



# SAFETY DATA SHEET

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Revision Number 1

This document complies with the US OSHA Hazard Communication Standard (29 CFR 1910.1200), Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR), and Mexico's NMX-R-019-SC-2011.

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### GHS product identifier

**Product Name** M1 Fine Line Permanent Marker

### Other means of identification

**Product Code(s)** 10581 M1 Black  
10581 M1 Red

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Solvent based marker

**Uses advised against** Keep away from children. Not for use on skin.

### Supplier's details

**Supplier Address**  
U-Mark, Inc  
102 Iowa Ave.  
Belleville, IL 62220  
TEL: 618-235-7500

### Emergency telephone number

**Emergency Telephone Number** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

### Classification

This product is not considered hazardous according to the criteria set within the US OSHA Hazard Communication Standard (29 CFR 1910.1200), Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR), and Mexico's NMX-R-019-SC-2011.

### Label Elements

**Signal Word**  
Not Classified

None

**Physical and Health Hazards Not Otherwise Classified**  
Not applicable.

**Precautionary Statements****Other information**

No information available

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Propylene glycol monomethyl ether	107-98-2	50-80	-	-
Ethanol	64-17-5	0-15	-	-
Benzyl alcohol	100-51-6	5-10	-	-
Methyl lactate	547-64-8	0-6	-	-
Propyl alcohol	71-23-8	0-2	-	-
Isopropyl alcohol	67-63-0	0-1	-	-

**4. FIRST AID MEASURES****Description of necessary first-aid measures****General Advice**

Under normal conditions of use first aid is not required.

**Eye Contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.

**Skin Contact**

Wash skin with soap and water. Get medical attention if irritation develops and persists.

**Inhalation**

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

**Ingestion**

Not an expected route of exposure.

**Most important symptoms/effects, acute and delayed****Most Important Symptoms/Effects** None known**Indication of immediate medical attention and special treatment needed, if necessary****Notes to Physician**

Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

None

**Specific Hazards Arising from the Chemical**

The ink contained in this product is flammable but not readily ignited.

**Explosion Data****Sensitivity to Mechanical Impact**

None.

**Sensitivity to Static Discharge**

None.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Remove all sources of ignition.

**Environmental Precautions**

**Environmental Precautions** See Section 12 for additional Ecological Information.

**Methods and materials for containment and cleaning up**

**Methods for Containment** None required.

**Methods for Cleaning Up** Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Handling** Keep away from open flames, hot surfaces and sources of ignition.

**Conditions for safe storage, including any incompatibilities**

**Storage** Store in a well-ventilated place. Keep cool.

**Incompatible Products** None known based on information supplied.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Control parameters**

**Exposure Guidelines** The following exposure limits are provided for information only; exposure is not expected under normal conditions of use or storage.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Propylene glycol monomethyl ether 107-98-2	STEL: 100 ppm TWA: 50 ppm	(vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m <sup>3</sup> (vacated) STEL: 150 ppm (vacated) STEL: 540 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 360 mg/m <sup>3</sup> STEL: 150 ppm STEL: 540 mg/m <sup>3</sup>
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm 10% LEL TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
Propyl alcohol 71-23-8	TWA: 100 ppm	TWA: 200 ppm TWA: 500 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 500 mg/m <sup>3</sup> (vacated) STEL: 250 ppm (vacated) STEL: 625 mg/m <sup>3</sup>	IDLH: 800 ppm TWA: 200 ppm TWA: 500 mg/m <sup>3</sup> STEL: 250 ppm STEL: 625 mg/m <sup>3</sup>
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m <sup>3</sup> (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m <sup>3</sup>	IDLH: 2000 ppm 10% LEL TWA: 980 mg/m <sup>3</sup> TWA: 400 ppm STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

**Appropriate engineering controls**

**Engineering Measures** None under normal use conditions.

**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	No protective equipment is needed under normal use conditions.
<b>Skin and Body Protection</b>	No protective equipment is needed under normal use conditions.
<b>Respiratory Protection</b>	No protective equipment is needed under normal use conditions.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid.	<b>Appearance</b>	Red, Black.
<b>Odor</b>	Solvent.	<b>Odor Threshold</b>	No information available.

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
<b>pH</b>	No data available	None known
<b>Melting Point/Range</b>	No data available	None known
<b>Boiling Point/Boiling Range</b>	121 °C / 249.8 °F	None known
<b>Flash Point</b>	25-35 °C / 77-95 °F	(Liquid Ink only)
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limits in Air</b>		
upper flammability limit	11.8%	
lower flammability limit	2.7%	
<b>Vapor Pressure</b>	No data available	None known
<b>Vapor Density</b>	3.1 (air = 1)	None known
<b>Relative Density</b>	No data available	None known
<b>Specific Gravity</b>	0.9	None known
<b>Water Solubility</b>	Insoluble	None known
<b>Solubility in other solvents</b>	No data available	None known
<b>Partition coefficient: n-octanol/water</b>	No data available	None known
<b>Autoignition Temperature</b>	No data available	None known
<b>Decomposition Temperature</b>	No data available	None known
<b>Viscosity</b>	No data available	None known

**Flammable Properties** Flammable.

**Explosive Properties** No data available

**Oxidizing Properties** No data available

### Other information

**VOC Content (%)** 79-90

## 10. STABILITY AND REACTIVITY

**Reactivity** No data available.

**Chemical stability** Stable under recommended storage conditions.

**Possibility of hazardous reactions** None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Conditions to avoid** None known based on information supplied.

