according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

LA-CO Industries, Inc.

Date of issue: 06/17/2014Revision date: 03/09/2015 Version: 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. **Product identifier**

Product form : Mixture

Trade name : Pro-Line® HT Paint Markers (white, yellow, black, blue)

: Pro-Line® HT - White, Yellow, Black, Blue Synonyms

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

Use of the substance/mixture : Marking.

Details of the supplier of the safety data sheet 1.3.

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**

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with the Globally Harmonized Standard

Not classified

2.2 Label elements

GHS-US labelling

No labelling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Mixture

| Name | Product identifier | % (w/w) | GHS-US classification |
|--------------------|--------------------|--|---|
| dimethyl carbonate | (CAS No) 616-38-6 | 32.69 White 38.59 Yellow 30.56 Black 42.52 Blue | Flam. Liq. 2, H225 |
| Cyclohexanone | (CAS No) 108-94-1 | 6.99 White 7.88 Yellow 7.24 Black 8.98 Blue | Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 |

Full text of H-phrases: see section 16

SECTION 4: First aid measures

Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get

First-aid measures after inhalation If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing.

First-aid measures after skin contact Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash

with plenty of soap and water. Wash contaminated clothing before reuse.

09/03/2015 EN (English) SDS Ref.: LACO1406001 1/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

First-aid measures after eye contact : If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

First-aid measures after ingestion : Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries after inhalation : Inhalation may cause: irritation, coughing, shortness of breath.

Symptoms/injuries after skin contact : May cause moderate irritation.

Symptoms/injuries after eye contact : May cause slight irritation.

Symptoms/injuries after ingestion : Like any product not designed to be ingested, this product may cause stomach distress if

ingested in large quantities.

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

Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : Product is not explosive.

Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

Precautionary measures fire : Store in dry, cool, well-ventilated area.

Firefighting instructions : Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter

drains or water courses.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No

smoking.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing and gloves. Chemical goggles or safety glasses. In case of

inadequate ventilation wear respiratory protection.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves. Chemical goggles or safety glasses. Where

excessive vapour, mist, or dust may result, use approved respiratory protection equipment.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Contains no substances known to be hazardous to the environment. Do not discharge into drains or the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb and/or contain spill with inert material, then place in suitable container.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Take

up in non-combustible absorbent material and shove into container for disposal.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from sources of ignition - No smoking.

09/03/2015 EN (English) SDS Ref.: LACO1406001 2/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Hygiene measures

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Keep container tightly closed. Keep away from open flames, hot surfaces and sources of

ignition

Incompatible products

: Alkali. Oxidizer. acid. Moisture.

Incompatible materials

: Heat sources.

Heat and ignition sources

: Keep away from heat, sparks and flame.

Prohibitions on mixed storage

: Incompatible materials.

7.3. Specific end use(s)

Marking.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Pro-Line® HT Paint Markers (white, yellow, black, blue) | | |
|---|----------------|--|
| ACGIH | Not applicable | |
| OSHA | Not applicable | |
| dimethyl carbonate (616-38-6) | | |
| ACGIH | Not applicable | |
| OSHA | Not applicable | |

| Cyclohexanone (108-94-1) | | |
|--------------------------|------------------------|---------------|
| ACGIH | ACGIH TWA (mg/m³) | 50 mg/m³ |
| ACGIH | ACGIH TWA (ppm) | 20 ppm |
| ACGIH | ACGIH STEL (ppm) | 50 ppm |
| ACGIH | Remark (ACGIH) | Eye & URT irr |
| OSHA | OSHA PEL (TWA) (mg/m³) | 200 mg/m³ |
| OSHA | OSHA PEL (TWA) (ppm) | 50 ppm |
| Canada (Quebec) | VEMP (mg/m³) | 100 mg/m³ |
| Canada (Quebec) | VEMP (ppm) | 25 ppm |
| Canada (Quebec) | Notations and remarks | (Peau) |

8.2. Exposure controls

Appropriate engineering controls

: Avoid creating mist or spray. Avoid splashing. Provide local exhaust or general room

ventilation.

Personal protective equipment

: Avoid all unnecessary exposure.

Hand protection

: None under normal use. Handle in accordance with good industrial hygiene and safety

procedures. Wear suitable gloves. rubber.

Eye protection

: No special eye protection equipment recommended under normal conditions of use. Eye

protection should only be necessary where liquid could be splashed or sprayed.

Respiratory protection

: No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. In case of inadequate ventilation wear respiratory protection. Use an

approved respirator equipped with oil/mist cartridges.

Other information : Do not eat, drink or smoke when using this product.

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 : white. Blue. Black. Yellow.

Odour : Solvent.

Odour threshold : No data available pH : No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available

09/03/2015 EN (English) SDS Ref.: LACO1406001 3/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Freezing point : No data available

Boiling point : $90 \, ^{\circ}\text{C}$ Flash point : $19 \, ^{\circ}\text{C}$

Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) No data available : No data available Vapour pressure Relative vapour density at 20 °C : No data available Relative density No data available Solubility No data available : No data available Log Pow Log Kow : No data available : No data available Viscosity, kinematic Viscosity, dynamic No data available Explosive properties Product is not explosive. Oxidising properties : No oxidizing properties.

9.2. Other information

VOC content : 34.4 - 52.3 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Explosive limits

No dangerous reactions known.

10.2. Chemical stability

Highly flammable liquid and vapour.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Open flame. Direct sunlight.

10.5. Incompatible materials

Oxidizing agent. Moisture. Alkali. Acid.

10.6. Hazardous decomposition products

May release flammable gases. Thermal decomposition generates : metallic oxides. Carbon monoxide. Carbon dioxide.

