

SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Name: PRO-LINE HP

Product Code: PRO-LINE HP White (96960)
 PRO-LINE HP Yellow (96961)
 PRO-LINE HP Red (96962)
 PRO-LINE HP Black (96963)
 PRO-LINE HP Orange (96964)
 PRO-LINE HP Blue (96965)
 PRO-LINE HP Green (96966)
 PRO-LINE HP Silver (96967)

Product Use: Marker for metal, wood, glass, plastic, rubber, cardboard and paper.


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

Appearance, Color and Odor: Marker containing liquid paint in colors white, black, red, yellow, blue, green, orange and silver. Solvent-like odor.

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.

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Section 2: Hazards Identification (continued)

Potential Health Effects: **ACUTE (short term):** see Section 8 for exposure controls

Relevant Route(s) of Exposure: The paint contained inside the marker has components which are considered harmful by inhalation of vapors, eye and skin contact. Exposure to the paint is not expected with normal use of the marker.

Inhalation: Inhalation of vapors is not expected with normal use of the marker.

Ingestion: Not an expected route of exposure.

Skin: Normal use of marker will not result in harmful effects. Contact with the paint may be harmful to the skin; may be absorbed through the skin.

Eye: Not an expected route of exposure. Liquid and vapors can irritate the eyes.

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

Long-term health effects not expected with normal use of the marker. Inappropriate use of the marker resulting in exposure to the paint can have adverse long-term health effects.

Medical Conditions Aggravated by Exposure: Preexisting skin, eye and respiratory disorders may be aggravated by over-exposure to the paint. Impaired central nervous system functions from preexisting disorders may be aggravated by over-exposure to the paints.

Interactions With Other Chemicals: Not available

Potential Environmental Effects: Paint components in marker have exhibited low toxicity in 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>
Cyclohexyl Ketone	108-94-1	25-40	203-631-1	Xn	R10; R20
Methyl Propyl Ketone (MPK)	107-87-9	25-35	203-528-1	F; Xn*	R11; R22; R36/37/38*
Ethyl Acetate	141-78-6	1-5	205-500-4	F; Xi	R11; R36; R66; R67

* 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:	Markers contain a small amount of flammable liquid. Flashpoint for MPK is 8°C (46.4°F), TAG Closed Cup.
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 available
Sensitivity to Static Discharge:	Sensitive: Vapor may be ignited by a static discharge.
Specific Hazards arising from the Chemical:	Combustion may produce toxic and irritating gases. Can form explosive mixtures at or above the flashpoint. Containers can build up pressure if exposed to heat (fire).
Protective Equipment and precautions for firefighters:	Self-contained breathing apparatus and protective clothing should be worn. Vapors may accumulate and travel to ignition sources distant from the handling site. Remove all unauthorized personnel.
NFPA	
	Health: 0
	Flammability: 1
	Instability: 0

Section 6: Accidental Release Measures

Personal Precautions:	Wear protective equipment and ventilate the area.
Environmental Precautions:	Prevent the paint from entering sewers or waterways.
Methods for Containment:	Stop the leak if it is safe to do so. Contain spilled paint with earth, sand, or absorbent material which does not react with spilled material.
Methods for Clean-up:	Soak up spill with an inert absorbent material. Place the contaminated absorbent in a sealed container and dispose according to all applicable regulations.

Section 7: Handling and Storage

Handling:	This product contains a small amount of a flammable liquid. Avoid contact with skin and eyes. Do not use near ignition sources. 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 tightly closed when not in use.

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Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

<u>Ingredient</u>	<u>ACGIH TLV</u> <u>(8-hr. TWA)</u> <u>mg/m³</u>	<u>U.S. OSHA PEL</u> <u>(8-hr. TWA)</u> <u>mg/m³</u>	<u>Ontario (Canada)</u> <u>TWAEV</u> <u>mg/m³</u>	<u>UK OEL</u> <u>(8-hr. TWA)</u> <u>mg/m³</u>
Cyclohexyl Ketone	20 ppm 50 ppm STEL Skin	200 (50 ppm)	20 ppm 50 ppm STEV Skin	10 ppm 20 ppm STEL Skin
Methyl Propyl Ketone (MPK)	150 ppm STEL	700 (200 ppm)	700 (200 ppm) 880 (250 ppm) STEV	200 ppm 250 ppm STEL
Ethyl Acetate	400 ppm	1400 (400 ppm)	1440 (400 ppm)	200 ppm 400 ppm STEL

STEL = Short Term Exposure Limit

STEV = Short Term Exposure Value

"SKIN" NOTATION: Contact with skin, eyes and mucous membranes can contribute to the overall exposure and may invalidate the TLV. Consider measures to prevent absorption by these routes.

Exposure Controls

Engineering Controls: 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. If repeated skin contact is likely wear gloves made of butyl rubber.

