LA-CO Industries, Inc.

Dura-Ink® Fine Green; Dura-Ink® Chisel Green; Dura-Ink® Jumbo Chisel Green

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 12/12/2021 Revision date: 1/16/2023 Supersedes: 1/16/2023 Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Dura-Ink® Fine Green; Dura-Ink® Chisel Green; Dura-Ink® Jumbo Chisel Green

Other means of identification : UFI: T7FM-P1SP-H60E-WPES

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Ink.

Marking.

Restrictions on use : No additional information

1.3. Supplier

LA-CO Industries, Inc. 1201 Pratt Blvd.

Elk Grove Village, IL, 60007-5746

US

T 847-956-7600 - F 847-956-9885 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;

全国应急中心 0532 8388 9090

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids, Category 2 H225 Highly flammable liquid and vapour.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US) : H225 - Highly flammable liquid and vapour.

Precautionary statements (GHS US) : 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, lighting, ventilating equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P280 - Wear Protective gloves, eye protection.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

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skin with water/shower.

P370+P378 - In case of fire: Use Foam, carbon dioxide (CO2), dry extinguishing powder, Water spray to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

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 which do not result in classification

No data available

2.4. Unknown acute toxicity (GHS US)

23.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)

97.3% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

23.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Ethanol	CAS-No.: 64-17-5	50 - 75	Flam. Liq. 2, H225
1-methoxy-2-propanol	CAS-No.: 107-98-2		Flam. Liq. 3, H226 STOT SE 3, H336

^{*}Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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 : Never give anything by mouth to an unconscious person.

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 : Wash contaminated clothing before reuse. Wash skin with mild soap and water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

First-aid measures after ingestion : Call a POISON CENTER/doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

ire hazard : Highly flammable liquid and vapour.

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

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protection during firefighting : 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. 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. 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 : Stop leak if safe to do so.

Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Large Spills: Dike far ahead of spill for later disposal. Use a non-

container for disposal. Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like cermiculite, sand, or earth to soak up the product and place into a

container for later disposal.

6.4. Reference to other sections

See Sections 8 and 13 for more information. Section 7: safe handling.

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. Use

only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing.

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

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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. Use explosion-proof electrical, lighting, ventilating

equipment.

Storage conditions : Keep in fireproof place. Keep container tightly closed.

Incompatible products : Strong oxidizers. Alkali.

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

Information on mixed storage : Incompatible materials.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Dura-Ink® Fine Green; Dura-Ink® Chisel Gree	Dura-Ink® Fine Green; Dura-Ink® Chisel Green; Dura-Ink® Jumbo Chisel Green	
No data available		
1-methoxy-2-propanol (107-98-2)		
USA - ACGIH - Occupational Exposure Limits		
Local name	1-Methoxy-2-propanol	
ACGIH OEL TWA	369 mg/m³	
ACGIH OEL TWA [ppm]	50 ppm	
ACGIH OEL STEL	553 mg/m³	
ACGIH OEL STEL [ppm]	100 ppm	
Remark (ACGIH)	TLV® Basis: Eye & URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)	
Regulatory reference	ACGIH 2022	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL TWA	360 mg/m³	
NIOSH REL TWA [ppm]	100 ppm	
NIOSH REL STEL	540 mg/m³	
NIOSH REL STEL [ppm]	150 ppm	
Ethanol (64-17-5)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Ethanol	
ACGIH OEL TWA	1884 mg/m³	
ACGIH OEL TWA [ppm]	1000 ppm	
ACGIH OEL STEL [ppm]	1000 ppm	
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)	
Regulatory reference	ACGIH 2022	
USA - OSHA - Occupational Exposure Limits		
Local name	Ethyl alcohol (Ethanol)	

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Ethanol (64-17-5)		
OSHA PEL TWA [1]	1900 mg/m³	
OSHA PEL TWA [2]	1000 ppm	
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL TWA 1900 mg/m³		
NIOSH REL TWA [ppm]	1000 ppm	

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Eyewash stations.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Use rubber gloves. EN374

Eye protection:

Use splash goggles when eye contact due to splashing is possible

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Approved respirator. Organic vapor cartridge EN 12083

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 ink.

Colour : Green
Odour : alcohols

Odour threshold : No data available pH : No data available Melting point : No data available Freezing point : No data available : No data available

Boiling point : 78 °C Flash point : 14 °C

Relative evaporation rate (butylacetate=1) : No data available

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

Vapour pressure : No data available Relative vapour density at 20°C No data available Relative density No data available Solubility No data available Partition coefficient n-octanol/water (Log Pow) : No data available : No data available Auto-ignition temperature Decomposition temperature : No data available Viscosity, kinematic : No data available : No data available Viscosity, dynamic

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Explosive limits : No data available
Explosive properties : No data available
Oxidising properties : No data available

9.2. Other information

No data available

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. Heat.

