Date : 11/07/2012

Version: 1.1

Material Safety Data Sheet

PRO-WASH[™]D Detergent Removable Paint Marker - White, Yellow, Red, Black, Green, Blue

1. Product and company identification

Product name : PRO-WASH™D Detergent Removable Paint Marker - White, Yellow, Red, Black, Green,

Blue

Material uses : FOR INDUSTRIAL USE ONLY

Temporary marker for metal, aluminum, glass, plastic and other non-porous surfaces.

Code : 97010 (White), 97011 (Yellow), 97012 (Red), 97013 (Black), 97016 (Green), 97015 (Blue)

Supplier/Manufacturer : LA-CO Industries, Inc.

1201 Pratt Boulevard Elk Grove Village, IL. 60007-5746

MSDS authored by : KMK Regulatory Services Inc.

In case of emergency : CHEMTREC, U.S.: 1-800-424-9300 International: +1-703-527-3887

2. Hazards identification

This MSDS reflects the health, physical and environmental hazards of the liquid ink contained within the pen/marker. Because of the nature of the finished product i.e. the fact that the ink is held internally within the pen/marker inside a closed (sealed) container, and given that the liquid is present in a small quantity and is released in very small amounts during normal use, the user of the product and/or the reader of this MSDS should consider the potential exposure to the ink to be minimal and controlled during the normal use of the product. Refer to relevant sections of the SDS (7 and 13) for additional information on handling and disposal considerations. To avoid any potential hazard and to minimize the risk of exposure, it is important that the user of the product does NOT open, heat, burn or expose it to a source of intense heat, as this could release the ink.

Emergency overview

Physical state : Liquid. [in cylindrical marker]

Color : White. Yellow. Red. Black. Green. Blue.

Odor : Alcohol-like.

Hazard statements : NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN

THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and

available for employees and other users of this product.

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Inhalation: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.Skin: No known significant effects or critical hazards.Eyes: No known significant effects or critical hazards.

Potential chronic health effects

Chronic effects

: No known significant effects or critical hazards.

Carcinogenicity

: No known significant effects or critical hazards.

Mutagenicity

: No known significant effects or critical hazards.

Teratogenicity

: No known significant effects or critical hazards.

Developmental effects

: No known significant effects or critical hazards.

Fertility effects

: No known significant effects or critical hazards.

Target organs

: No known significant effects or critical hazards.

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2. Hazards identification

Over-exposure signs/symptoms

Inhalation: No specific data.Ingestion: No specific data.Skin: No specific data.Eyes: No specific data.Medical conditions: None known.

aggravated by overexposure

See toxicological information (Section 11)

3. Composition/information on ingredients

United States

Name	CAS number	%
Propan-2-ol	67-63-0	60 - 100

Canada

Name	CAS number	%
Propan-2-ol	67-63-0	60 - 100

<u>Mexico</u>

					Classification			
Name	CAS number	UN number	%	IDLH	Н	F	R	Special
Propan-2-ol	67-63-0	UN1219	60 - 100	2000 ppm	1	3	0	-

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Eye contact

: Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.

Skin contact

: In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention if irritation occurs.

Inhalation

: Move exposed person to fresh air. Get medical attention if symptoms occur.

Ingestion

: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician

: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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5. Fire-fighting measures

Flammability of the product

: Flammable liquid. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

Suitable

: Use dry chemical, CO₂, water spray (fog) or foam.

Not suitable

: Do not use water jet or water-based fire extinguishers.

Special exposure hazards

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon dioxide

carbon monoxide

6. Accidental release measures

Personal precautions

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions

: Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.

7. Handling and storage

Handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation.

Storage

: Store in accordance with local regulations.

8. Exposure controls/personal protection

United States

Ingredient	Exposure limits	
Propan-2-ol	ACGIH TLV (United States, 2/2010). STEL: 400 ppm 15 minute(s). TWA: 200 ppm 8 hour(s). NIOSH REL (United States, 6/2009). STEL: 1225 mg/m³ 15 minute(s). STEL: 500 ppm 15 minute(s). TWA: 980 mg/m³ 10 hour(s). TWA: 400 ppm 10 hour(s). OSHA PEL (United States, 6/2010). TWA: 980 mg/m³ 8 hour(s). TWA: 400 ppm 8 hour(s).	

Canada

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8. Exposure controls/personal protection

Occupational exposure limit	<u>s</u>	TWA	(8 hours)	STEL ((15 mins	5)	Ceilin	g		
Ingredient	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
	US ACGIH 2/2010 AB 4/2009 BC 9/2010 ON 7/2010 QC 6/2008	200 200 200 200 200 400	- 492 - - 983	- - - -	400 400 400 400 500	- 984 - - 1230	- - -	- - - -	- - - -	- - -	

Mexico

Occupational exposure limits

Ingredient	Exposure limits
Propan-2-ol	NOM-010-STPS (Mexico, 9/2000). LMPE-CT: 1225 mg/m³ 15 minute(s). LMPE-CT: 500 ppm 15 minute(s). LMPE-PPT: 980 mg/m³ 8 hour(s). LMPE-PPT: 400 ppm 8 hour(s).

