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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 Form/Description:	Marking Pens
Product Name:	PM-09, PM-15, PM-45, PM-13, PM-47, PM-49
Synonyms	Mighty-X-Marker Paint Marker

Other Means of Identification

Part Number:

Colors	Blue	Green	Light Blue	Lime	Orange	Purple	Pink	Red	White	Yellow
PM-09	09002	09005	09006	09007	09008	09009	09010	09011	09013	09014
PM-15	00215	00515	00615	00715	00815	00915	01015	01115	01315	01415
PM-45	04502	04505	04506	04507	04508	04509	04510	04511	04513	04514
PM-13	00213	00513	00613	00713	00813	00913	01013	01113	01313	01413
PM-47	00247	00547	00647	00747	00847	00947	01047	01147	01347	01447
PM-49	00249	00549	00649	00749	00849	00949	01049	01149	01349	01449

Formula Code:

Blue	Green	Light Blue	Lime	Orange	Purple	Pink	Red	White	Yellow
XV-11979	XV-11914	XV-11224	XV-11516	XV-12517	XV-11845	XV-11940	XV-11951	XV-11812	XV-11820

Recommended use of the chemical and restrictions on use

Recommended Use	Marking Pens
Uses Advised Against:	No information available

Supplier's Details

Supplier Address	Arro-Mark Company LLC. 158 West Forest Ave Englewood, New Jersey, 07631 USA Phone: (201) 567-4112 Email: Sales@arromark.com
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Emergency Telephone Number

Chemtrec	US 800-424-9300	International 703-527-3887
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2. HAZARD IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communications Standard 2012 (29 CFR 1910.1200):

Flammable Liquid Category	2
Skin Corrosion/Irritation Category	1B
Acute Toxicity Inhalation Category	3
Specific target Organ Toxicity (single Exposure) respiratory tract irritation Category	3
Specific target Organ Toxicity (repeated Exposure) Inhalation Category	2

GHS Label Elements, including precautionary statements



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(This product is not corrosive to metal.)

Signal Word: Danger

Appearance:	Opaque, varies
Physical state:	Thin viscosity liquid
Odor:	Aromatic Odor

Hazard Statements:

Code	Statement
H315	Causes skin irritation. Causes serious eye irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H304	May be fatal if swallowed and enters airways.
H372	May cause damage to organs through prolonged or repeated exposure by inhalation.
H351	Suspected of causing cancer if inhaled.
H226	Flammable liquid and vapor.

Precautionary Statements:

Prevention	Response	Storage	Disposal
Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Keep container tightly closed Use only in a well ventilated area. Do not breathe dust/vapors/fumes Wash face and hands and any exposed skin thoroughly after handling. Wear protective gloves/clothing/eye protection/face protection. Keep away from heat/sparks/flame hot surfaces – no smoking. Use explosion proof electrical/ventilating/lighting equipment Ground/bond container and receiving equipment. Use non-sparking tools. Take precautionary measures against static discharge.	If exposed or concerned: get medical attention/advice. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If swallowed: Immediately call a poison center/doctor. Do not induce vomiting. In case of fire: Use CO ₂ , dry chemical, foam or water spray to extinguish.	Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.	Dispose of contents/container in approved waste disposal plant.

General Advice

If exposed or concerned:	Get medical attention/advice
ACUTE HAZARD:	At high concentration, dizziness and unconsciousness may occur.
CAUTION:	Contains xylene. Harmful or fatal if swallowed. Avoid inhalation. Direct contact may cause skin or eye irritation.

KEEP OUT OF REACH OF CHILDREN.



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Fire	Use CO2, dry chemical, foam, or water spray
Spills and Leaks	Contain and collect spillage
Hazard not Otherwise Classified (HNOC)	Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous substance(s) or Complex Substance(s) required for disclosure

<u>Chemical Name</u>	<u>CAS -No</u>	<u>Weight %</u>
n-propenol	71-23-8	15-25%
Titanium Dioxide	13463-67-7	20-40%
Silicon Dioxide	7631-86-9	1-5%
Aluminum Hydroxide	21645-51-2	.1-5%
Zirconium Dioxide	1314-23-4	.1-5%
Synthetic Amorphous Silica, precipitated	112926-00-8	1-5%
Stoddard solvent; low boiling point naphtha – unspecified	8052-41-3	1-5%
2-butoxyethanol	111-76-2	5-15%

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

4. FIRST AID MEASURES

Description of necessary first-aid measures

General Advice	In case of doubt, or when symptoms persist, seek medical attention.
Eye Contact	Immediately flush eyes with plenty of water for at least fifteen (15) minutes. Get medical attention immediately.
Skin Contact	Flush skin with plenty of water. Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleanser.
Inhalation:	Remove to fresh air, keep patient warm and at rest. If breathing is irregular seek medical advice. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.
Ingestion:	Seek medical attention immediately. Do not induce vomiting. Never give anything by mouth to an unconscious person.
Protection of First Aiders:	Use personal protection equipment.

