SAFETY DATA SHEET

US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Issuing Date 12-Dec-2022 **Revision Date** 12-Dec-2022 **Revision Number** 1

1. Identification

Product identifier

Product Name 100P Industrial Paint Marker / 100P Fine Line Industrial Paint Marker / 130P Industrial Paint Marker – Silver and Gold

Other means of identification

Product Code(s) 10210, 10214, 10210FL, 10214FL, 10310, 10314

UN/ID no UN1210

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Solvent based marker

Restrictions on use Keep away from children

Details of the supplier of the safety data sheet

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

E-mail compliance@umarkers.com

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

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 3

Label elements

Warning

Hazard statements
Flammable liquid and vapor.
Harmful if swallowed.
Harmful if inhaled.
May cause drowsiness or dizziness.

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust, fume, gas, mist, vapors and spray. Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take action to prevent static discharges. Wear protective gloves, eye protection and face protection. Keep cool.
Precautionary Statements - Response

Skin
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water and then shower.
Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.
Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.
Fire
In case of fire: Use CO_2, dry chemical, or foam to extinguish.
Precautionary Statements - Storage
Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Precautionary Statements - Disposal
Dispose of contents and container to an approved waste disposal plant.

Other information
Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

Unknown acute toxicity
50 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

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)
Propylene glycol monomethyl ether	107-98-2	50-100	-	-
Copper	7440-50-8	10-25	-	-
Aluminum powder (stabilized)	7429-90-5	10-25	-	-
Zinc	7440-66-6	2.5-10	-	-

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid breathing vapors or mists.

Most important symptoms and effects, both acute and delayed

Symptoms	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.
Unsuitable extinguishing media	No information available.
Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Explosion data

Sensitivity to mechanical impact	None.
Sensitivity to static discharge	Yes.

Special protective equipment and precautions 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	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid breathing vapors or mists.
Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Propylene glycol monomethyl ether 107-98-2	STEL: 100 ppm TWA: 50 ppm	(vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m³ (vacated) STEL: 150 ppm (vacated) STEL: 540 mg/m³	TWA: 100 ppm TWA: 360 mg/m³ STEL: 150 ppm STEL: 540 mg/m³
Copper 7440-50-8	TWA: 0.2 mg/m³ fume	TWA: 0.1 mg/m³ fume TWA: 1 mg/m³ dust and mist (vacated) TWA: 0.1 mg/m³ Cu dust, fume, mist	IDLH: 100 mg/m³ dust, fume and mist TWA: 1 mg/m³ dust and mist TWA: 0.1 mg/m³ fume
Aluminum powder (stabilized) 7429-90-5	TWA: 1 mg/m³ respirable particulate matter	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 15 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust

Chemical name	Alberta	British Columbia	Ontario	Quebec
Propylene glycol monomethyl ether 107-98-2	TWA: 100 ppm TWA: 369 mg/m³ STEL: 150 ppm STEL: 553 mg/m³	TWA: 50 ppm STEL: 100 ppm	TWA: 50 ppm STEL: 100 ppm	TWA: 100 ppm TWA: 369 mg/m³ STEL: 150 ppm STEL: 553 mg/m³
Copper 7440-50-8	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 1 mg/m³ TWA: 0.2 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³
Aluminum powder (stabilized) 7429-90-5	TWA: 10 mg/m³	TWA: 1.0 mg/m³	TWA: 1 mg/m³	TWA: 10 mg/m³

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
Propylene glycol monomethyl ether	TWA: 50 ppm STEL: 100 ppm	TWA: 50 ppm STEL: 100 ppm	TWA: 50 ppm STEL: 100 ppm	TWA: 50 ppm STEL: 100 ppm
Copper	TWA: 0.2 mg/m³	TWA: 0.2 mg/m³	TWA: 0.2 mg/m³	TWA: 0.2 mg/m³
Aluminum powder (stabilized)	TWA: 1 mg/m³	TWA: 1 mg/m³	TWA: 1 mg/m³	TWA: 1 mg/m³

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
Propylene glycol monomethyl ether	TWA: 100 ppm STEL: 150 ppm	TWA: 50 ppm STEL: 100 ppm	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 360 mg/m³ STEL: 150 ppm STEL: 450 mg/m³
Copper	TWA: 0.2 mg/m³ TWA: 1 mg/m³ STEL: 3 mg/m³ STEL: 0.6 mg/m³	TWA: 0.2 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³ STEL: 0.6 mg/m³ STEL: 3 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³ STEL: 0.2 mg/m³ STEL: 2 mg/m³
Aluminum powder (stabilized)	TWA: 10 mg/m³ STEL: 20 mg/m³	TWA: 1 mg/m³	TWA: 10 mg/m³ STEL: 20 mg/m³	

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance
Physical state Liquid
Color Varies
Odor Alcohol-like
Odor threshold No information available

Property	Values	Remarks • Method
pH		No data available
Melting point / freezing point		No data available
Initial boiling point and boiling range	120 °C / 248 °F	
Flash point	31 °C / 87.8 °F	

Evaporation rate		No data available
Flammability		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	
Solubility(ies)		No data available
Partition coefficient		No data available
Autoignition temperature		Does not ignite
Decomposition temperature		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available

Other information

Explosive properties	No information available.
Oxidizing properties	No information available.
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Liquid Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity None under normal use conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Heat, flames and sparks. Excessive heat.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation May cause drowsiness or dizziness. Specific test data for the substance or mixture is not available. Harmful by inhalation. (based on components).

