

Low Chloride Feltip Fine Line Paint Marker

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada HPR

Date of issue: 11/08/2017 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Trade name : Low Chloride Feltip Fine Line Paint Marker

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Marking.

1.3. Details of the supplier of the safety data sheet

LA-CO Industries, Inc.
 1201 Pratt Boulevard
 Elk Grove Village, IL. 60007-5746
 Phone: (847) 956-7600
 Fax: (847) 956-9885
 E-mail: customer_service@laco.com



1.4. Emergency telephone number

Emergency number : 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS classification

Flammable liquids, Category 3	H226
Serious eye damage/eye irritation, Category 2	H319
Reproductive toxicity, Category 1B	H360
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS) :



Signal word (GHS) :

Danger

Hazard statements (GHS) :

H226 - Flammable liquid and vapour.
 H319 - Causes serious eye irritation.
 H336 - May cause drowsiness or dizziness.
 H360 - May damage fertility or the unborn child.

Precautionary statements (GHS) :

P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 - Keep container tightly closed.
 P240 - Ground/bond container and receiving equipment
 P241 - Use explosion-proof electrical/ventilating/lighting equipment.
 P242 - Use only non-sparking tools.
 P243 - Take precautionary measures against static discharge.
 P261 - Avoid breathing vapours.
 P264 - Wash hands thoroughly after handling.
 P271 - Use only outdoors or in a well-ventilated area.
 P280 - Wear protective gloves.
 P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
 P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
 P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P308+P313 - If exposed or concerned: Get medical advice/attention.
 P337+P313 - If eye irritation persists: Get medical advice/attention.

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P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO₂), Dry chemical, Water fog to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS classification
1-Methoxy-2-propanol	(CAS-No.) 107-98-2	45	Flam. Liq. 3, H226 STOT SE 3, H336
diacetone alcohol	(CAS-No.) 123-42-2	37	Flam. Liq. 4, H227 Eye Irrit. 2A, H319
N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone	(CAS-No.) 872-50-4	3	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Repr. 1B, H360 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Causes serious eye irritation. May cause drowsiness or dizziness. May damage fertility or the unborn child.
Symptoms/effects after inhalation : May cause drowsiness or dizziness.
Symptoms/effects after skin contact : None under normal use.
Symptoms/effects after eye contact : Causes serious eye irritation.
Symptoms/effects after ingestion : None under normal use.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.
Explosion hazard : Flammable vapours heavier than air/can accumulate.
Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Do not breathe vapours. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Incompatible products : Strong oxidizers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1-Methoxy-2-propanol (107-98-2)		
ACGIH	ACGIH TWA (mg/m ³)	369 mg/m ³
ACGIH	ACGIH TWA (ppm)	50 ppm
ACGIH	ACGIH STEL (mg/m ³)	553 mg/m ³
ACGIH	ACGIH STEL (ppm)	100 ppm
ACGIH	Remark (ACGIH)	Eye irr; CNS impair; A4 (Not classifiable as a Human Carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories)
OSHA	Not applicable	OSHA
Canada (Quebec)	VECD (mg/m ³)	553 mg/m ³
Canada (Quebec)	VECD (ppm)	150 ppm
Canada (Quebec)	VEMP (mg/m ³)	369 mg/m ³
Canada (Quebec)	VEMP (ppm)	100 ppm
N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)		
Not applicable		
diacetone alcohol (123-42-2)		
ACGIH	ACGIH TWA (mg/m ³)	238 mg/m ³
ACGIH	ACGIH TWA (ppm)	50 ppm

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diacetone alcohol (123-42-2)		
ACGIH	Remark (ACGIH)	URT & eye irr
OSHA	OSHA PEL (TWA) (mg/m ³)	240 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm
Canada (Quebec)	VEMP (mg/m ³)	238 mg/m ³
Canada (Quebec)	VEMP (ppm)	50 ppm

8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Hand protection	: Protective gloves. (nitrile rubber). Gloves must be replaced after each use and whenever signs of wear or perforation appear.
Eye protection	: Eye protection should only be necessary where liquid could be splashed or sprayed.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: No respiratory protection needed under normal use conditions.
Environmental exposure controls	: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Solid marker containing liquid colored paint.
Colour	: Various
Odour	: alcohol odour
Odour threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 97.2 °C
Flash point	: 42 °C
Relative evaporation rate (butylacetate=1)	: 1.3
Flammability (solid, gas)	: Not applicable.
Vapour pressure	: 20.8 mm Hg
Relative vapour density at 20 °C	: > 1
Relative density	: < 1
Solubility	: Water: 70 - 80 %
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: Lower explosive limit (LEL): 1.9 vol % Upper explosive limit (UEL): 12.3 vol %
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

VOC content	: 77.5 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

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10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Dermal; Inhalation

Acute toxicity : Not classified

1-Methoxy-2-propanol (107-98-2)	
LD50 oral rat	4016 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight
LC50 inhalation rat (ppm)	> 7000 ppm 6 hr
ATE US (oral)	4016 mg/kg bodyweight