**Incompatible materials** None known based on information supplied.

**Hazardous decomposition products** Thermal decomposition can lead to release of irritating gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Product Information**

<b>Inhalation</b>	No known effect based on information supplied.
<b>Eye Contact</b>	No known effect based on information supplied
<b>Skin Contact</b>	No known effect based on information supplied
<b>Ingestion</b>	No known effect based on information supplied

**Numerical measures of toxicity - Product****Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propylene glycol monomethyl ether	= 5000 mg/kg ( Rat )	= 13 g/kg ( Rabbit )	> 7559 ppm ( Rat ) 6 h
Ethanol	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4 h
Benzyl alcohol	= 1230 mg/kg ( Rat )	= 2000 mg/kg ( Rabbit )	= 8.8 mg/L ( Rat ) 4 h

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** No information available.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Respiratory or Skin Sensitization** No information available  
**Germ Cell Mutagenicity** No information available  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed and abused as an alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethanol	A3	Group 1	Known	X
Isopropyl alcohol		Group 3		X

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC: (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

**NTP: (National Toxicity Program)**

Known - Known Carcinogen

**OSHA: (Occupational Safety & Health Administration)**

X - Present

**Reproductive Toxicity** No information available  
**STOT - single exposure** No information available  
**STOT - repeated exposure** No information available  
**Aspiration Hazard** No information available.

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Not classified

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Propylene glycol monomethyl ether 107-98-2		LC50 96 h: 4600 - 10000 mg/L static (Leuciscus idus) LC50 96 h: = 20.8 g/L static (Pimephales promelas)		EC50 48 h: = 23300 mg/L (Daphnia magna)
Ethanol 64-17-5		LC50 96 h: 12.0 - 16.0 mL/L static (Oncorhynchus)	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	LC50 48 h: 9268 - 14221 mg/L (Daphnia magna)

		mykiss) LC50 96 h: 13400 - 15100 mg/L flow-through (Pimephales promelas) LC50 96 h: > 100 mg/L static (Pimephales promelas)		EC50 24 h: = 10800 mg/L (Daphnia magna) EC50 48 h: = 2 mg/L Static (Daphnia magna)
Benzyl alcohol 100-51-6	EC50 3 h: = 35 mg/L (Anabaena variabilis)	LC50 96 h: = 10 mg/L static (Lepomis macrochirus) LC50 96 h: = 460 mg/L static (Pimephales promelas)	EC50 = 50 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 63.7 mg/L 5 min EC50 = 71.4 mg/L 30 min	EC50 48 h: = 23 mg/L (water flea)

**Persistence and Degradability** No information available

**Bioaccumulation** No information available

Chemical Name	Log Pow
Propylene glycol monomethyl ether	-0.437
Ethanol	-0.32
Benzyl alcohol	1.1
Propyl alcohol	0.34
Isopropyl alcohol	0.05

**Mobility** No information available

**Other Adverse Effects** No information available.

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** Dispose of in accordance with local regulations.

**Contaminated Packaging** Not Applicable

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated.

### 15. REGULATORY INFORMATION

#### International Regulations

**Ozone depleting substances** Not applicable

**Persistent Organic Pollutants** Not applicable

**Hazardous Waste** Not applicable

Chemical Name	Basel Convention (Hazardous Wastes)
Ethanol	Y42
Isopropyl alcohol	Y42

**The Rotterdam Convention (Prior Informed Consent)** Not applicable

**International Convention for the Prevention of Pollution from Ships (MARPOL)** Not applicable

#### International Inventories

**TSCA** Contact supplier for inventory compliance status

**DSL/NDSL** Contact supplier for inventory compliance status

#### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals: Ethyl alcohol is only considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

Chemical Name	CAS-No	California Prop. 65
Ethanol	64-17-5	Developmental

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Propylene glycol monomethyl ether	X	X	X	X	X
Ethanol	X	X	X	X	
Benzyl alcohol	-	X	X	-	-
Propyl alcohol	X	X	X		X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. OTHER INFORMATION**

**NFPA** Health Hazard 0 Flammability 2 Instability 0 Physical and Chemical Hazards -

**HMIS** Health Hazard 0 Flammability 2 Physical Hazard 0 Personal Protection X

**Prepared By** Product Stewardship  
23 British American Blvd.  
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1-800-572-6501

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**General Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**