Most important symptoms/effects, acute and delayed

Most important symptoms/effects	No information available
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Indication of immediate medical attention and special treatment needed, if necessary

Note to physician	Treat symptomatically
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, carbon dioxide, and regular foam. For large fires, use foam or flood with fine water spray

Unsuitable Extinguishing media

No information available

Specific Hazards arising from the chemical



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Flash Point:	70°F
Flammability Limits (% by volume):	Lower – 1.1%; Upper – 6.4%
Unusual Fire Explosion Hazards:	none

Protective Equipment and Precautions for Firefighters

Wear appropriate self-contained breathing apparatus MSHA/NIOSH (approved or equivalent) and full protective gear. Cool closed containers exposed to fire with water spray. Avoid inhalation of material or combustion by-products; stay upwind.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions:	Avoid breathing vapors. Evacuate personnel to safe areas. Ensure adequate ventilation.
Environmental Precautions:	Avoid release into the environment. Do not allow entrance to drains or water-courses.

Methods and materials for containment and cleaning up

Methods for Containment:	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up	Contain the spillage with non-combustible absorbent materials such as sand, earth, vermiculite, and diatomaceous earth. This will soak up the product. Place in a suitable container for disposal in accordance with the waste regulations.

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

Handling	Avoid skin and eye contact. Avoid the inhalation of vapor and mist.
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Conditions for safe storage, including any incompatibilities

Storage	Keep away from open flame, hot surfaces and sources of ignition. Keep containers tightly closed. Observe label precautions. Store between 5-25° C in a dry, well ventilated place. Prevent unauthorized access.
Incompatible products	Unknown

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Appropriate engineering controls**

Engineering Measures	Showers, eyewash stations, ventilation systems
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Individual protection measures, such as personal protective equipment

Eye/Face protection	None under normal use conditions
Skin and body Protection	None under normal use conditions
Respiratory Protection	None under normal use conditions. If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn
Hygiene Measures	Use in a well-ventilated area. When using do not eat, drink, or smoke. Provide regular cleaning of equipment, work areas and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Property	Value	Remarks/Method
Physical State:	Liquid	None Known
Appearance and Odor:	Opaque color, liquid with alcohol odor	None Known
Odor Threshold:	No Data	None Known



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Vapor Density (AIR = 1):	Greater than one (1)	None Known
Vapor Pressure (mm-Hg @ 70°F):	No Data	None Known
Flash Point:	No Data	Tag closed cup
Specific Gravity (H2O=1) @70°F:	>1	None Known
Flammability:	No Data	None Known
Auto-ignition Temperature:	No Data	None Known
Decomposition Temperature:	No Data	None Known
Melting Point:	No Data	None Known
Freezing Point:	No Data	None Known
Boiling Point:	282 to 286°F	None Known
Relative Evaporation Rate (Butyl Acetate = 1):	Less than one (1)	None Known
Solubility in Water:	Negligible	None Known
Log Pow:	No Data	None Known
PH:	No Data	None Known
Viscosity (Kinematic):	No Data	None Known
Viscosity (Dynamic):	No Data	None Known
Explosive limits	No Data	None Known
Explosive Properties	No Data	None Known
Oxidizing Properties	No Data	None Known

Volatile Organic Compounds

Color	Formula	Percentage (% by weight)	Parts Per Gallon	g/L
Blue	XV-11979	72%,	5.77 PPG,	691.9 g/L
Green	XV-11914	70.57%	5.79 PPG,	693.4 g/L
Light Blue	XV-11224	68.05%	7.11 PPG,	852.1 g/L
Lime	XV-11516	71.82%	5.70 PPG,	683.3 g/L
Orange	XV-12517	70.63%	5.975 PPG,	715.9 g/L
Purple	XV-11845	77.48%	6.48 PPG,	776.1 g/L
Pink	XV-11940	72.91%	5.79 PPG,	125.5 g/L
Red	XV-11951	66.01%	5.23 PPG,	626.9 g/L
White	XV-11812	67.66%	7.42 PPG,	888.6 g/L
Yellow	XV-11820	67.50%	5.63 PPG,	674.5 g/L

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable under normal storage and handling conditions
Possibility of Hazardous reactions	None under normal use
Hazardous Polymerization	Will not occur
Conditions to Avoid	Heat, open flame, sparks, and sources of ignition
Incompatible Materials	Strong oxidizing and reducing agents, strong alkalis and strong acids
Hazardous Decomposition products	Carbon dioxide, carbon monoxide, smoke, soot and various oxidation by-products.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation	May cause irritation of respiratory tract. May cause drowsiness and dizziness.
Eye Contact	Irritating to eyes. Causes serious eye irritation.
Skin Contact	Irritating to skin. Causes skin irritation.
Ingestion	Ingestion may cause nausea and vomiting.