: No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

| dimethyl carbonate (616-38-6) | |
|-------------------------------|---|
| LD50 oral rat | > 5000 mg/kg no rats died during the study |
| LD50 dermal rabbit | > 2000 mg/kg New Zealand White rabbit; no rabbits died during the study |
| LC50 inhalation rat (mg/l) | > 5.36 mg/l/4h no rats died during the study |

| Cyclohexanone (108-94-1) | |
|--------------------------|---------------|
| ATE CLP (dust,mist) | 1.500 mg/l/4h |

 Skin corrosion/irritation
 : Not classified

 Serious eye damage/irritation
 : Not classified

 Respiratory or skin sensitisation
 : Not classified

 Germ cell mutagenicity
 : Not classified

 Carcinogenicity
 : Not classified.

| clohexanone (108-94-1) | |
|-------------------------------|--|
| RC group 3 - Not classifiable | |
| 2 Not election | |

Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified

09/03/2015 EN (English) SDS Ref.: LACO1406001 4/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms

Symptoms/injuries after inhalation : Inhalation may cause: irritation, coughing, shortness of breath.

Symptoms/injuries after skin contact : May cause moderate irritation. Symptoms/injuries after eye contact : May cause slight irritation.

Symptoms/injuries after ingestion : Like any product not designed to be ingested, this product may cause stomach distress if

ingested in large quantities.

Likely routes of exposure : Skin and eye contact

SECTION 12: Ecological information

12.1 Toxicity

Ecology - general : No ecotoxicological data about this product are known.

| dimethyl carbonate (616-38-6) | |
|-------------------------------|------------|
| NOEC (acute) | > 100 mg/l |

12.2. Persistence and degradability

Pro-I ine® HT Paint Markers (white vellow black blue)

| 110 Elice 111 Tulik markers (winte, yellow, black, black | |
|--|------------------------|
| Persistence and degradability | Not established. |
| dimethyl carbonate (616-38-6) | |
| Persistence and degradability | Readily biodegradable. |
| Biodegradation | 86 % after 28 days |

12.3. Bioaccumulative potential

| Pro-Line® HT Paint Markers (white, yellow, black, blue) | | |
|---|------------------|--|
| Bioaccumulative potential | Not established. | |
| dimethyl carbonate (616-38-6) | | |
| Log Pow | 0.354 @ 20°C | |

Not potentially bioaccumulable.

Bioaccumulative potential 12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

In accordance with DOT and TDG

Transport document description : UN1263 Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid

filler, and liquid lacquer base, 3, II

UN-No.(DOT) : UN126

Proper Shipping Name (DOT) : Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and

liquid lacquer base

Department of Transportation (DOT) Hazard

Classes

: 3 - Flammable liquid

Packing group (DOT) : II - Medium Danger

ADR

Transport document description : UN 1263 PAINT, 3, II, (D/E)

Proper Shipping Name (ADR) : PAINT Packing group (ADR) : II

Class (ADR) : 3 - Flammable liquid

09/03/2015 EN (English) SDS Ref.: LACO1406001 5/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Transport by sea

UN-No. (IMDG) : UN 1263
Proper Shipping Name (IMDG) : PAINT

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : II

Air transport

UN-No.(IATA) : UN 1263
Proper Shipping Name (IATA) : PAINT

Class (IATA) : 3 - Flammable Liquids

Packing group (IATA) : II

SECTION 15: Regulatory information

15.1. US Federal regulations

Pro-Line® HT Paint Markers (white, yellow, black, blue)

SARA Section 311/312 Hazard Classes Fire hazard

dimethyl carbonate (616-38-6)

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

Cyclohexanone (108-94-1)

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

15.2. International regulations

CANADA

dimethyl carbonate (616-38-6)

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

Cyclohexanone (108-94-1)

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

EU-Regulations

dimethyl carbonate (616-38-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Cyclohexanone (108-94-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Pro-Line® HT Paint Markers (white, yellow, black, blue)

All components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS).

All ingredients are listed in the Toxic Substances Control Act (TSCA).

All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

15.3. US State regulations

dimethyl carbonate (616-38-6)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - New York - Right to Know List of Hazardous Chemicals

Cyclohexanone (108-94-1)

U.S. - Pennsylvania - RTK (Right to Know) List

U.S. - New York - Right to Know List of Hazardous Chemicals

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Minnesota - Hazardous Substance List

SECTION 16: Other information

Indication of changes : Removed. WHMIS. 1998

09/03/2015 EN (English) SDS Ref.: LACO1406001 6/7

Safety Data Sheet

Abbreviations and acronyms

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Data sources

: ACGIH 2000.

ESIS (European chemincal Substances Information System; accessed at:

http://esis.jrc.ec.europa.eu/index.php?PGM=cla

OSHA 29CFR 1910.1200 Hazard Communication Standard.

European Chemicals Agency (ECHA) Registered Substances list. Accessed at

http://echa.europa.eu/

Krister 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

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending

Regulation (EC) No 1907/2006.

TSCA Chemical Substance Inventory. Accessed at

http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html.

: 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. OSHA: Occupational Safety & Health Administration.

STEL: Short Term Exposure Limits. TSCA: Toxic Substances Control Act.

TWA: Time Weight Average.

Other information : None.

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual

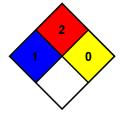
injury even if no treatment is given.

NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high

temperature before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and not reactive with water.



Full text of H-phrases:

| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4 |
|---------------------------|-------------------------------------|
| Flam. Liq. 2 | Flammable liquids, Category 2 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| H225 | Highly flammable liquid and vapour |
| H226 | Flammable liquid and vapour |
| H332 | Harmful if inhaled |

SDS Prepared by: The Redstone Group, LLC

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LACO NA GHS SDS

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

09/03/2015 EN (English) SDS Ref.: LACO1406001 7/7