



Date of Issue: 10/12/2018

Latest Revision: 2/8/2019

Revision #: 3

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:	Permanent Ball Point Marking Pen for Textiles
Product Name:	FM-040, FM-043, FM-044, FM-083 – All Colors
Synonyms	Everon “Dye Resist”

Other Means of Identification

Part Number:

Colors	White	Yellow	Blue	Green	Red	Orange
FM-040	04013	04014	04002	04005	04011	04008
FM-043	04313	04314	04302	04305	04311	04308
FM-044	04413	04414	04402	04405	04411	04408
FM-083	08313	08314	08302	08305	08311	08308

Formula Code:

White	Yellow	Blue	Green	Red	Orange
XV-12654	XV-12673	XV-12682	XV-12681	XV-12683	XV-12977

Recommended use of the chemical and restrictions on use

Recommended Use	Marking
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):

Skin Corrosion/Irritation Category	1
Serious eye damage/Eye Irritation Category	2
Carcinogenicity	2
Specific target Organ Toxicity (single Exposure) respiratory tract irritation Category	3
Flammable Liquids	2

GHS Label Elements, including precautionary statements

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Signal Word: Danger

Appearance:	Opaque, varies
Physical state:	Thin viscosity liquid
Odor:	Ketone Sweet Odor

Hazard Statements:

Code	Statement
H315	Causes skin irritation. Causes serious eye irritation.
H335	May cause respiratory irritation.
H332	Harmful if inhaled.
H312	Harmful in contact with skin.
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
<p>Do not handle until all safety precautions have been read and understood.</p> <p>Obtain special instructions before use.</p> <p>Keep container tightly closed Use only in a well ventilated area.</p> <p>Do not breathe dust/vapors/fumes</p> <p>Wash face and hands and any exposed skin thoroughly after handling.</p> <p>Wear protective gloves/clothing/eye protection/face protection.</p> <p>Keep away from heat/sparks/flame hot surfaces – no smoking.</p> <p>Use explosion proof electrical/ventilating/lighting equipment</p> <p>Ground/bond container and receiving equipment.</p> <p>Use non-sparking tools.</p> <p>Take precautionary measures against static discharge.</p>	<p>If exposed or concerned: get medical attention/advice.</p> <p>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.</p> <p>If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.</p> <p>If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.</p> <p>If swallowed: Immediately call a poison center/doctor. Do not induce vomiting. In case of fire: Use CO2, dry chemical, foam or water spray to extinguish.</p>	<p>Store in a well-ventilated place. Keep cool.</p> <p>Store locked up.</p> <p>Keep container tightly closed.</p>	<p>Dispose of contents/container in approved waste disposal plant.</p>

General Advice

If exposed or concerned:	Get medical attention/advice
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KEEP OUT OF REACH OF CHILDREN.

Fire	Use CO2, dry chemical, foam, or water spray
Spills and Leaks	None
Hazard not Otherwise Classified (HNOC)	Not applicable



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3. COMPOSITION / INFORMATION ON INGREDIENTS**Hazardous substance(s) or Complex Substance(s) required for disclosure**

Chemical Name	CAS -No	Weight %
Titanium Dioxide (As part of liquid mixture)	13463-67-7	10-30
Propylene Glycol Monomethyl ether	107-98-2	10-30
Cyclohexanone	108-94-1	10-30
Acetone	67-64-1	10-30

* The exact percentage (concentration) of composition are approximate values.

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

Flash Point:	-0.56°C or 31°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.



