: 07/15/2012 **Date**

: 2 Version

Material Safety Data Sheet

PRO-WASH™W Water Removable Paint Marker- White, Yellow, Red, Black, Green, Blue

1. Product and company identification

: PRO-WASH™W Water Removable Paint Marker- White, Yellow, Red, Black, Green, Blue **Product name**

Material uses : FOR INDUSTRIAL USE ONLY

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

: 97030 (White), 97031 (Yellow), 97032 (Red), 97033 (Black), 97036 (Green), 97035 (Blue) Code

: LA-CO Industries, Inc. Supplier/Manufacturer

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

MSDS authored by : KMK Regulatory Services Inc.

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

2. Hazards identification

This SDS reflects the health, physical and environmental hazards of the liquid paint contained within the pen/marker. Because of the nature of the finished product i.e. the fact that the paint 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 SDS should consider the potential exposure to the paint 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 paint.

An Extended-SDS (E-SDS) for this product, that will cover the minimal existing 'risk of exposure' to the chemicals found in this product is under development and will be provided to all users upon availability.

Emergency overview

OSHA/HCS status

Physical state : Liquid. [in cylindrical marker]

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

: Alcohol-like. Odor

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

THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

: 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.

2. Hazards identification

Fertility effects : No known significant effects or critical hazards.

Target organs : No known significant effects or critical hazards.

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	%
Ethyl Alcohol	64-17-5	60 - 100
Heptane	142-82-5	1 - 5

Canada

Name	CAS number	%
Ethyl Alcohol	64-17-5	60 - 100
Heptane	142-82-5	1 - 5

<u>Mexico</u>

					Classification			ation
	CAS number	UN number	%	IDLH	Н	F	R	Special
Ethyl Alcohol Heptane	64-17-5 142-82-5	UN1170 UN1206	60 - 100 1 - 5	3300 ppm 750 ppm	1 1	3 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.

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
Ethyl Alcohol	ACGIH TLV (United States, 2/2010). STEL: 1000 ppm 15 minute(s). NIOSH REL (United States, 6/2009). TWA: 1900 mg/m³ 10 hour(s). TWA: 1000 ppm 10 hour(s). OSHA PEL (United States, 6/2010). TWA: 1900 mg/m³ 8 hour(s). TWA: 1000 ppm 8 hour(s).
Heptane	ACGIH TLV (United States, 2/2010). STEL: 2050 mg/m³ 15 minute(s). STEL: 500 ppm 15 minute(s). TWA: 1640 mg/m³ 8 hour(s). TWA: 400 ppm 8 hour(s). NIOSH REL (United States, 6/2009). CEIL: 1800 mg/m³ 15 minute(s). CEIL: 440 ppm 15 minute(s).

8. Exposure controls/personal protection

TWA: 350 mg/m³ 10 hour(s). TWA: 85 ppm 10 hour(s).

OSHA PEL (United States, 6/2010). TWA: 2000 mg/m³ 8 hour(s). TWA: 500 ppm 8 hour(s).

Canada

Occupational exposure limit	<u>s</u>	TWA	(8 hours)	STEL ((15 mins	s)	Ceilin	g		
Ingredient	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
Ethyl Alcohol Heptane	US ACGIH 2/2010 AB 4/2009 BC 9/2010 ON 7/2010 QC 6/2008 US ACGIH 2/2010 AB 4/2009 BC 9/2010 ON 7/2010 QC 6/2008	- 1000 - - 1000 400 400 400 400 400 400	- 1880 - - 1880 1640 1640 - 1640 1640	- - - - - -	1000 - 1000 1000 - 500 500 500 500	- - - - 2050 2050 - 2050 2050	- - - - - - -	- - - - - - -	-	- - - - - - -	

Mexico

Occupational exposure limits

Ingredient	Exposure limits
Ethyl Alcohol	NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 1900 mg/m³ 8 hour(s). LMPE-PPT: 1000 ppm 8 hour(s).
Heptane	NOM-010-STPS (Mexico, 9/2000). Absorbed through skin. LMPE-CT: 2000 mg/m³ 15 minute(s). LMPE-CT: 500 ppm 15 minute(s). LMPE-PPT: 1600 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: -2°C (28.4°F)

Burning time : Not applicable.

