



SAFETY DATA SHEET

Issuing Date 07-Sept-2015

Revision Date 19-April-2016

Revision Number 01

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

GHS product identifier

Product Name U-Phase™ Wire Marker

Other means of identification

Product Code(s) **Colors:** #10701PPM Black, #10702PPM Blue, #10703PPM Green, #10704PPM Red, #10705PPM White, #10706PPM Yellow, #10707PPM Orange, #10709PPM Pink, #10712PPM Violet, #10715PPM Brown, #10717PPM Gray

Packs: #10718PSA 4 Pack single phase color assort. (1ea. Blue, Red, White, Green)
#10718P3A 4 Pack 3-phase color assort. (1ea. Brown, Yellow, Orange, Gray)
#10719PMD 70 U-Phase Marker Display (15 ea. Red, Blue, Green; 5 each White, Brown, Orange, Gray, Yellow)
#10720SMD 30 Marker Small Display (10 each Red, Blue and Green)

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Solvent based marker

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

Supplier's details

Supplier Address

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

Emergency telephone number

Chemical Emergency Phone Number

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

2. HAZARDS IDENTIFICATION

Classification

This product is an article as defined by the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200). No exposure to hazardous chemicals is expected to occur during intended product use. Misuse of the product may result in exposure to hazardous chemicals. The classification below applies to the liquid ink in this marker.

This product is not a toxic or hazardous substance as defined by 16 CFR 1500.3 of the Federal Hazardous Substances Act (FHSA) and as such does not require acute or chronic hazard labeling. Reviews were conducted using guidelines set forth by the CPSC (Consumer Product Safety Commission). Inks are certified as compliant under ASTM D-4236

Emergency Overview

GHS Label elements, including precautionary statements

Keep away from children.

The product contains no substances which at their given concentration are considered to be hazardous to health

Appearance Varies**Physical State** Liquid.**Odor** Alcohol

Precautionary Statements

Prevention

- None

General Advice

- None

Storage

- None

Disposal

- None

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS-No	Weight %	Trade secret
Propyl alcohol	71-23-8	30-70	*
Titanium dioxide	13463-67-7	10-20	*
Pigment Yellow 83	5567-15-7	0-10	*
C.I. Pigment red 3	2425-85-6	0-7	*
Carbon black	1333-86-4	0-5	*
C.I. Pigment Blue 15	147-14-8	0-5	*
Ci 51319	6358-30-1	0-3	*
Silicon dioxide	7631-86-9	1-3	*
Silica, amorphous, fumed, crystal-free	112945-52-5	0-2	*
Propylene glycol monomethyl ether acetate	108-65-6	0.1-1.0	*
n-Butyl acetate	123-86-4	0.1-1.0	*
Dipropylene glycol monomethyl ether	34590-94-8	0.1-1.0	*
Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, chlorinated	68987-63-3	0.1-1.0	*
Copper	7440-50-8	0.1-1.0	*
n-Butyl alcohol	71-36-3	<0.1	*
Sodium bisulfite	7631-90-5	<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. Call a physician or Poison Control Center immediately.

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

IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell

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

Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant. 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

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Measures

None under normal use conditions.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

No protective equipment is needed under normal use conditions.

Skin and Body Protection

No protective equipment is needed under normal use conditions.

Respiratory Protection

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

Physical State

Liquid

Appearance

Varies.

Odor

Alcohol

Odor Threshold

No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
pH	No data available	None known
Melting Point/Range	No data available	None known
Boiling Point/Boiling Range	96 °C / 205 °F	(Liquid Ink only)
Flash Point	23 °C / 73 °F	(Liquid Ink only)
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
upper flammability limit	13.5%	
lower flammability limit	2.1%	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Specific Gravity	No data available	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known
Flammable Properties	Flammable.	
Explosive Properties	No data available	
Oxidizing Properties	No data available	
<u>Other information</u>		
VOC Content (%)	No data available	

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	Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation	None under normal use conditions.
Eye Contact	None under normal use conditions.
Skin Contact	None under normal use conditions.
Ingestion	None under normal use conditions.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propyl alcohol	= 1870 mg/kg (Rat)	= 4049 mg/kg (Rabbit)	> 13548 ppm (Rat) 4 h
Titanium dioxide	> 10000 mg/kg (Rat)	-	> 6820 mg/m ³
Carbon black	-	> 3 g/kg (Rabbit)	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms None under normal use.

