Propanol-2

Autoignition Temperature: Not determined

Flammability Classification: NFPA Class IC

Extinguishing Media: Water spray, foam, carbon dioxide

Hazardous Combustion Products: Carbon monoxide, carbon dioxide.

Unusual Fire or Explosion Hazards: None known

Fire-Fighting Instructions/Equipment: Keep personnel removed and upwind of any fire. Wear full fire-fighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

Section 6

Accidental Release Measures

Use recommended personal protective equipment (see Section 8).

Small Spill: Take up spill with absorbent material and place in non-leaking container. Seal container for proper disposal.

Large Spill: **CAUTION!** Flammable. Contain spilled product by diking. Eliminate all possible ignition sources. Provide adequate ventilation. Equip responders with appropriate personal protection equipment. Take up spill with absorbent material and place in non-leaking container. Seal container for proper disposal.

Section 7

Handling and Storage

Handling Precautions: Use recommended personal protective equipment (see Section 8). Wash thoroughly after handling.

Storage Requirements: Store away from incompatible chemicals (see Sec. 10). Store in a cool, dry area.

Section 8 Exposure Controls/Personal Protection

Eye/Face Protection: Safety glasses. Where contact with the eyes is likely, use chemical goggles. Use a

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face shield as needed.

Skin/Hand Protection: Use impervious gloves.

Respiratory Protection: Use a NIOSH/MSHA approved air-purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use a positive pressure air supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respiratory protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Other Equipment: Eyewash and safety shower.

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control sources of dust or fumes.

Administrative Controls: Users of this product must be properly trained and qualified in its use.

Other Information: No food or beverage should be consumed in the work area. Wash thoroughly before eating, drinking, or smoking.

Section 9 Physical and Chemical Properties

Appearance/Physical State: Paint/Liquid

Odor: Solvent/paint-like.

Odor Threshold (ppm): Not Determined.

Specific Gravity (H₂O = 1): Approximately 1

pH: Not applicable

Melting Point: Not applicable

Boiling Point: Approximately 248^oF / 120^oC

Vapor Pressure (mm Hg at 20^oC): 10.9 for 1-Methoxy-Propanol-2

Vapor Density (Air = 1): Not determined

Evaporation Rate (n-BuAc=1): 0.66 for 1-Methoxy-Propanol-2

V.O.C. (U.S. Clean Air Act Section 111): 0%(w/w)

Flash Point (method): (see Section 5)

Solubility - Water: Soluble

- **Fat:** Partially soluble

Coefficient of Water/Oil Solubility: >1

Partition Coefficient (n-octanol/water): <1

Autoignition Temperature: (see Section 5)

Flammability Classification: (see Section 5)

Unusual Fire or Explosion Hazards: (see Section 5)

Oxidizing Properties: Not Applicable.

Other Information: None.

Note: The physical data represented above are typical values and should not be construed as a specification.

Section 10 Stability and Reactivity

Chemical Stability: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid: None known

Chemicals to Avoid: Strong oxidizers

Hazardous Decomposition Products (non-thermal): Not determined

Section 11 Toxicological Information

Sensitization to Product: Not Applicable.

Reproductive Toxicity: Not Applicable.

Teratogenicity: Not Applicable.

Mutagenicity: Not Applicable.

RTECS #: UB7700000

2-PROPANOL, 1-METHOXY-
IRRITATION DATA

SKN-RBT 500 MG OPEN MLD

EYE-RBT 500 MG/24H MLD

TOXICITY DATA

IHL-RAT LC50:10000 PPM/5H

UCDS** 11/15/1971

85JCAE -,625,1986

NPIRI* 1,105,1974

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IPR-RAT LD50:3720 MG/KG	38MKAJ 2C,3977,1982
SCU-RAT LD50:7800 MG/KG	ARZNAD 22,569,1972
IVN-RAT LD50:4200 MG/KG	ARZNAD 22,569,1972
ORL-MUS LD50:11700 MG/KG	ARZNAD 22,569,1972
IVN-MUS LD50:5300 MG/KG	ARZNAD 22,569,1972
ORL-DOG LD50:5 GM/KG	ARZNAD 22,569,1972
IVN-DOG LD50:2 GM/KG	ARZNAD 22,569,1972
ORL-RBT LD50:5700 MG/KG	ARZNAD 22,569,1972
SKN-RBT LD50:13 GM/KG	NPIRI* 1,105,1974
SCU-RBT LD50:5 GM/KG	ARZNAD 22,569,1972
IVN-RBT LD50:1200 MG/KG	ARZNAD 22,569,1972

Further hazard information, if applicable, may be found in Section 3. Toxicological information regarding individual ingredients, if applicable, may be found in Section 2.

