

SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Name: DURA-INK® 200, DURA-INK® 10, DURA-INK® 15, DURA-INK® 25, DURA-INK® 55

Product Code: DURA-INK® 200 – 96916 (red), 96917 (*black), 96915 (blue), 96914 (green), 96540 (red carded), 96541 (*black carded).
 DURA-INK® 10 – 96076 (*black), 96077 (*black carded).
 DURA-INK® 15 – 96022 (red), 96023 (*black), 96025 (blue), 96026 (green), 96033 (*black carded) 96068 (red carded).
 DURA-INK® 25 - 96222 (red), 96223 (*black), 96233 (*black carded) 96234 (red carded).
 DURA-INK® 55 – 96528 (red), 96529 (*black), 96530 (blue), 96531 (green), 96532 (red carded), 96533 (*black carded).
 *Black codes I-08 and later

Product Use: Marker for cardboard, wood, metal, paper, ceramics, glass, leather and rubber.


Supplier: LA-CO Industries, Inc.
 1201 Pratt Boulevard
 Elk Grove Village, IL.
 60007-5746
 E-mail Contact: customer_service@laco.com

Phone: (847) 956-7600

Fax: (847) 956-9885

24-hour Emergency: CHEMTREC: (800) 424-9300

Section 2: Hazards Identification

Protective Clothing	NFPA Rating (USA)	EC Classification	WHMIS (Canada)	Transportation
Not Required for Normal Use		Not Classified as Dangerous	Not Controlled	Not Regulated

Emergency Overview: The ink inside the marker contains components which are considered flammable and hazardous by inhalation of vapors and if swallowed. Exposure to hazardous or dangerous substances is not expected when handling this product for its intended use.

Appearance, Color and Odor: Marker containing less than 10 mL of colored ink. Organic solvent odor.

USA: This product is not a hazardous material as defined by 29 CFR1910.1200, OSHA Hazard Communication Evaluation. This product meets the definition of an "article".

Canada: This is not a controlled product under WHMIS. This product meets the definition of a "manufactured article" and is not subject to the regulations of the Hazardous Products Act.

European Communities (EC): This product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Potential Health Effects: ACUTE (short term):

Relevant Route(s) of Exposure: Skin contact.

Inhalation: Exposure to hazardous substances by inhalation is not expected with normal use of the marker.

Ingestion: Not an expected route of occupational exposure. Acute oral toxicity of the component substances is low.

Skin: Normal use of marker will not result in harmful effects. The ink may cause irritation when in contact with the skin. Some components of the ink may be absorbed through the skin.

Eye: Not an expected route of occupational exposure. Liquid and concentrated vapors can irritate the eyes.

SAFETY DATA SHEET

Section 2: Hazards Identification, continued

CHRONIC (long term): see Section 11 for additional toxicological data

Long-term health effects are not expected with normal use of the marker. Prolonged or repeated contact with of the ink to skin may result in defatting and drying of skin and may result in dermatitis.

The component substance, 4-(phenylazo)benzene-1,3-diamine, present at between 1 and 2.5%, is classified in mutagenic category 3, limited evidence of possible mutagenic effects. Exposure to this substance is not expected with normal use of the marker.

Medical Conditions Aggravated by Exposure:	Preexisting skin disorders may be aggravated by repeated exposure to the liquid in the marker.
Interactions With Other Chemicals:	Not available
Potential Environmental Effects:	Not available

Section 3: Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Wt.%</u>	<u>EINECS / ELINCS</u>	<u>Symbol</u>	<u>Risk Phrases</u>
propan-1-ol	71-23-8	60 - 100	200-746-9	F; Xi	R11; R41 - R67
1-methoxypropan-2-ol	107-98-2	10 - 25	203-539-1	None	R10
Phosphoric acid, mono- and bis(2-ethylhexyl) esters	90506-69-7	2.5 - 10	291-933-4	Not classified	Not applicable
4-(phenylazo)benzene-1,3-diamine	495-54-5	1 - 2.5	207-803-7	Xn, Xi, N	Muta. Cat. 3; R68 - R22 - R38 - R50-53

See Section 16 for the full text of the R-phrases above.

Section 4: First Aid Measures

Inhalation:	If symptoms are experienced remove source of contamination or move victim to fresh air and obtain medical advice.
Eye Contact:	No effects expected. If irritation occurs, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.
Skin Contact:	No health effects expected. If irritation does occur, flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.
Ingestion:	If irritation or discomfort occurs, obtain medical advice immediately.

