SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Name: Markal® Dura Ink® Dry-Erase

Product Code: 96570 Red, 96571 Black, 96572 Blue, 96573 Green

Product Use: Erasable whiteboard marker

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

Phone Number: (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:

Normal use of this marker will not result in exposure to hazardous substances. The paint contained inside the marker has components which are flammable and are considered harmful by inhalation of vapors, eye and skin contact.

Appearance, Color and Odor: Marker containing liquid paint in colors white, black, red, yellow, blue, green, orange and silver. Alcohol-like 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. This product contains a small amount of a liquid preparation which contains dangerous ingredients however, there is no expected release of the liquid during use of the product and there is a barrier preventing exposure of the user and the environment.

Potential Health Effects: **ACUTE (short term): see Section 8 for exposure controls**

Relevant Route(s) of Exposure: The paint contained inside the marker has components which are considered highly flammable and irritating to eyes and skin. Exposure to the paint is not expected with normal use of the marker.

Inhalation: Inhalation of vapors is not expected with normal use of the marker.

Ingestion: Not an expected route of exposure.

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Section 2: Hazards Identification (continued)

Skin: Normal use of marker will not result in harmful effects. Prolonged skin contact with the paint may cause skin dryness and irritation.

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

CHRONIC (long term):
Long-term health effects not expected with normal use of the marker. Inappropriate use of the marker resulting in exposure to the paint may have adverse health effects. Prolonged or repeated contact with of the liquid to skin may result in defatting and drying of skin and may result in dermatitis.

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

Hazardous Ingredients:

Chemical Name	CAS No.	Wt.%	EINECS / ELINCS	Symbol	Risk Phrases
Ethanol	64-17-5	25 – 50	200-578-6	F	R11
Propan-1-ol	71-23-8	25 – 50	200-746-9	F; Xi	R11; R41; R67
2-Propanol	67-63-0	2.5 - 10	200-661-7	F; Xi	R11; R36; R67

Note: 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: Markers contain a small amount of flammable liquid.

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 available

Sensitivity to Static Discharge: Vapor may be ignited by a static discharge.

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Section 5: Fire Fighting Measures, continued

Specific Hazards arising from the Chemical: Combustion may produce toxic and irritating gases. Can form explosive mixtures at or above the flashpoint. Containers can build up pressure if exposed to heat (fire).

Protective Equipment and precautions for firefighters: Self-contained breathing apparatus and protective clothing should be worn. Vapors may accumulate and travel to ignition sources distant from the handling site. Remove all unauthorized personnel.

NFPA

Health: 0
Flammability: 1
Instability: 0

Section 6: Accidental Release Measures

Personal Precautions: Wear protective equipment and ventilate the area.

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

Methods for Containment: Stop the leak if it is safe to do so. Contain spilled paint with earth, sand, or absorbent material which does not react with spilled material.

Methods for Clean-up: Soak up spill with an inert absorbent material. Place the contaminated absorbent in a sealed container and dispose according to all applicable regulations.

Section 7: Handling and Storage

Handling: This product contains a small amount of a flammable liquid. Avoid contact with skin and eyes. Do not use near ignition sources. Keep out of reach of children.

Storage: Store in a cool, dry area, out of direct sunlight and away from heat, flames and ignition sources. Keep markers tightly closed when not in use.

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: Provide adequate ventilation to keep vapor concentrations below the exposure limits listed above.

Personal Protection:

Eye/Face Protection: Not required for normal use.

Skin Protection: Not required for normal use. If repeated skin contact is likely wear gloves made of butyl rubber.

Respiratory Protection: Not required for normal use. NIOSH approved respirator for organic vapors in high vapor concentrations.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or Canadian Standards Association (CSA) Standard Z94.4-93 must be followed whenever workplace conditions warrant a respirator's use.

Other Protective Equipment: Not required.

General Hygiene Measures: Avoid breathing vapors. Do not ingest. Avoid contact with skin and eyes. Keep out of reach of children. Do not smoke while handling this material. Wash hands after handling.

