

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: 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

**Issuing Date** 11-Apr-2018

**Revision Date** 13-Jun-2019

**Revision Number** 2

## 1. Identification

### Product identifier

**Product Name** Marsh M88 Dye Marker

### Other means of identification

**Product Code(s)** M88-BKD Black; M88-R Red; M88-BL Blue

**UN/ID no** UN1210

**Synonyms** None

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

**Recommended use** Markers

**Restrictions on use** Keep away from children. Not to be used for skin.

### Details of the supplier of the safety data sheet

#### Manufacturer Address

MSSC, LLC  
926 McDonough Lake Road  
Suite E  
Collinsville, IL 62234

#### Emergency telephone number

**Emergency Telephone** 24-hour Emergency Phone: Infotrac 1-800-535-5053 (USA & Canada), 1-352-323-3500 (International)

## 2. Hazard(s) identification

### Classification

### Label elements

#### **Hazard statements**

This product is an article as defined by 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. No exposure to hazardous chemicals is expected to occur during intended product use. Misuse of the product may result in exposure to hazardous chemicals.

**Other information**

May be harmful if inhaled.

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Ethanol	64-17-5	25-100	-	-
Propylene glycol monomethyl ether	107-98-2	25-50	-	-
Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, [[3-(dimethylamino)propyl]amino]sulfonyl derivatives	68411-04-1	0-10	-	-

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. First-aid measures****Description of first aid measures**

<b>General advice</b>	Under normal conditions of use first aid is not required.
<b>Inhalation</b>	If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
<b>Eye contact</b>	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 symptoms occur.
<b>Skin contact</b>	Wash skin with soap and water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Not an expected route of exposure.

**Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	None known.
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**Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Treat symptomatically.
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**5. Fire-fighting measures**

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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<b>Unsuitable extinguishing media</b>	None known.
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**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.

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

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

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

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

**7. Handling and storage****Precautions for safe handling**

**Advice on safe handling** Keep away from open flames, hot surfaces and sources of ignition.

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

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

**8. Exposure controls/personal protection****Control parameters**

**Exposure Limits** 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
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 TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
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>
Copper, [29H,31H-phthalocyaninato(2-)- N29,N30,N31,N32]-,	TWA: 1 mg/m <sup>3</sup> Cu dust and mist	-	IDLH: 100 mg/m <sup>3</sup> Cu dust and mist TWA: 1 mg/m <sup>3</sup> Cu dust and

[[3-(dimethylamino)propyl]amino ]sulfonyl derivatives 68411-04-1				mist
<b>Chemical name</b>	<b>Alberta</b>	<b>British Columbia</b>	<b>Ontario</b>	<b>Quebec</b>
Ethanol 64-17-5	TWA: 1000 ppm TWA: 1880 mg/m <sup>3</sup>	STEL: 1000 ppm	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1880 mg/m <sup>3</sup>
Propylene glycol monomethyl ether 107-98-2	TWA: 100 ppm TWA: 369 mg/m <sup>3</sup> STEL: 150 ppm STEL: 553 mg/m <sup>3</sup>	TWA: 50 ppm STEL: 100 ppm	TWA: 50 ppm STEL: 100 ppm	TWA: 100 ppm TWA: 369 mg/m <sup>3</sup> STEL: 150 ppm STEL: 553 mg/m <sup>3</sup>

**Other information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

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

**Eye/face protection** No protective equipment is needed under normal use conditions.

**Hand protection** No special protective equipment required.

**Skin and body protection** No protective equipment is needed under normal use conditions.

**Respiratory protection** No protective equipment is needed under normal use conditions.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

## **9. Physical and chemical properties**

### Information on basic physical and chemical properties

#### **Appearance**

**Physical state** Liquid  
**Color** Red, Blue, Black  
**Odor** Alcohol-like  
**Odor threshold** No information available

#### Property

**pH** No data available  
**Melting point / freezing point** No data available  
**Boiling point / boiling range** 78 °C / 172.4 °F  
**Flash point** 13 °C / 55.4 °F  
**Evaporation rate** No data available  
**Flammability (solid, gas)** No data available  
**Flammability Limit in Air**  
**Upper flammability or explosive limits** No data available  
**Lower flammability or explosive limits** No data available  
**Vapor pressure** No data available  
**Vapor density** No data available  
**Relative density** No data available  
**Water solubility** Miscible in water

#### Remarks • Method

None known  
None known  
(Liquid Ink)  
(Liquid Ink)  
None known  
None known  
None known  
None known  
None known  
None known  
None known  
None known

<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient</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>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known

**Other information**

<b>Explosive properties</b>	No information available.
<b>Oxidizing properties</b>	No information available.
<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk density</b>	No information available

**10. Stability and reactivity**

<b>Reactivity</b>	None under normal use conditions.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Conditions to avoid</b>	None known based on information supplied.
<b>Incompatible materials</b>	None known based on information supplied.
<b>Hazardous decomposition products</b>	Thermal decomposition can lead to release of irritating gases and vapors

**11. Toxicological information****Information on likely routes of exposure**

<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.