Respiratory Protection: Not required for normal use. NIOSH approved respirator for organic vapors in high vapor concentrations.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or Canadian Standards Association (CSA) Standard Z94.4-93 must be followed whenever workplace conditions warrant a respirator's use.

Other Protective Equipment: Not required.

General Hygiene Measures: Avoid breathing vapors. Do not ingest. Avoid contact with skin and eyes. Keep out of reach of children. Do not smoke while handling this material. Wash hands after handling.

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Section 9: Physical and Chemical Properties

Physical State:	Solid marker containing liquid paint.	Flash Point & method:	8°C (46.4°F) for MPK, TAG Closed Cup
Appearance, Color and Odor:	Marker containing liquid paint in colors white, black, red, yellow, blue, green, orange and silver. Solvent-like odor.	Autoignition Temperature:	Not available
Odor Threshold:	Not available	Flammability Limits in Air:	LEL: 1.1% UEL: 9.4-11% (for the paints)
pH:	Not applicable	Vapor Pressure:	Not available
Specific Gravity: (water = 1)	0.9 – 1.4	Vapor Density: (Air = 1)	>1.0 (for the paints)
Partition coefficient: (n-octanol/water)	Not available	Evaporation Rate: (n-Butyl Acetate = 1)	>1.0 (for the paints)
Solubility:	Paint is soluble in organic solvents.	Boiling Point/Range:	103°C (217°F) for MPK
Viscosity:	Paint is water thin	Melting Point:	Not available
Decomposition Temperature:	Not available	VOC Content:	50-85% w/w

Section 10: Stability and Reactivity

Chemical Stability:	Stable at normal room temperature.
Conditions to Avoid:	Avoid heat, open flames, static charge, sparks and ignition sources.
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

	LD₅₀ Oral (mg/kg)	LD₅₀ Dermal (mg/kg)	LC₅₀ Inhalation (4 hrs.)
Cyclohexyl Ketone	1 340 (rat)	950 (rabbit)	2 639 ppm (rat)
Methyl Propyl Ketone (MPK)	2 205 (mouse)	6 450 (rabbit)	2 000 – 4 000 ppm (rat)
Ethyl Acetate	4 900 (rabbit)	> 18 000 (rabbit)	10 600 ppm (mouse)

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Section 11: Toxicological Information (continued)

Chronic Toxicity Data

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

	ACGIH	IARC	NTP
Cyclohexyl Ketone	A3	Group 3	Not listed
Methyl Propyl Ketone (MPK)	Not listed	Not listed	Not listed
Ethyl Acetate	Not listed	Not listed	Not listed

ACGIH: (American Conference of Governmental Industrial Hygienists)
 A3 – Confirmed animal carcinogen with unknown relevance to humans.
 IARC: (International Agency for Research on Cancer)
 Group 3 – The agent is not classifiable as to its carcinogenicity in humans.
 NTP: (National Toxicity Program)

Irritation: Normal use of marker will not result in harmful effects. Direct eye or skin contact with the paint can cause moderate to severe irritation.

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.

Other Adverse Effects: Not applicable with normal use of the marker.

Target Organ Effects: Not applicable

Section 12: Ecological Information

Ecotoxicity: Paints have exhibited low toxicity in aquatic organisms.

Persistence/Degradability: Not applicable

Bioaccumulation/Accumulation: Not applicable

Mobility: Not available

Other adverse effects: 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. Spent markers are considered “empty” of fluid.

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.

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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

Section 15: Regulatory Information

<u>USA</u>	
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:	None
CERCLA RQ:	Cyclohexyl Ketone 5 000 lb, Ethyl Acetate 5 000 lb
California Prop 65:	This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.
<u>State Right-to-Know Lists :</u>	Cyclohexyl Ketone, Methyl Propyl Ketone, and Ethyl Acetate can be found on the following state right to know lists: Massachusetts, New Jersey, Pennsylvania.
<u>Canada</u>	
	This product has been classified in accordance with the hazard criteria of the <i>Controlled Products Regulations</i> and the MSDS contains all the information required by the <i>Controlled Products Regulations</i> .
WHMIS Classification: (for workplace exposures)	Not controlled
NSNR Status: (New Substance Notification Regulations)	All ingredients in the product are listed, as required, on Canada's Domestic Substances List (DSL).
NPRI Substances: (National Pollutant Release Inventory)	Ethyl Acetate is a NPRI reportable substance.
<u>EC Classification for the Substance/Preparation</u>	
<u>Symbol:</u>	This product is not classified as dangerous according to Directive 1999/45/EC and its amendments.
<u>Risk Phrases:</u>	None
<u>Safety Phrases:</u>	S2: Keep out of reach of children.

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Section 16: Other Information

Full Text of R-phrases appearing in Section 2:

R10: Flammable.
R11: Highly flammable.
R20: Harmful by inhalation.
R22: Harmful in contact with skin.
R36/37/38: Irritating to eyes, respiratory system and skin.
R67: Vapors may cause drowsiness and dizziness.

Preparation Information:

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