Toxicological characteristics

Symptoms	No information available.
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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.



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Carcinogenicity

This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

12. ECOLOGICAL INFORMATION

Ecotoxicity

There is no data available on the product itself

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated Packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

Domestic Highway (Containers <1 Quart are ORM-D) Proper Shipping Name:







Consumer Commodity

Hazard Class/Subsidiary:

ORM-D

Label Required:

ORM-D

	(Ground) DOT	(Ground) TDG	(Ground) MEX	(Road/Train) ADR/RID	(Sea) IMDG/IMO	(Air) IATA
UN number	UN 1263	UN 1263	UN 1263	UN 1263	UN 1263	UN 1263
UN proper shipping name	Paint related material	Paint related material	Paint related material	Paint related material	Paint related material	Paint related material
Transport Hazard Class(es)	 3	 3	 3	 3	 3	 3
Packing Group	III	III	III	III	III	III
Environmental Hazards	No.	No.	No.	No.	No.	No.
Additional Information	Limited quantity: Yes. <u>Packaging instruction</u> <u>Passenger aircraft</u> Quantity limitation: 60 L <u>Cargo aircraft</u> <u>Quantity</u> limitation: 220 L <u>Special provisions</u> B1, B52, IB3, T2, TP1	<u>Explosive Limit and Limited Quantity Index</u> 5 <u>Passenger Carrying Road or Rail Index</u> 60	<u>Special provisions:</u> 223	<u>Hazard identification number</u> 30 <u>Limited quantity</u> 5 L <u>Special provisions</u> 640E Viscous substance exemption This class 3 material can be considered non hazardous in packagings up to 450 L. Exempted according to 2.2.3.1.5 (Viscous substance exemption) Tunnel code (D/E)	<u>Emergency schedules (EmS)</u> F-E, _S-E_ <u>Special provisions</u> 223, 955 Viscous substance exemption This class 3 material can be considered non hazardous in packagings up to 30 L. Exempted according to 2.3.2.5 (Viscous substance exemption)	<u>Passenger and Cargo Aircraft</u> <u>Quantity</u> limitation: 60 L <u>Packaging instructions:</u> 355 <u>Cargo Aircraft</u> <u>Only Quantity</u> limitation: 220 L <u>Packaging instructions:</u> 366 <u>Limited Quantities - Passenger Aircraft</u> <u>Quantity</u> limitation: 10 L <u>Packaging instructions:</u> Y344 <u>Special provisions</u> A3

Special Precautions for User:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. REGULATORY INFORMATION



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TSCA INVENTORY:

The product on this SDS is not listed on the Toxic Substances Control Act Inventory.
All ingredients used to manufacture this product are listed on the TSCA Inventory.

US Regulatory Rules:

Section 313 or Title III of SARA. This product contains a chemical, which is subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations Part 372.

n-propenol	71-23-8
Titanium Dioxide	13463-67-7
Silicon Dioxide	7631-86-9
Aluminum Hydroxide	21645-51-2
Zirconium Dioxide	1314-23-4
Synthetic Amorphous Silica, precipitated	112926-00-8
Stoddard solvent; low boiling point naphtha – unspecified /	8052-41-3

Hazard categories

Acute Health Hazard	YES
Chronic Health Hazard	YES
Fire Hazard	YES
Sudden release of Pressure Hazard	NO
Reactive Hazard	NO

State Regulation

California Proposition 65	n-propenol, 2-butoxyethanol, carbon black extracts Listed
Massachusetts Right to know List	n-propenol, 2-butoxyethanol, carbon black extracts Listed
New Jersey Right to Know	n-propenol, 2-butoxyethanol, carbon black extracts Listed
Pennsylvania Right to Know	n-propenol, 2-butoxyethanol, carbon black extracts Listed

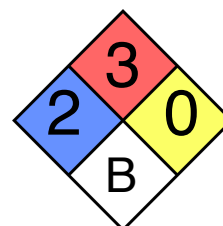
16. OTHER INFORMATION**HMIS CLASSIFICATION**

Health Hazard:	2
Flammability:	3
Physical Hazard:	0
PPE	Splash Goggles, Gloves, Apron, Vapor Respirator

Health Hazard:	2
Flamability:	3
Physical Hazard:	0
Personal Protection:	B

NEPA CLASSIFICATION

Health Hazard	2
Flammability	3
Reactivity	0
Personal Protection	B

**End of Safety Data Sheet**