

Safety Data Sheet

according to US HazCom 2012 Issue date: 30 November 2022 Revision date: 30 November 2022 Version: 1.0

SECTION 1: Identification		
1.1. Identification		
Product form Trade name Product code	: Liquid filled marker : UV 10 Ultraviolet Mark : 10162	ker
1.2. Recommended use and restriction	ons on use	
Recommended use	: Solvent based marker	
1.3. Supplier		
Supplier: U-Mark Inc. 102 Iowa Ave. Belleville, IL 62220, USA T: 618-235-7500; 866-383-6275 compliance@umarkers.com		
1.4. Emergency telephone number		
Emergency number	: 24-hour Emergency P (International)	hone: Infotrac 1-800-535-5053 (USA & Canada), 1-352-323-3500
SECTION 2: Hazard(s) identificati	on	
2.1. Classification of the substance of	r mixture	
GHS US classification		
Flammable liquids, Category 2 Serious eye damage/eye irritation, Category 5 Specific target organ toxicity – Single exposu		Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.
2.2. GHS Label elements, including p	recautionary statements	
GHS US labelling		
Hazard pictograms (GHS US)		!
Signal word (GHS US)	: Danger	•
Hazard statements (GHS US)	: Highly flammable liqui Causes serious eye ir May cause drowsines:	ritation.
Precautionary statements (GHS US)	: Keep away from heat, Keep container tightly Ground/bond containe Use only non-sparking	hot surfaces, sparks, open flames and other ignition sources. No smoking closed. er and receiving equipment. g tools. easures against static discharge.

- Avoid breathing mist, spray, vapours.
- Wash hands thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Wear eye protection, protective gloves.

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If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER, a doctor if you feel unwell. If eye irritation persists: Get medical advice/attention. In case of fire: Use dry sand, Dry chemical, alcohol resistant foam to extinguish. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, national regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
isopropanol	CAS-No.: 67-63-0		Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures	
First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	 Remove person to fresh air and keep comfortable for breathing. Obtain medical attention if breathing difficulty persists.
First-aid measures after skin contact	: Not expected to present a significant skin hazard. If skin irritation occurs: Wash hands with water and soap. Get medical advice if skin irritation persists.
First-aid measures after eye contact	: In case of contact, immediately rinse eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.
4.2. Most important symptoms and eff	ects (acute and delayed)
Symptoms/effects after inhalation Symptoms/effects after eye contact	: May cause drowsiness or dizziness. : Eye irritation.
4.3. Immediate medical attention and special treatment, if necessary	
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Treat symptomatically.

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SECTION 5: Fire-fighting measures				
5.1. Suitable (and unsuitable) extinguishing	. Suitable (and unsuitable) extinguishing media			
Suitable extinguishing media Unsuitable extinguishing media	Dry sand. Dry chemical. Alcohol resistant foam.None known. Do not use a heavy water stream.			
5.2. Specific hazards arising from the chen	nical			
Fire hazard Explosion hazard	 Highly flammable liquid and vapour. On combustion, forms: carbon oxides (CO and CO2). Vapours may cause fire/explosion if source of ignition is present. Can form explosive peroxides by prolonged contact with air. 			
Hazardous decomposition products in case of fire	: Toxic fumes may be released.			
5.3. Special protective equipment and precautions for fire-fighters				
Firefighting instructions	: Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. Use water spray or fog for cooling exposed containers.			
Protective equipment for firefighters	: Do not enter fire area without proper protective equipment, including respiratory protection.			

SECTION 6: Accidental release measures				
6.1. Personal precautions, protective equipment and emergency procedures				
General measures : Ensure adequate ventilation. Remove all sources of ignition. Evacuate unnecessary personn Special attention should be given to low areas/pits where flammable vapours can accumulate				
6.1.1. For non-emergency personnel				
Protective equipment Emergency procedures	 Wear personal protective equipment. Ventilate spillage area. Avoid breathing vapours. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. 			
6.1.2. For emergency responders				
Protective equipment Emergency procedures	Do not attempt to take action without suitable protective equipment.Avoid breathing vapours.			
6.2. Environmental precautions	6.2. Environmental precautions			

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up				
For containment	: Stop leaks if it can be done without personal risk. Contain or absorb spilled liquid with non- combustible material. Use non-sparking tools.			
Methods for cleaning up	: Ventilate area. Remove all sources of ignition. Take up liquid spill into absorbent material. Wipe up with absorbent material (for example cloth). Do not absorb with saw-dust or any other combustible absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Notify authorities if product enters sewers or public waters. Do not flush into surface water or sewer system.			
Other information	: Dispose of materials or solid residues at an authorized site.			
6.4. Reference to other sections				

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13 : "Disposal considerations".

