LA-CO Industries, Inc.

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 7/16/2015 Revision date: 5/21/2018 Version: 2.0

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

1.1. Product identifier

Product form : Article

Product name : PRO-LINE® Fine Line, PRO-LINE® Microline, PRO-MAXTM, POCKET, and SL.100 PAINT

MARKER - Black, White

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Marking.

1.2.2. Uses advised against

Restrictions on use : No additional information available

1.3. Details of the supplier of the safety data sheet

LA-CO Industries Europe S.A.S. Parc Industriel de la Plaine de l'Ain - Allée des Combes. 01150.BLYES.France. Phone: +33 (0)4 74 46 23 23 Fax: +33 (0)4 74 46 23 29

Fax: +33 (0)4 74 46 23 29 E-mail: info@eu.laco.com Web: http://www.markal.com

1.4. Emergency telephone number

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

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH210 - Safety data sheet available on request.

2.3. Other hazards

PBT: not yet assessed vPvB: not yet assessed

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1-Methoxy-2-propanol	(CAS-No.) 107-98-2 (EC-No.) 203-539-1 (EC Index-No.) 603-064-00-3	10 - 50	Flam. Liq. 3, H226 STOT SE 3, H336
ethanol	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5	25 - 50	Flam. Liq. 2, H225

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. Get medical advice/attention if you

feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTER/doctor if you feel unwell.

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

First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. First-aid measures after ingestion : Do NOT induce vomiting. Get medical advice/attention.

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

Symptoms/effects after inhalation : May cause drowsiness or dizziness.

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 : Carbon dioxide. Dry chemical. Inert gas. Foam. Water spray. Water fog.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

Hazardous decomposition products in case of

fire

: Carbon oxides (CO, CO2). Hydrocarbon.

5.3. Advice for firefighters

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

drains or water courses. Eliminate all ignition sources if safe to do so.

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

self-contained breathing apparatus. EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all eye and skin contact and do not breathe vapour and mist. 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 : Chemical goggles or safety glasses. Wear suitable gloves.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Chemical goggles or safety glasses. Wear suitable gloves.

Emergency procedures : Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Eliminate all ignition sources. Stop the flow of material, if this is without risk.

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.

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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

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist. No open flames. No

smoking. Use only non-sparking tools. Use only outdoors or in a well-ventilated area.

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

Technical measures : Use only non-sparking tools. Proper grounding procedures to avoid static electricity should be

followed. Ground/bond container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting equipment.

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

ignition. Keep in fireproof place.

Incompatible products : Strong oxidizers.
Incompatible materials : Heat sources.

Heat and ignition sources : Keep away from heat, sparks and flame.

Prohibitions on mixed storage : Keep away from incompatible materials.

Storage area : Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

Marking.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1-Methoxy-2-propanol (107-98-2)			
EU	Local name	1-Methoxypropanol-2	
EU	IOELV TWA (mg/m³)	375 mg/m³	
EU	IOELV TWA (ppm)	100 ppm	
EU	IOELV STEL (mg/m³)	568 mg/m³	
EU	IOELV STEL (ppm)	150 ppm	
EU	Notes	Skin	
United Kingdom	WEL TWA (mg/m³)	375 mg/m³	
United Kingdom	WEL TWA (ppm)	100 ppm	
United Kingdom	WEL STEL (mg/m³)	560 mg/m³	
United Kingdom	WEL STEL (ppm)	150 ppm	
ethanol (64-17-5)			
United Kingdom	WEL TWA (mg/m³)	1920 mg/m³	
United Kingdom	WEL TWA (ppm)	1000 ppm	

8.2. Exposure controls

Appropriate engineering controls : Provide local exhaust ventilation of closed transfer systems to minimize exposures.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection:

None under normal use. It is a good industrial hygiene practice to minimize skin contact. Wear suitable gloves. rubber. EN 374

Eye protection:

Eye protection should only be necessary where liquid could be splashed or sprayed. EN 166

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Use an approved respirator equipped with oil/mist cartridges. EN 12083

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

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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 : Variable.
Odour : Ether.

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

Boiling point : $78 \, ^{\circ}\text{C}$ Flash point : $13 \, ^{\circ}\text{C}$ Auto-ignition temperature : $287 \, ^{\circ}\text{C}$

Decomposition temperature : No data available

Flammability (solid, gas) : Highly flammable liquid and vapour.