Burning rate : Not applicable.

Auto-ignition temperature : 398.85°C (749.9°F)

Flammable limits : Lower: 2.5%

Upper: 12% (Propan-2-ol)

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

Odor : Alcohol-like.

Taste : Not available.

Molecular weight : Not applicable.

Molecular formula : Not applicable.

pH : Not available.

Boiling/condensation point : 78.35°C (173°F)

Melting/freezing point : -113.89°C (-173°F)

Critical temperature : Not available.

 Critical temperature
 : Not available.

 Relative density
 : 0.788 (Propan-2-ol)

 Vapor pressure
 : 4 kPa (30 mm Hg) [20°C]

 Vapor density
 : 2.07 [Air = 1] (Propan-2-ol)

 Volatility
 : 68.37% (v/v), 51.7% (w/w)

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.

Solubility : Not available.

Physical/chemical : Not available.

properties comments

10. Stability and reactivity

Chemical stability : The product is stable.

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

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials, acids and

alkalis.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Possibility of hazardous

reactions

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

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ethyl Alcohol	LC50 Inhalation Vapor	Rat	124700 mg/m3	4 hours
	LD50 Oral	Rat	7 g/kg	-
Heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	103 g/m3	4 hours

Chronic toxicity

11. Toxicological information

There is no data available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
	Eyes - Moderate irritant Skin - Moderate irritant	Rabbit Rabbit	-	100 microliters 24 hours 20 milligrams	-

Sensitizer

Skin Respiratory : There is no data available.

: There is no data available.

Carcinogenicity

There is no data available.

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
Ethyl Alcohol	Acute EC50 17.921 mg/L Marine water Acute EC50 2000 ug/L Fresh water Acute LC50 25500 ug/L Marine water	Algae - Ulva pertusa Daphnia - Daphnia magna Crustaceans - Artemia franchiscana - Larvae	96 hours 48 hours 48 hours
	Acute LC50 42000 ug/L Fresh water Chronic NOEC 0.375 ul/L Fresh water	Fish - Oncorhynchus mykiss Fish - Gambusia holbrooki - Larvae - 3 days	4 days 12 weeks
Heptane	Acute LC50 375000 ug/L Fresh water	Fish - Oreochromis mossambicus - 99 mm - 10 g	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 4(a) final test rules: Heptane

TSCA 8(a) PAIR: Heptane

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

TSCA 12(b) annual export notification: Heptane

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: Heptane; Ethyl Alcohol

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Heptane: Fire hazard; Ethyl Alcohol: Fire hazard, Immediate (acute) health hazard,

Delayed (chronic) health hazard

Clean Air Act Section

112(b) Hazardous Air

: Not listed

Pollutants (HAPs)

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

Not listed

DEA List I Chemicals

(Precursor Chemicals)

: Not listed

DEA List II Chemicals

: Not listed

(Essential Chemicals)

State regulations

Massachusetts : The following components are listed: Ethyl Alcohol; Heptane

New York : None of the components are listed.

: The following components are listed: Ethyl Alcohol; Heptane **New Jersey** The following components are listed: Ethyl Alcohol; Heptane **Pennsylvania**

California Prop. 65

Not available.

Canada

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

Canadian lists

: The following components are listed: Ethyl alcohol; Heptane Canadian NPRI

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

15. Regulatory information



16. Other information

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

THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

Physical hazards:

Hazardous Material 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.

Flammability:

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

: Health:

National Fire Protection : Health : 0 Flammability : 1 Instability : 0

Association (U.S.A.)

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History

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Version : 2

Revised Section(s) : Not applicable.

Notice to reader

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