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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions:	Evacuate personnel to safe areas. Ensure adequate ventilation. Remove all sources of ignition. Stop leak
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. Keep away from incompatible materials.
Incompatible products	Unknown

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Guidelines:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium Dioxide 13463-67-7	TWA 10 mg/m ³	TWA 15 mg/m ³ total dust Vacated TWA 5 mg/m ³ total dust	IDLH 5000 mg/m ³
Acetone 67-64-1	STEL: 750 ppm TWA: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm	IDLH: 2500 ppm 10% LEL TWA: 250 ppm TWA: 590 mg/m ³
Propylene glycol monomethyl ether 107-98-2	STEL: 50 ppm TWA: 20 ppm	(vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 540 mg/m ³	TWA: 100 ppm TWA: 360 mg/m ³ STEL: 150 ppm STEL: 540 mg/m ³
Cyclohexanone 108-94-1	STEL: 75 ppm TWA: 500 ppm	TWA: 50 ppm TWA: 200 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 100 mg/m ³ (vacated) S*	IDLH: 700 ppm TWA: 25 ppm TWA: 100 mg/m ³

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
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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 appearance. Pungent, Sweet, Mild odor.	None Known
Odor Threshold:	No Data	None Known
Vapor Density (AIR = 1):	Greater than one (1)	None Known
Vapor Pressure (mm-Hg @ 70°F):	No Data	None Known
Flash Point:	-0.56 °C / 31 °F	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:	55 – 157.78 °C / 131 – 316 °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)	g/L
White	XV-12654	39.74 %	465 g/L
Yellow	XV-12673	43.36 %	485 g/L
Blue	XV-12682	42.28%	476 g/L
Green	XV-12681	41.64%	462 g/L
Red	XV-12683	46.9%	466 g/L
Orange	XV-12977	39.74%	465 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.



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Skin Contact	Irritating to skin. Causes skin irritation.
Ingestion	Ingestion may cause nausea and vomiting.

Chemical	LD50 oral	LD50 Dermal	LD50 Inhalation
Titanium dioxide	10000 mg/kg rat	-	-
Cyclohexanone	= 800 mg/kg rat	= 948 mg/kg rabbit	= 10.7 mg/l (rat) 1 h = 8000 ppm (rat) 4 h

Symptoms related to the physical, chemical and 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.
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).

Chemical Name	ACGIH*	IARC**	NTP***	OSHA****
Titanium dioxide		Group 2B - Possibly Carcinogenic to Humans	-	-
Cyclohexanone	A3 - Animal Carcinogen	Group 2B - Possibly Carcinogenic to Humans		

* ACGIH: (American Conference of Governmental Industrial Hygienists)

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

*** NTP: (National Toxicology Program)

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

If X is present in OSHA column:

Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic Toxicity	Avoid repeated exposure.
Target Organ Effects	Liver. Kidney. Respiratory system. Eyes. Skin. Central nervous system (CNS). Blood. Lungs. Lymphatic system.
Aspiration Hazard	No information available

12. ECOLOGICAL INFORMATION







Ecotoxicity	There is no data available on the product itself. The environmental impact of this product has not been fully investigated.
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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	Paint	Paint	Paint	Paint	Paint
Transport Hazard Class(es)	 3	 3	 3	 3	 3	 3



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Packing Group	III	III	III	III	III	III
Environmental Hazards	No.	No.	No.	No.	No.	No.
Additional Information	<u>Limited quantity:</u> Yes. <u>Packaging instruction</u> <u>Passenger aircraft</u> Quantity limitation: 60 L <u>Cargo aircraft</u> Quantity 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 Special provisions 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 Quantity limitation:</u> 60 L <u>Packaging instructions:</u> 355 <u>Cargo Aircraft Only Quantity limitation:</u> 220 L <u>Packaging instructions:</u> 366 <u>Limited Quantities - Passenger Aircraft Quantity limitation:</u> 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.
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15. REGULATORY INFORMATION

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.
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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.

Titanium Dioxide	13463-67-7
Cyclohexanone	108-94-1
Acetone	67-64-1

Hazard categories

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

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



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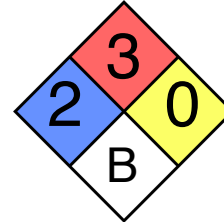
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Physical Hazard: 0
Personal Protection: B

NFPA CLASSIFICATION

Health Hazard	2
Flammability	3
Reactivity	0
Personal Protection	B



End of Safety Data Sheet