Vapour pressure : 12 mbar @ 20 °C
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 1.1 g/cm³ @ 20 °C
Solubility : No data available
Log Pow : No data available
Viscosity, kinematic : No data available

Viscosity, dynamic : 25 mPa.s
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : 1.7 vol %

: 1.7 vol % 15 vol %

9.2. Other information

VOC content : 53.4 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Open flame. Direct sunlight.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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	

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ethanol (64-17-5)		
LD50 oral rat	10470 mg/kg	
LD50 dermal rabbit	> 20000 mg/kg	
LC50 inhalation rat (mg/l)	133.8 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	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified.	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
PRO-LINE® Fine Line, PRO-LINE® Microline, PRO-MAX™, POCKET, and SL.100 PAINT MARKER - Black, White		
Viscosity, kinematic	22.727 mm²/s	

SECTION 12: Ecological information

12.1. Toxicity

1-Methoxy-2-propanol (107-98-2)		
LC50 fish 1	20800 mg/l	
EC50 Daphnia 1	23300 mg/l	
ErC50 (algae)	> 1000 mg/l	
ethanol (64-17-5)		
LC50 fish 1	14200 mg/l	
EC50 Daphnia 1	5012 mg/l	

12.2. Persistence and degradability

1-Methoxy-2-propanol (107-98-2)		
Persistence and degradability Readily biodegradable.		
Biodegradation 96 % 28 d		
ethanol (64-17-5)		
Biodegradation > 96 % 28 d		

12.3. Bioaccumulative potential

1-Methoxy-2-propanol (107-98-2)		
Bioaccumulative potential Not expected to bioaccumulate.		
ethanol (64-17-5)		
Bioaccumulative potential Not expected to bioaccumulate.		

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

PRO-LINE® Fine Line, PRO-LINE® Microline, PRO-MAX™, POCKET, and SL.100 PAINT MARKER - Black, White	
PBT: not yet assessed	
vPvB: not yet assessed	

12.6. Other adverse effects

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.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : For disposal within the EC, the appropriate code according to the European Waste Catalogue

(EWC) should be used.

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HP Code

- : H4 'Irritant': non-corrosive substances and preparations which, through immediate, prolonged or repeated contact with the skin or mucous membrane, can cause inflammation.
 - H3-A 'Highly flammable' :
 - liquid substances and preparations having a flash point below 21 °C (including extremely flammable liquids), or
 - substances and preparations which may become hot and finally catch fire in contact with air at ambient temperature without any application of energy, or
 - solid substances and preparations which may readily catch fire after brief contact with a source of ignition and which continue to burn or to be consumed after removal of the source of ignition, or
 - gaseous substances and preparations which are flammable in air at normal pressure, or
 - substances and preparations which, in contact with water or damp air, evolve highly flammable gases in dangerous quantities.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

 UN-No. (ADR)
 : 1263

 UN-No. (IMDG)
 : 1263

 UN-No. (IATA)
 : 1263

 UN-No. (ADN)
 : 1263

 UN-No. (RID)
 : 1263

14.2. UN proper shipping name

Proper Shipping Name (ADR) : PAINT
Proper Shipping Name (IMDG) : PAINT
Proper Shipping Name (IATA) : PAINT
Proper Shipping Name (ADN) : PAINT
Proper Shipping Name (RID) : PAINT

Transport document description (ADR)

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

Transport document description (IMDG)

: UN 1263 PAINT, 3, II

Transport document description (ADN)

: UN 1263 PAINT, 3, II

: UN 1263 PAINT, 3, II

: UN 1263 PAINT, 3, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3



IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3

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ADN

Transport hazard class(es) (ADN) : 3
Danger labels (ADN) : 3



RID

Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1
Hazard identification number (Kemler No.) : 33

Orange plates



Tunnel restriction code (ADR) : D/E EAC code : •3YE

- Transport by sea

EmS-No. (Fire): F-EEmS-No. (Spillage): S-EStowage category (IMDG): B

Properties and observations (IMDG) : Miscibility with water depends upon the composition.

- Air transport

Special provisions (IATA) : A3, A72, A192

ERG code (IATA) : 3L

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- Inland waterway transport

Classification code (ADN) : F1

- Rail transport

Classification code (RID) : F1

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no substance on the REACH candidate list

VOC content : 53.4 %

15.1.2. National regulations

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Product identifier.

Abbreviations and acronyms:

 and the same and and the same a		
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		
PBT: Persistent, Bioaccumulative, Toxic		
TWA: Time Weighted Average		
TSCA: Toxic Substances Control Act		

Data sources

: ESIS (European chemincal Substances Information System; accessed at: http://esis.jrc.ec.europa.eu/index.php?PGM=cla. European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database. 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 edition. 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.

Other information : None

Full text of H- and EUH-statements:

Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
EUH210	Safety data sheet available on request.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

SDS Prepared by: The Redstone Group, LLC

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6077 Frantz Rd. Suite 206 Dublin, OH USA 43016 T 614-923-7472 www.redstonegrp.com

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

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