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:
ATEmix (oral) 1,393.80 mg/kg
ATEmix (inhalation-dust/mist) 3.56 mg/l

Unknown acute toxicity
50 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Propylene glycol monomethyl ether	= 5000 mg/kg (Rat)	= 13 g/kg (Rabbit)	> 7559 ppm (Rat) 6 h
Copper	-	-	> 5.11 mg/L (Rat) 4 h
Aluminum powder (stabilized)	-	-	> 0.888 mg/L (Rat) 4 h
Zinc	= 630 mg/kg (Rat)	-	-

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure May cause drowsiness or dizziness. May cause respiratory irritation.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Propylene glycol monomethyl ether 107-98-2	-	LC50: =20.8g/L (96h, Pimephales promelas)	-	EC50: =23300mg/L (48h, Daphnia magna)
Copper 7440-50-8	EC50: 0.0426 - 0.0535mg/L (72h, Pseudokirchneriella subcapitata) EC50: 0.031 - 0.054mg/L (96h, Pseudokirchneriella subcapitata)	LC50: 0.0068 - 0.0156mg/L (96h, Pimephales promelas) LC50: <0.3mg/L (96h, Pimephales promelas) LC50: =0.2mg/L (96h, Pimephales promelas) LC50: =0.052mg/L (96h,	-	EC50: =0.03mg/L (48h, Daphnia magna)

		Oncorhynchus mykiss) LC50: =1.25mg/L (96h, Lepomis macrochirus) LC50: =0.3mg/L (96h, Cyprinus carpio) LC50: =0.8mg/L (96h, Cyprinus carpio) LC50: =0.112mg/L (96h, Poecilia reticulata)		
Zinc 7440-66-6	EC50: 0.11 - 0.271mg/L (96h, Pseudokirchneriella subcapitata) EC50: 0.09 - 0.125mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 2.16 - 3.05mg/L (96h, Pimephales promelas) LC50: 0.211 - 0.269mg/L (96h, Pimephales promelas) LC50: =2.66mg/L (96h, Pimephales promelas) LC50: =30mg/L (96h, Cyprinus carpio) LC50: =0.45mg/L (96h, Cyprinus carpio) LC50: =7.8mg/L (96h, Cyprinus carpio) LC50: =3.5mg/L (96h, Lepomis macrochirus) LC50: =0.24mg/L (96h, Oncorhynchus mykiss) LC50: =0.59mg/L (96h, Oncorhynchus mykiss) LC50: =0.41mg/L (96h, Oncorhynchus mykiss)	-	EC50: 0.139 - 0.908mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Propylene glycol monomethyl ether 107-98-2	1

Mobility in soil No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Should not be released into the environment, Dispose of in accordance with local regulations, Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

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

14. Transport information

DOT

UN/ID no	UN1210
Proper shipping name	PRINTING INK
Transport hazard class(es)	3
Packing group	III
Reportable Quantity (RQ)	(Copper: RQ (kg)= 2270.00, Zinc: RQ (kg)= 454.00) Copper: RQ (lb)= 5000.00, Zinc: RQ (lb)= 1000.00
Reportable quantity kg (calculated)	Copper: RQ (kg)= 9080.00, Zinc: RQ (kg)= 4540.00
Reportable quantity lbs. (calculated)	Copper: RQ (lb)= 20000.00, Zinc: RQ (lb)= 10000.00
Special Provisions	B1, IB3, T2, TP1, 367
DOT Marine Pollutant	PP
Marine pollutant	Copper
Description	UN1210, PRINTING INK, 3, III, Marine pollutant (Copper)
Emergency Response Guide Number	129

TDG

UN/ID no	UN1210
Proper shipping name	PRINTING INK
Transport hazard class(es)	3
Packing group	III
Special Provisions	59, 142
Marine pollutant	Copper.
Description	UN1210, Printing ink, 3, III

IATA

UN number or ID number	UN1210
UN proper shipping name	Printing ink
Transport hazard class(es)	3
Packing group	III
ERG Code	3L
Special Provisions	A3, A72, A192
Description	UN1210, Printing ink, 3, III

IMDG

UN number or ID number	UN1210
UN proper shipping name	PRINTING INK
Transport hazard class(es)	3
Packing group	III
EmS-No	F-E, S-D
Special Provisions	163, 223, 367, 955
Marine pollutant	NP
Description	UN1210, PRINTING INK, 3, III, (31°C C.C.)

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
Contact supplier for inventory compliance status

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 - 7440-50-8	1.0
Aluminum powder (stabilized) - 7429-90-5	1.0
Zinc - 7440-66-6	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.

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 7440-50-8	-	X	X	-
Zinc 7440-66-6	-	X	X	-

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Copper 7440-50-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Zinc 7440-66-6	1000 lb	-	RQ 454 kg final RQ RQ 1000 lb final RQ

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Propylene glycol monomethyl ether 107-98-2	X	X	X
Aluminum powder (stabilized) 7429-90-5	X	X	X
Copper 7440-50-8	X	X	X
Zinc 7440-66-6	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	**Health hazards** 2	**Flammability** 3	**Instability** 0	**Special hazards** -
HMIS	**Health hazards** 2	**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) (AEGL(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
World Health Organization

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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