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures
Hygiene measures

- : No special ventilation requirements.
- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory

: Not required for normal use of the pen/marker.

Wear an appropriate NIOSH approved respirator if concentration levels exceed the safe exposure limits.

Hands

Not required for normal use of the pen/marker.

Use gloves appropriate for work or task being performed.

Recommended: Natural rubber (latex).

Eyes

: Not required for normal use of the pen/marker.

Safety eyewear should be used when there is a likelihood of exposure.

Recommended: Safety glasses with side shields.

Skin

: Not required for normal use of the pen/marker.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling

this product.

Recommended: Lab coat.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they

comply with the requirements of environmental protection legislation.

9. Physical and chemical properties

Physical state : Liquid. [in cylindrical marker]

Flash point : Closed cup: 12°C (53.6°F) [Tagliabue.]

Burning time : Not applicable.

Burning rate : Not applicable.

Auto-ignition temperature : 399°C (750.2°F)

Flammable limits : Lower: 2.5%

: Lower: 2.5% Upper: 12% (Propan-2-ol)

Color : White. Yellow. Red. Black. Green. Blue.

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9. Physical and chemical properties

: Alcohol-like. Odor : Not available. **Taste** Molecular weight Not applicable. Molecular formula : Not applicable.

Ha : Not available. : 82.5°C (180.5°F) **Boiling/condensation point Melting/freezing point** : -88.88°C (-128°F) **Critical temperature** : Not available.

Vapor pressure : 4 kPa (30 mm Hg) [20°C] : 2.07 [Air = 1] (Propan-2-ol) Vapor density : 73.33% (v/v), 64.59% (w/w) Volatility

Odor threshold : Not available.

Evaporation rate 1.7 (Butyl acetate = 1) (Propan-2-ol)

SADT : Not available. **Viscosity** : Not available. **Ionicity (in water)** Not available. **Dispersibility properties** : Not available. : Not available. **Solubility** : Not available. Physical/chemical

10. Stability and reactivity

properties comments

Chemical stability : The product is stable.

: Avoid all possible sources of ignition (spark or flame). **Conditions to avoid**

: 0.788 (Propan-2-ol)

Reactive or incompatible with the following materials: oxidizing materials. **Incompatible materials**

: Under normal conditions of storage and use, hazardous decomposition products should **Hazardous decomposition** not be produced. products

Possibility of hazardous : Under normal conditions of storage and use, hazardous reactions will not occur.

reactions

Relative density

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-

Chronic toxicity

There is no data available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Propan-2-ol	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-

Sensitizer

Skin : There is no data available. Respiratory : There is no data available.

Carcinogenicity

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11. Toxicological information

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Propan-2-ol	A4	3	-	-	-	None.

Mutagenicity

There is no data available.

Teratogenicity

There is no data available.

Reproductive toxicity

There is no data available.

12. Ecological information

Ecotoxicity

: No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Propan-2-ol	Acute LC50 1400000 to 1950000 ug/L Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 >1400000 ug/L	Fish - Gambusia affinis - 20 to 30 mm	96 hours

Persistence/degradability

There is no data available.

13. Disposal considerations

Waste disposal

: The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

DOT/TDG/MXT/IMDG/IATA: Not regulated.

15. Regulatory information

United States

HCS Classification

: Not regulated.

U.S. Federal regulations

: TSCA 8(a) IUR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Propan-2-ol

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Propan-2-ol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health

hazard

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed



Conforms to ANSI Z400.1-2004 Standard

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15. Regulatory information

Clean Air Act Section 602

: Not listed

Class I Substances

Clean Air Act Section 602

: Not listed

Class II Substances

M. C.P. C.

DEA List I Chemicals (Precursor Chemicals)

: Not listed

DEA List II Chemicals

: Not listed

(Essential Chemicals)

SARA 313

	Product name	CAS numb	er Concentration
Form R - Reporting requirements	Propan-2-ol	67-63-0	60 - 100
Supplier notification	Propan-2-ol	67-63-0	60 - 100

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: Propan-2-ol

New York : None of the components are listed.

New Jersey : The following components are listed: Propan-2-ol Pennsylvania : The following components are listed: Propan-2-ol

California Prop. 65

No products were found.

Canada

WHMIS (Canada) : Not controlled under WHMIS (Canada).

Canadian lists

Canadian NPRI: The following components are listed: Propan-2-ol

CEPA Toxic substances : None of the components are listed.Canada inventory : All components are listed or exempted.

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.

Mexico

Classification :



16. Other information

Label requirements : NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN

THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

Hazardous Material : Health : 1 Flammability : 1 Physical hazards : 0

Information System (U.S.A.)

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.



Conforms to ANSI Z400.1-2004 Standard

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16. Other information

National Fire Protection : Health : 1 Flammability : 1 Instability : 0 Association (U.S.A.)

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History

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Version : 1.1 Revised Section(s) : 2, 15, 16

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