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

Sensitization No information available.
Mutagenic Effects No information available.
Carcinogenicity This product contains titanium dioxide which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is a liquid. This product contains carbon black which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is not in a respirable form.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide		Group 2B		X
C.I. Pigment red 3		Group 3		
Carbon black	A3	Group 2B		X
Silicon dioxide		Group 3		
Silica, amorphous, fumed, crystal-free		Group 3		
Sodium bisulfite		Group 3		

ACGIH: (American Conference of Governmental Industrial Hygienists)
 A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)
 Group 2B - Possibly Carcinogenic to Humans

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

Numerical measures of toxicity - Product

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 1747 mg/kg; Acute toxicity estimate
LD50 Dermal 3787 mg/kg; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

Not Applicable

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Propyl alcohol 71-23-8		LC50 96 h: = 4480 mg/L flow-through (Pimephales promelas)	EC50 = 17700 mg/L 5 min EC50 = 45000 mg/L 5 h EC50 = 8686 mg/L 15 min EC50 = 980 mg/L 12 h	EC50 48 h: = 3642 mg/L (Daphnia magna) EC50 48 h: 3339 - 3977 mg/L Static (Daphnia magna)

Persistence and Degradability No information available.
Bioaccumulation No information available.

Chemical Name	Log Pow
Propyl alcohol	0.34
C.I. Pigment Blue 15	6.6
Propylene glycol monomethyl ether acetate	0.43
n-Butyl acetate	1.81
Dipropylene glycol monomethyl ether	-0.064
n-Butyl alcohol	0.785

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

UN-Number	UN1210
Proper shipping name	Printing ink
Hazard Class	3
Packing Group	III
Description	UN1210, Printing ink, 3, III, Limited Quantity
Emergency Response Guide Number	129

TDG

UN-Number	UN1210
Proper Shipping Name	Printing ink
Hazard Class	3
Packing Group	III
Description	UN1210, Printing ink, 3, III, Limited Quantity

MEX

UN-Number	UN1210
Proper Shipping Name	Printing ink
Hazard Class	3
Packing Group	III
Description	UN1210, Printing ink, 3, III, Limited Quantity

ICAO

UN-Number	UN1210
Proper shipping name	Printing ink
Hazard Class	3
Packing Group	III
Description	UN1210, Printing ink, 3, III, Limited Quantity

IATA

UN-Number	UN1210
Proper Shipping Name	Printing ink
Hazard Class	3
Packing Group	III
ERG Code	3L
Description	UN1210, Printing ink, 3, III, Limited Quantity

IMDG/IMO

UN-Number	UN1210
Proper Shipping Name	Printing ink
Hazard Class	3
Packing Group	III
EmS No.	F-E, S-D
Description	UN1210, Printing ink, 3, III, (23°C c.c.), Limited Quantity

RID

UN-Number	UN1210
Proper Shipping Name	Printing ink
Hazard Class	3
Packing Group	III
Classification Code	F1
Description	UN1210, Printing ink, 3, III, Limited Quantity

ADR

UN-Number	UN1210
Proper Shipping Name	Printing ink
Hazard Class	3

Packing Group III
Classification Code F1
Tunnel Restriction Code (D/E)
Description UN1210, Printing ink, 3, III, (D/E), Limited Quantity

ADN

Proper Shipping Name Printing ink
Hazard Class 3
Packing Group III
Classification Code F1
Special Provisions 163, 640E
Description UN1210, Printing ink, 3, III, Limited Quantity
Limited Quantity 5 L
Ventilation VE01

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - 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

Acute Health Hazard No
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

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).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
C.I. Pigment Blue 15		X		
n-Butyl acetate	5000 lb			X
Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, chlorinated		X		
Copper		X	X	
Sodium bisulfite	5000 lb			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.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ

n-Butyl acetate	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Copper	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
n-Butyl alcohol	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Sodium bisulfite	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations
California Proposition 65

The classification listed below only applies to respirable Titanium dioxide and respirable carbon black. This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Titanium dioxide	13463-67-7	Carcinogen
Carbon black	1333-86-4	Carcinogen

U.S. State Right-to-Know Regulations

This product does not contain any substances above threshold limits that are regulated by state right-to-know.

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 0	Flammability 2	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health Hazard 0	Flammability 2	Physical Hazard 0	Personal Protection X

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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