Section 5: Fire Fighting Measures

Flammable Properties:	Ink contained within the markers is flammable.
Suitable extinguishing Media:	For small fires, use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. For large fires, use carbon dioxide, dry chemical powder, alcohol-resistant foam or polymer foam. Firefighting foams are the extinguishing agent of choice for most flammable liquid fires. Use water spray to cool fire-exposed containers.
Unsuitable extinguishing Media:	Not available
Explosion Data:	
Sensitivity to Mechanical Impact:	Not applicable
Sensitivity to Static Discharge:	Not applicable

SAFETY DATA SHEET

Section 5: Fire Fighting Measures, continued

Specific Hazards arising from the Chemical: If involved in a fire, combustion may produce toxic and irritating fumes and gases.

Protective Equipment and precautions for firefighters: Self-contained breathing apparatus and protective clothing should be worn. Remove all unprotected personnel.

NFPA

Health: 0
Flammability: 1
Instability: 0

Section 6: Accidental Release Measures

Personal Precautions: If large volumes of liquid ink are released, wear protective gloves, goggles and clothing. Ventilate the area. Monitor the workplace air for harmful concentrations of vapors and take appropriate precautions if concentrations in air exceed workplace exposure limits.

Environmental Precautions: Prevent the product from entering sewers or waterways.

Methods for Containment: If large volumes of liquid ink are released, stop the leak if it is safe to do so. Contain spilled ink with earth, sand, or absorbent material which does not react with spilled material.

Methods for Clean-up: Clean up spills immediately. Shut off or extinguish all sources of ignition. Immediately soak spilled material with water. Soak up spill with absorbent material which does not react with spilled chemical. Put material in suitable, covered, labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Dispose of any contaminated, unusable product as described in Section 13 of this SDS.

Section 7: Handling and Storage

Handling: Avoid breathing vapors. Do not use near sources of extreme heat and keep away from sources of ignition. Keep out of reach of children. Keep container tightly closed. Avoid contact with the skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Storage: Store out of direct sunlight and away from heat, flames and ignition sources. Keep markers closed when not in use. Store between 4 – 49°C (40-120°F).

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

Measurable airborne concentrations of the component substances, listed in Section 3, are not expected when the markers are used for their intended purpose. Consult local authorities for acceptable exposure limits.

Exposure Controls

Engineering Controls: Not required for normal use.

Personal Protection:

Eye/Face Protection: Not required for normal use. In case of accidental release of large quantities of ink, wear goggles.

Skin Protection: Not required for normal use. In case of accidental release of large quantities of ink, wear gloves.

Respiratory Protection: Not required for normal use.

General Hygiene Measures: Avoid breathing vapors. Do not ingest. Avoid contact of the ink to skin and eyes. Keep out of reach of children.

SAFETY DATA SHEET

Section 9: Physical and Chemical Properties

Physical State:	Solid, containing liquid ink.	Flash Point & method:	13°C (55°F) CC
Appearance, Color and Odor:	Cylindrical marker; various colors; odor of organic solvent.	Autoignition Temperature:	Not available
Odor Threshold:	Not available	Flammability Limits in Air:	1.7 – 13.5%
pH:	Not applicable	Vapor Pressure:	14 mmHg (of the liquid ink)
Specific Gravity:	0.81 (for liquid ink)	Vapor Density:	Not applicable
Partition coefficient:	Not available	Evaporation Rate:	Not applicable
Solubility:	Not applicable	Boiling Point/Range:	78°C (172°F)
Viscosity:	Not applicable	Melting Point:	Not available
Decomposition Temperature:	Not available	VOC Content:	81% (w/w) for liquid ink

Section 10: Stability and Reactivity

Chemical Stability:	Stable at normal room temperature.
Conditions to Avoid:	Do not use in conditions of extreme heat or near open flames.
Incompatible Materials:	Incompatible with strong oxidizing agents.
Hazardous Decomposition Products:	Not applicable
Possibility of Hazardous Reactions:	Not applicable

Section 11: Toxicological Information

Acute Toxicity Data Acute toxicity data is not available for the liquid ink preparations inside the markers. The ink contains substances which are considered harmful by inhalation and if swallowed. Exposure to toxic and harmful substances by the user is not expected when the marker is used for its intended purpose.