N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)	
LD50 oral rat	4150 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 5.1 mg/l/4h
ATE US (oral)	4150 mg/kg bodyweight

diacetone alcohol (123-42-2)	
LD50 oral rat	4000 mg/kg
LD50 dermal rabbit	13630 mg/kg
ATE US (oral)	4000 mg/kg bodyweight
ATE US (dermal)	13630 mg/kg bodyweight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility or the unborn child.
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: None under normal use.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: None under normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

1-Methoxy-2-propanol (107-98-2)	
LC50 fish 1	20800 mg/l
EC50 Daphnia 1	23300 mg/l
ErC50 (algae)	> 1000 mg/l

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N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)	
LC50 fish 1	> 500 mg/l
NOEC (acute)	495 mg/l
diacetone alcohol (123-42-2)	
LC50 fish 1	420 mg/l 96 h
EC50 Daphnia 1	9000 mg/l 24 h

12.2. Persistence and degradability

Low Chloride Feltip Fine Line Paint Marker	
Persistence and degradability	Not established.
1-Methoxy-2-propanol (107-98-2)	
Persistence and degradability	Readily biodegradable.
Biodegradation	96 % 28 d
N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)	
Persistence and degradability	Readily biodegradable.
diacetone alcohol (123-42-2)	
Persistence and degradability	Readily biodegradable.
Biodegradation	100 % 14 d

12.3. Bioaccumulative potential

Low Chloride Feltip Fine Line Paint Marker	
Bioaccumulative potential	Not established.
1-Methoxy-2-propanol (107-98-2)	
Bioaccumulative potential	Not expected to bioaccumulate.
N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)	
Bioaccumulative potential	Not expected to bioaccumulate.
diacetone alcohol (123-42-2)	
Log Pow	1.03

12.4. Mobility in soil

Low Chloride Feltip Fine Line Paint Marker	
Mobility in soil	Not established

12.5. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
 Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

US-DOT 49-CFR / HMR / TDG / ADR / IMDG / ICAO / IATA

In accordance with DOT

Transport document description : UN1263 Paint, 3, III
 UN-No.(DOT) : UN1263
 Proper Shipping Name (DOT) : Paint ()
 Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
 Packing group (DOT) : III - Minor Danger
 Hazard labels (DOT) : 3 - Flammable liquid



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Transportation of Dangerous Goods

Transport document description : UN 1263 Paint, 3, III
 UN-No. (TDG) : UN 1263
 Proper Shipping Name (Transportation of Dangerous Goods) : Paint
 TDG Primary Hazard Classes : 3 - Class 3 - Flammable Liquids
 Packing group : III - Minor Danger

Transport by sea

UN-No. (IMDG) : 1263
 Proper Shipping Name (IMDG) : PAINT
 Class (IMDG) : 3 - Flammable liquids
 Packing group (IMDG) : III - substances presenting low danger
 Limited quantities (IMDG) : 5 L

Air transport

UN-No. (IATA) : 1263
 Proper Shipping Name (IATA) : PAINT
 Class (IATA) : 3 - Flammable Liquids
 Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

1-Methoxy-2-propanol (107-98-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

diacetone alcohol (123-42-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. CANADA

1-Methoxy-2-propanol (107-98-2)

Listed on the Canadian DSL (Domestic Substances List) inventory.

N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

diacetone alcohol (123-42-2)

Listed on the Canadian DSL (Domestic Substances List) inventory.

15.3. US State regulations

N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	No	3200 µg/day

1-Methoxy-2-propanol (107-98-2)

U.S. - Idaho - Occupational Exposure Limits - Ceilings
 U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
 U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
 U.S. - Minnesota - Hazardous Substance List
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - New York - Right to Know List of Hazardous Chemicals
 U.S. - Washington - Permissible Exposure Limits - STELs
 U.S. - Washington - Permissible Exposure Limits - TWAs

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N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities

SECTION 16: Other information

Data sources : ACGIH (American Conference of Government Industrial Hygienists).
Chemical Inspection & Regulation Service; accessed at: http://www.cirs-reach.com/Inventory/Global_Chemical_Inventories.html.
Component Supplier SDSs.
European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>.
European Chemicals Agency (ECHA) Registered Substances list.
Internal Company test data.
Kristen Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition.
OSHA 29CFR 1910.1200 Hazard Communication Standard.
TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.

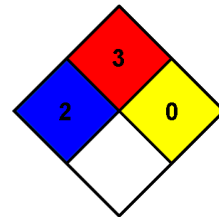
Full text of H-statements:

H226	Flammable liquid and vapour.
H227	Combustible liquid
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360	May damage fertility or the unborn child.

Abbreviations and acronyms:

ACGIH (American Conference of Government Industrial Hygienists)
ATE: Acute Toxicity Estimate
CAS (Chemical Abstracts Service) number
CLP: Classification, Labelling, Packaging.
EC50: Environmental Concentration associated with a response by 50% of the test population.
GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
LD50: Lethal Dose for 50% of the test population
LC50: Median lethal concentration
STEL: Short Term Exposure Limits
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product