

DURA-INK® 5, 15, 25, 55, 60, 200 Black Markers

LA-CO Industries, Inc.

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
according to Canadian Hazardous Products Regulations (HPR)
Date of issue: 04/02/2015
Version: 1.0

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

1.1. Product Identifier

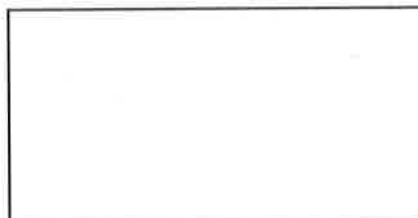
Trade name : DURA-INK® 5, 15, 25, 55, 60, 200 Black Markers
Synonyms : DURA-INK® 5 Black / DURA-INK® 15 Black / DURA-INK® 25 Black / DURA-INK® 55 Black /
DURA-INK® 60 Black / DURA-INK® 200 Black

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: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with the Globally Harmonized Standard

Flam. Liq. 3 H226
Eye Dam. 1 H318
STOT SE 3 H335
STOT SE 3 H336

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

Hazard statements (GHS-US)

Precautionary statements (GHS-US)

: Danger
: H226 - Flammable liquid and vapour
: H318 - Causes serious eye damage
: H335 - May cause respiratory irritation
: H336 - May cause drowsiness or dizziness
: P210 - Keep away from heat, sparks, open flames. - No smoking
: P233 - Keep container tightly closed
: P242 - Use only non-sparking tools
: P243 - Take precautionary measures against static discharge
: P261 - Avoid breathing mist, vapours
: P271 - Use only outdoors or in a well-ventilated area
: P280 - Wear eye protection, 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
: P310 - Immediately call a doctor
: P370+P378 - In case of fire: Use carbon dioxide (CO2), dry extinguishing powder, Water spray to extinguish
: P403+P233 - Store in a well-ventilated place. Keep container tightly closed
: P403+P235 - Store in a well-ventilated place. Keep cool

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P501 - Dispose of contents/container to an authorised waste collection point

Bulk

P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P405 - Store locked up

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	% (w/w)	GHS-US classification
1-Methoxy-2-propanol	(CAS No) 107-98-2	25 - 50	Flam. Liq. 3, H226 STOT SE 3, H336
propan-1-ol	(CAS No) 71-23-8	25 - 50	Flam. Liq. 2, H225 Eye Dam. 1, H318 STOT SE 3, H335

Full text of H-phrases: 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. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- 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.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. 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 : May cause drowsiness or dizziness. May cause respiratory irritation.
- Symptoms/injuries after eye contact : Causes serious eye damage.
- 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

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Dry powder. Water spray.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable liquid and vapour.
- Explosion hazard : May form flammable/explosive vapour-air mixture.
- Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire. In case of fire: stop leak if safe to do so. 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.

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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. Avoid all eye and skin contact and do not breathe vapour and mist.

6.1.1. For non-emergency personnel

Protective equipment : Chemical goggles or safety glasses. Clothing impervious to chemical penetration. Wear suitable gloves resistant to chemical penetration. 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. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to 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. This material and its container must be disposed of in a safe way, and as per local legislation.

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 : No open flames. No smoking. Use only non-sparking tools. Avoid breathing mist/vapours/spray. Use only outdoors or in a well-ventilated area. Take precautionary measures against static discharge.

Hygiene measures : Wash contaminated clothing before reuse. 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 : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.

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

Incompatible products : Strong oxidizers.

Incompatible materials : Heat sources. Sources of ignition.

Prohibitions on mixed storage : Keep away from incompatible materials.

7.3. Specific end use(s)

Marking.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

-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
OSHA	Not applicable	
Canada (Quebec)	VECD (mg/m ³)	553 mg/m ³
Canada (Quebec)	VECD (ppm)	150 ppm

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-Methoxy-2-propanol (107-98-2)		
Canada (Quebec)	VEMP (mg/m³)	369 mg/m³
Canada (Quebec)	VEMP (ppm)	100 ppm
propan-1-ol (71-23-8)		
ACGIH	ACGIH TWA (ppm)	100 ppm
ACGIH	Remark (ACGIH)	Eye & URT irr
OSHA	OSHA PEL (TWA) (mg/m³)	500 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	200 ppm
Canada (Quebec)	VECD (mg/m³)	615 mg/m³
Canada (Quebec)	VECD (ppm)	250 ppm
Canada (Quebec)	VEMP (mg/m³)	492 mg/m³
Canada (Quebec)	VEMP (ppm)	200 ppm
Canada (Quebec)	Notations and remarks	(Peau)