Section 12 Ecological Information

Mobility: Not Determined.

Ecotoxicity: Not Determined.

Degradability: Not Determined.

Other Adverse Effects: Not Determined.

Accumulation: Not Determined.

Section 13 Disposal Considerations

Dispose of in accordance with all applicable regulations.

The conditions of handling, storage, and use 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.

Section 14 Transport Information

D.O.T. (U.S.): Consumer Commodity ORM-D (less than 30 kg gross package weight).

TDG (Canada): Consumer Commodity ORM-D (less than 30 kg gross package weight).

International Maritime Organization (IMO)/IMDG: PAINT, 3, UN 1263, PG III, FP 31°C, Ltd Qty, EmS F-E, S-E

International Air Transport Association (IATA)/ICAO: Consumer Commodity, 9, ID8000

ADR: UN 1263; Class 3; Item 31°C; Hazard Identification No: 30. CEFIC Tremcard is not applicable.

Australian Code for the Transport of Dangerous Goods

Dangerous Goods Class and Subsidiary Risk: Not Determined.

Section 15 Regulatory Information

Footnotes for Section 2:

- 1 Subject to the reporting requirements of SARA Title III, Section 313.
- 2 Appears on the California Safe Drinking Water and Toxic Enforcement Act (Prop. 65) Substances List.
- 3 Appears on the Massachusetts Substances List.
- 4 Appears on the New Jersey Right-To-Know Hazardous Substances List.
- 5 Appears on the Pennsylvania Hazardous Substances List.
- 6 Appears on the Canadian WHMIS Ingredient Disclosure List.

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U.S.A.

OSHA Hazard Status: This product is considered to be hazardous as defined by the U.S. OSHA HCS (29 CFR 1910.1200).

EPA SARA sec. 311/312 Hazard Categories: Immediate (Acute) Health Hazard, Fire Hazard,

Toxic Substances Control Act (TSCA): All ingredients contained in this product are listed on the U.S. EPA TSCA Chemical Substance Inventory.

HMIS® Rating: Health 1, Flammability 3, Reactivity 0

NFPA® (704) Rating: Health 2, Flammability 3, Reactivity 0

CANADA

WHMIS Status: This product is considered to be hazardous as defined by Canadian WHMIS Controlled Products Regulations.

WHMIS Rating: None.D1-B, B2

WHMIS Risk Phrases: None required on containers of 100 ml or less per CPR, Section 19[1][a]-[d].

WHMIS Precautionary Statements: None required on containers of 100 ml or less per CPR, Section 19[1][a]-[d].

Domestic Substances List (DSL): All ingredients contained in this product are listed on the Canadian EPA (CEPA) Domestic Substances List (DSL).

E.U.

European Inventory of Existing Chemical Substances (EINECS): All ingredients contained in this product are listed on the European Inventory of Existing Chemical Substances (EINECS).

Categories of Danger (Labeling Information): Flammable

Risk (R) Phrases: Not required per regulation 9 (8) of CHIP.

Safety (S) Phrases: Not required per regulation 9 (8) of CHIP.

AUSTRALIA

Worksafe Australia Status: Not determined

HAZCHEM Code: Not determined

Poisons Schedule Number: Not determined

Further regulatory information regarding individual ingredients, if applicable, may be found in Section 2.

This product has been classified in accordance with the hazard criteria of the U.S. OSHA Hazard Communication Standard, the Canadian WHMIS Controlled Products Regulations, the British CHIP2 regulation 6, and the Australian NMRCWHS. This MSDS contains the information required by the above regulations and conforms to ANSI Z400.1-1993.

Section 16

Other Information

HMIS is a registered trademark of the National Paint and Coatings Association.

NFPA is a registered trademark of the National Fire Protection Association.

MSDS Prepared By: Director of Chemical Safety

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.