10.5. Incompatible materials

Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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Dura-Ink® Fine Green; Dura-Ink® Chisel Green; Dura-Ink® Jumbo Chisel Green		
Unknown acute toxicity (GHS US)	23.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 97.3% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 23.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))	
1-methoxy-2-propanol (107-98-2)		
LD50 oral rat	4016 mg/kg Source: ECHA	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal))	
LD50 dermal rabbit	> 2000 mg/kg Source: ECHA	
LC50 Inhalation - Rat [ppm]	> 7000 ppm 6 hr	
Ethanol (64-17-5)		
LD50 oral rat	10470 mg/kg	
LD50 dermal rabbit	> 20000 mg/kg	

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Ethanol (64-17-5)	
LC50 Inhalation - Rat	133.8 mg/l/4h
ATE US (oral)	10470 mg/kg bodyweight
ATE US (vapours)	133.8 mg/l/4h
ATE US (dust,mist)	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
Ethanol (64-17-5)	
IARC group	1 - Carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
1-methoxy-2-propanol (107-98-2)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
1-methoxy-2-propanol (107-98-2)	
LOAEL (oral, rat, 90 days)	2757 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	919 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	> 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
Ethanol (64-17-5)	
LOAEL (oral, rat, 90 days)	3200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	1730 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other:
Aspiration hazard	: Not classified
/iscosity, kinematic	: No data available
1-methoxy-2-propanol (107-98-2)	
Viscosity, kinematic	1.848 mm²/s
Ethanol (64-17-5)	
Viscosity, kinematic	1.366 mm²/s
ikely routes of exposure	: Inhalation. Skin and eye contact.
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.

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SECTION 12: Ecological information

12.1. Toxicity

1-methoxy-2-propanol (107-98-2)	
LC50 - Fish [1]	≥ 1000 mg/l Source: EHCA
EC50 - Crustacea [1]	21100 – 25900 mg/l Source: ECHA
EC50 - Other aquatic organisms [1]	2954 mg/l Test organisms (species): other aquatic crustacea:
EC50 72h - Algae [1]	> 500 mg/l Source: EHCA
ErC50 algae	> 1000 mg/l
Ethanol (64-17-5)	
LC50 - Fish [1]	14200 mg/l
EC50 - Crustacea [1]	5012 mg/l
EC50 96h - Algae [1]	≈ 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	275 mg/l Source: ECHA

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

1-methoxy-2-propanol (107-98-2)		
Partition coefficient n-octanol/water (Log Pow)	-0.49 Source: HSDB	
Bioaccumulative potential	Not expected to bioaccumulate.	
Ethanol (64-17-5)		
Partition coefficient n-octanol/water (Log Pow)	-0.32 Source: ICSC	
Bioaccumulative potential	Not expected to bioaccumulate.	

12.4. Mobility in soil

No data available

12.5. Other adverse effects

No data available

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SECTION 13: Disposal considerations

13.1. Disposal methods

Sewage disposal recommendations

: Do not dispose of waste into sewer.

Product/Packaging 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 / IMDG / IATA

DOT	IMDG	IATA	
14.1. UN number	14.1. UN number		
Not regulated for transport			
14.2. Proper Shipping Name	14.2. Proper Shipping Name		
Not applicable	Not applicable	Not applicable	
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	
14.4. Packing group			
Not applicable	Not applicable	Not applicable	
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	

Per ICAO/IATA Regulations 3.4.1.1.2; IMDG Regulations 2.4.2.2.2 Product testing according to the UN regulations for classification of readily combustible solids section 33.2.1.4.3.1 – Preliminary Screening Test.

Inner filter with absorbed ink is removed from marker body. End of filter is ignited using 2000°C torch. After 2 minutes rate of burning is less than 2 mm per second.

Product is not readily combustible solid of Division 4.1

14.6. Special precautions for user

DOT

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

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

Listed on the Canadian DSL (Domestic Substances List)

Ethanol (64-17-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No data available

National regulations

Dura-Ink® Fine Green; Dura-Ink® Chisel Green; Dura-Ink® Jumbo Chisel Green

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

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

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Ethanol (64-17-5)

Listed on IARC (International Agency for Research on Cancer)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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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/clinventory-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-statements	
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H336	May cause drowsiness or dizziness.

Abbreviations and acronyms	
	ACGIH (American Conference of Government Industrial Hygienists)
	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	OSHA: Occupational Safety & Health Administration
	PBT: Persistent, Bioaccumulative, Toxic
	TSCA: Toxic Substances Control Act

NFPA health hazard

: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

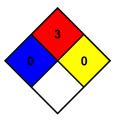
NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire

conditions.



Safety Data Sheet (SDS), USA

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.