8.2. Exposure controls

Appropriate engineering controls	: Avoid creating mist or spray. Avoid splashing. Eyewash stations. Provide local exhaust ventilation of closed transfer systems to minimize exposures.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear suitable gloves resistant to chemical penetration. Impermeable protective nitrile gloves.
Eye protection	: In case of splashing or aerosol production: protective goggles. Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing. Impervious clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. 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	: Black.
Odour	: No data available
Odour threshold	: No data available
pH	: 5.7 @ 20 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 96 °C
Flash point	: 23 °C
Auto-ignition temperature	: 287 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 14 mm Hg @ 20 °C
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.9 g/cm³ @ 20 °C
Solubility	: Miscible with water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 5 mPa.s @ 20 °C
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 1.7 vol % 13.5 g/m³

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9.2. Other information

VOC content : 82 %

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. Flammable liquid and vapour.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid excessive heat or cold. Direct sunlight. Heat. Keep away from sources of ignition. Open flame. Overheating. Sparks.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

May release flammable gases. Carbon oxides (CO, CO₂).

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
ATE CLP (oral)	4016.000 mg/kg bodyweight

propan-1-ol (71-23-8)	
LD50 oral rat	5400 mg/kg
LD50 dermal rabbit	4032 mg/kg
LC50 inhalation rat (mg/l)	> 33.8 mg/l/4h
ATE CLP (oral)	5400.000 mg/kg bodyweight
ATE CLP (dermal)	4032.000 mg/kg bodyweight

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause respiratory irritation. May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms

Symptoms/injuries after inhalation : May cause drowsiness or dizziness. May cause respiratory irritation.

Symptoms/injuries after eye contact : Causes serious eye damage.

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 : Inhalation;Skin and eye contact

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

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propan-1-ol (71-23-8)	
LC50 fish 1	4555 mg/l 96 h
EC50 Daphnia 1	1000 mg/l 48 h

12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment.
1-Methoxy-2-propanol (107-98-2)	
Persistence and degradability	Readily biodegradable.
Biodegradation	96 % 28 d
propan-1-ol (71-23-8)	
Persistence and degradability	Readily biodegradable.
Biodegradation	75 % 20 d

12.3. Bioaccumulative potential

1-Methoxy-2-propanol (107-98-2)	
Bioaccumulative potential	Not expected to bioaccumulate.
propan-1-ol (71-23-8)	
BCF fish 1	0.88
Log Pow	0.2

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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.

SECTION 14: Transport information

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

14.1. UN number

Not considered a dangerous good for transport regulations

14.2. UN proper shipping name

Proper Shipping Name (ADR) :

14.3. Transport hazard class(es)

Not applicable

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	
propan-1-ol (71-23-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. International regulations

CANADA

1-Methoxy-2-propanol (107-98-2)	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
propan-1-ol (71-23-8)	
Listed on the Canadian DSL (Domestic Substances List) inventory.	

EU-Regulations

1-Methoxy-2-propanol (107-98-2)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

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propan-1-ol (71-23-8)

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

National regulations

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

15.3. US State regulations

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

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

propan-1-ol (71-23-8)

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

SECTION 16: Other information

Indication of changes

: Original Document.

Data sources

: ACGIH 2000.

ESIS (European chemical 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
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.

TSCA Chemical Substance Inventory. Accessed at
<http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.

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.

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

: 2 - Intense or continued exposure could cause temporary
incapacitation or possible residual injury unless prompt
medical attention is given.

NFPA fire hazard

: 2 - Must be moderately heated or exposed to relatively high
temperature before ignition can occur.

NFPA reactivity

: 1 - Normally stable, but can become unstable at elevated
temperatures and pressures or may react with water with
some release of energy, but not violently.



Full text of H-phrases:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 2	Flammable liquids, Category 2

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Flam. Liq. 3	Flammable liquids, Category 3
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H318	Causes serious eye damage
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness

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