Other Toxicity Data

Carcinogenicity:	Normal use of the markers is not expected to pose the risk of exposure to carcinogenic substances.
Irritation:	Normal use of marker will not result in harmful effects. High concentrations of vapors may cause irritation to the eyes. Ink may cause irritation in contact with skin.
Corrosivity:	Not applicable
Sensitization:	Not applicable
Neurological Effects:	Not applicable with normal use of the marker.
Genetic Effects:	Not applicable with normal use of the marker.
Reproductive Effects:	Not applicable with normal use of the marker.
Developmental Effects:	Not applicable with normal use of the marker.
Target Organ Effects:	Not applicable with normal use of the marker.

SAFETY DATA SHEET

Section 12: Ecological Information

Ecotoxicity:	Not available
Persistence/Degradability:	Not available
Bioaccumulation/Accumulation:	Not available
Mobility:	Not available

Section 13: Disposal Considerations

Waste Disposal Method:	Do NOT dump into any sewers, on the ground or into any body of water. Store material for disposal as indicated in Section 7 Handling and Storage. The conditions of use, storage and disposal of this product are beyond our control and may be beyond our knowledge. For this and other reasons, LA-CO Industries, Inc. does not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.
USA:	Dispose of in accordance with local, state and federal laws and regulations.
Canada:	Dispose of in accordance with local, provincial and federal laws and regulations.
EC:	Waste must be disposed of in accordance with relevant EC Directives and national, regional and local environmental control regulations. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

Section 14: Transport Information:

U.S. Hazardous Materials Regulation (DOT 49CFR):	Not regulated, this product conforms to small quantity exception of DOT 49CFR173.4.
Canadian Transportation of Dangerous Goods (TDG):	Not regulated
ADR/RID:	Not regulated
IMDG:	Not regulated
Marine Pollutants:	Not applicable
ICAO/IATA:	Not regulated

Section 15: Regulatory Information

<u>USA</u>	
	TSCA Status: All component substances are listed on the TSCA inventory.
	SARA Title III
	Sec. 302/304: None
	Sec. 311/312: Flammable, Chronic health
	Sec. 313: Not applicable
	CERCLA RQ: Not applicable
	California Prop 65: To the best of our knowledge this product does not contain chemicals known to the State of California to cause cancer or reproductive harm.
	<u>State Right-to-Know Lists :</u> Propan-1-ol can be found on the following state right to know lists: New Jersey, Pennsylvania and Massachusetts. 1-methoxypropan-2-ol can be found on the following state right to know lists: New Jersey, Pennsylvania and Massachusetts.

SAFETY DATA SHEET

Section 15: Regulatory Information, continued

Canada

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

WHMIS Classification: Not controlled. Product meets the definition of a “manufactured article” and is not subject to the regulations of the Hazardous Products Act.
(for workplace exposures)

New Substance Notification Regulations: Phosphoric acid, mono- and bis(2-ethylhexyl) esters, 90506-69-7 is not listed. All other component substances are listed on Canada’s Domestic Substances List (DSL).

NPRI Substances: There are no NPRI reportable substances in the ink preparation.

EC Classification for the Substance/Preparation

European Inventories: All component substances are listed in EINECS.

Symbol: This product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Section 16: Other Information

Full Text of R-phrases appearing in Section 2:

R10: Flammable.
 R11: Highly flammable.
 R22: Harmful if swallowed.
 R38: Irritating to skin.
 R41: Risk of serious damage to eyes.
 R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R67: Vapours may cause drowsiness and dizziness.
 R68: Possible risk of irreversible effects.

Preparation Information:

Prepared by: LEHDER Environmental Services Limited (519) 336-4101
 www.lehder.com

Revision Date: January 9, 2009

Disclaimer: While LEHDER Environmental Services Limited believes that the data set forth herein is accurate, as of the date hereof, LEHDER makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation and verification.

Manufacturer Disclaimer: The information contained herein is based on data available to us and is accurate and reliable to the best of our knowledge and belief. However, LA-CO Industries, Inc. makes no representations as to its completeness or accuracy. Information is supplied on condition that persons receiving such information will make their own determination as to its suitability for their purposes prior to use. In no event will LA-CO Industries, Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon the information contained herein.