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

<b>Symptoms</b>	None known.
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**Acute toxicity**

**Numerical measures of toxicity**  
No information available

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol	= 7060 mg/kg ( Rat )		= 124.7 mg/L ( Rat ) 4 h
Propylene glycol monomethyl ether	= 5000 mg/kg ( Rat )	= 13 g/kg ( Rabbit )	> 7559 ppm ( Rat ) 6 h

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	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 as alcoholic beverage.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethanol 64-17-5	A3	Group 1	Known	X

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

A3 - Animal Carcinogen

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

Group 2B - Possibly Carcinogenic to Humans

**NTP (National Toxicology Program)**

Known - Known Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**12. Ecological information**

**Ecotoxicity** Not classified.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethanol 64-17-5	-	LC50: 12.0 - 16.0mg/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales promelas)	-	LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna) EC50: =10800mg/L (24h, Daphnia magna)
Propylene glycol monomethyl ether 107-98-2	-	LC50: 4600 - 10000mg/L (96h, Leuciscus idus) LC50: =20.8g/L (96h, Pimephales promelas)	-	EC50: =23300mg/L (48h, Daphnia magna)

<b>Persistence and degradability</b>	No information available.
<b>Bioaccumulation</b>	There is no data for this product.
<b>Component Information</b>	

Chemical name	Partition coefficient
Ethanol 64-17-5	-0.32
Propylene glycol monomethyl ether 107-98-2	-0.437

**Mobility in soil** No information available.

**Other adverse effects** No information available.

### 13. Disposal considerations

#### Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**California Hazardous Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Ethanol 64-17-5	Toxic Ignitable
Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, [[3-(dimethylamino)propyl]amino]sulfonyl derivatives 68411-04-1	Toxic

### 14. Transport information

#### DOT

**UN/ID no** UN1210  
**Proper shipping name** PRINTING INK  
**Hazard class** 3  
**Packing group** II  
**Special Provisions** 149, IB2, T4, TP1, TP8, 367  
**Description** UN1210, PRINTING INK, 3, II, Limited Quantity  
**Emergency Response Guide Number** 129

#### TDG

**UN/ID no** UN1210  
**Proper shipping name** PRINTING INK  
**Hazard class** 3  
**Packing group** II  
**Description** UN1210, PRINTING INK, 3, II, Limited Quantity

#### MEX

**UN/ID no** UN1210  
**Proper shipping name** PRINTING INK  
**Hazard class** 3  
**Special Provisions** 163  
**Packing group** II  
**Description** UN1210, PRINTING INK, 3, II, Limited Quantity

**IATA**

UN number	UN1210
UN proper shipping name	Printing ink
Transport hazard class(es)	3
Packing group	II
ERG Code	3L
Description	UN1210, Printing ink, 3, II

**IMDG**

UN number	UN1210
UN proper shipping name	PRINTING INK
Transport hazard class(es)	3
Packing group	II
EmS-No	F-E, S-D
Special Provisions	163, 367
Description	UN1210, PRINTING INK, 3, II, (13°C C.C.), Limited Quantity

**15. Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture****International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

**International Inventories**

<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDSL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AICS</b>	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  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, [[3-(dimethylamino)propyl]amino]sulfonyl derivatives - 68411-04-1	1.0

**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.

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32] -, [[3-(dimethylamino)propyl]amino]sulfonyl derivatives 68411-04-1	-	X	-	-

**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.

**US 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	California Proposition 65
Ethanol - 64-17-5	Carcinogen Developmental

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	X	X	X
Propylene glycol monomethyl ether 107-98-2	X	X	X
Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, [[3-(dimethylamino)propyl]amino]sulfonyl derivatives 68411-04-1	X	-	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. Other information**

**NFPA** Health hazards 0 Flammability 3 Instability 0 Physical and chemical properties -

**HMIS**                      **Health hazards** 0              **Flammability** 3              **Physical hazards** 0              **Personal protection** X

**Key or legend to abbreviations and acronyms used in the safety data sheet**

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Key literature references and sources for data used to compile the SDS**

U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AELG(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 RTECS (Registry of Toxic Effects of Chemical Substances)  
 World Health Organization

<b>Issuing Date</b>	11-Apr-2018
<b>Revision Date</b>	13-Jun-2019
<b>Revision Note</b>	SDS sections updated: 3. 8. 15.

**Disclaimer**

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

**End of Safety Data Sheet**