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Section 9: Physical and Chemical Properties

Physical State:	Solid marker containing liquid paint.	**Flash Point & method:**	22°C (71.6°F)
Appearance, Color and Odor:	Marker containing liquid paint in various colors. Alcohol-like odor.	**Autoignition Temperature:**	360°C (680°F)
Odor Threshold:	Not available	**Flammability Limits in Air:**	LEL: 2.1% UEL: 19.8% (for the paints)
pH:	Not applicable	**Vapor Pressure:**	Not available
Specific Gravity: (water = 1)	0.892	**Vapor Density: (Air = 1)**	>1.0 (for the paints)
Partition coefficient: (n-octanol/water)	Not available	**Evaporation Rate: (n-Butyl Acetate = 1)**	>1.0 (for the paints)
Solubility:	Paint is partially soluble in water	**Boiling Point/Range:**	80°C (176°F)
Viscosity:	Paint is water thin	**Melting Point:**	Not available
Decomposition Temperature:	Not available	**VOC Content:**	80% w/w

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. Avoid heating above 60°.

Incompatible Materials: Incompatible with strong oxidizing agents and strong reducing agents.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Section 11: Toxicological Information

Acute Toxicity Data

	LD_{50} Oral (mg/kg)	LD_{50} Dermal (mg/kg)	LC_{50} Inhalation (4 hrs.)
Ethanol	7 060 (rat)	Not available	39 000 (mouse)
Propan-1-ol	1 870 (rat)	Not available	>13 548 ppm (rat)
2-Propanol	4 720 (rat)	12 890 (rabbit)	17 000 ppm (rat)

Acute toxicity data is not available for the liquid preparations inside the markers. The liquid contains substances which are considered irritants in contact with eyes and skin and vapors may cause drowsiness and dizziness. Exposure to irritating and harmful substances by the user is not expected when the marker is used for its intended purpose.

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Section 11: Toxicological Information, continued

Other Toxicity Data

Carcinogenicity:	Normal use of the markers is not expected to pose the risk of exposure to carcinogenic substances. The component Ethanol is listed by ACGIH (American Conference of Governmental Industrial Hygienists) as A3, Confirmed animal carcinogen with unknown relevance to humans. The component Propan-1-ol is listed by ACGIH (American Conference of Governmental Industrial Hygienists) as A4, Not Classifiable as a Human Carcinogen.
Irritation:	Normal use of marker will not result in harmful effects. High concentrations of vapors may cause irritation to the eyes. Liquid is irritating when in contact with eyes.
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.

Section 12: Ecological Information

Ecotoxicity:	Not available
Persistence/Degradability:	Not applicable
Bioaccumulation/Accumulation:	Not applicable
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. Spent markers are considered “empty” of fluid.
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
Canadian Transportation of Dangerous Goods (TDG):	Not regulated
ADR/RID:	Not regulated
IMDG:	Not regulated
Marine Pollutants:	Not applicable
ICAO/IATA:	Not regulated

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Section 15: Regulatory Information

USA

TSCA Status: All ingredients in the product are listed on the TSCA inventory.

SARA Title III
Sec. 302/304: None
Sec: 311/312: Flammable
Sec. 313: 2-Propanol
CERCLA RQ: Not applicable

California Prop 65: Not available

State Right-to-Know Lists : Ethanol and 2-Propanol can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota and Massachusetts. Propan-1-ol is found on New Jersey, Pennsylvania and Massachusetts.

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

NSNR Status: Exempt, NSNR state that inks in markers are excluded from the definition of a substance.

NPRI Substances: 2-Propanol is listed as an NPRI reportable substance.

EC Classification for the Substance/Preparation

Symbol: This product is not classified as dangerous according to Directive 1999/45/EC and its amendments.
Risk Phrases: None
Safety Phrases: S2: Keep out of reach of children.

Section 16: Other Information

Full Text of R-phrases appearing in Section 2:
R11: Highly flammable.
R36: Irritating to eyes.
R41: Risk of serious damage to eyes.
R67: Vapors may cause drowsiness and dizziness.

Preparation Information:

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

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