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SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	 Ensure adequate ventilation. Wear personal protective equipment. Avoid breathing vapours. Avoid contact with eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non- sparking tools. Take precautionary measures against static discharge. Use explosion-proof equipment. Flammable vapours may accumulate in the container. Use good personal hygiene practices. Always wash hands after handling the product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.
7.2. Conditions for safe storage, including any incompatibilities	
Technical measures Storage conditions	 Avoid ignition sources. Ground/bond container and receiving equipment. Protect from physical damage. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use. Store, if possible, in a cool, well ventilated place away from incompatible materials. Keep only in the original container in a cool well ventilated place.
Incompatible materials	: Strong oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

UV 10 Ultraviolet Marker			
No additional information available			
isopropanol (67-63-0)			
USA - ACGIH - Occupational Exposure Limits			
Local name	2-Propanol		
ACGIH OEL TWA [ppm]	200 ppm		
ACGIH OEL STEL [ppm]	400 ppm		
Remark (ACGIH)	TLV® Basis: Eye & URT irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI		
ACGIH chemical category Not Classifiable as a Human Carcinogen			
Regulatory reference ACGIH 2022			
USA - ACGIH - Biological Exposure Indices			
Local name 2-PROPANOL			
BEI 40 mg/l Parameter: Acetone - Medium: urine - Sampling time: end of shift at end of w (background, nonspecific)			
Regulatory reference ACGIH 2022			
USA - OSHA - Occupational Exposure Limits			
Local name Isopropyl alcohol			
OSHA PEL TWA [1] 980 mg/m ³			
OSHA PEL TWA [2] 400 ppm			
Regulatory reference (US-OSHA)	Regulatory reference (US-OSHA) OSHA Annotated Table Z-1		

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isopropanol (67-63-0)				
USA - IDLH - Occupational Exposure Limits				
IDLH [ppm] 2000 ppm (10% LEL)				
USA - NIOSH - Occupational Exposure Limits				
NIOSH REL TWA 980 mg/m ³				
NIOSH REL TWA [ppm]	400 ppm			
NIOSH REL STEL	1225 mg/m ³			
NIOSH REL STEL [ppm]	500 ppm			
8.2. Appropriate engineering controls				
Appropriate engineering controls : Provide adequate ventilation. Eyewash station. Ensure good ventilation of the work station. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.				
nvironmental exposure controls : Avoid release to the environment.				

8.3. Individual protection measures/Personal protective equipment

Hand protection:

It is a good industrial hygiene practice to minimize skin contact. Impermeable protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

If repeated skin contact or contamination of clothing is likely, protective clothing should be worn

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Other information:

Do not eat, drink or smoke during use.

SECTION 9:	Physical	and chemical	properties
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9.1. Information on basic physical and chemical properties

Physical state Appearance	:	Liquid Liquid filled marker
Colour	-	Clear
Odour	-	alcohol-like
Odour threshold	-	No data available
рН	:	No data available
Melting point	:	-89.5 °C (-129.1 °F)
Freezing point	:	No data available
Boiling point	:	82.4 °C (180.3 °F; 1013 hPa)
Flash point	:	< 12.8 °C (< 55 °F)
Relative evaporation rate (butylacetate=1)	:	≈ 1
Flammability (solid, gas)	:	Not applicable.
Vapour pressure	:	43 hPa (20 °C / 68 °F)
Relative vapour density at 20°C	:	No data available
Relative density	:	0.78 g/cm ³

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Solubility	: In water, material is partially soluble.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: ≈ 425 (~ 797.0 °F)
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

None under normal conditions. Peroxides may be formed on prolonged contact with air.

10.4. Conditions to avoid

Remove all sources of ignition. Avoid contact with hot surfaces. Heat.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature. Thermal decomposition can lead to the release of irritating gases and vapours.

SECTION 11: Toxicological information			
11.1. Information on toxicological effects			
Acute toxicity (dermal) :	Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)		
isopropanol (67-63-0)			
LD50 oral rat	1870 mg/kg		
LD50 dermal rabbit	4059 mg/kg		
LC50 Inhalation - Rat [ppm]	> 10000 ppm (Exposure time: 6 h)		
Serious eye damage/irritation:Respiratory or skin sensitisation:Germ cell mutagenicity:	Not classified (Based on available data, the classification criteria are not met) Causes serious eye irritation. Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)		

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isopropanol (67-63-0)			
IARC group	3 - Not classifiable		
Reproductive toxicity	Not classified (Based on available data, the classification criteria are not met)		
STOT-single exposure	: May cause drowsiness or dizziness.		
isopropanol (67-63-0)			
STOT-single exposure	May cause drowsiness or dizziness.		
STOT-repeated exposure	Not classified (Based on available data, the classification criteria are not met)		
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)		
Viscosity, kinematic	: No data available		
Symptoms/effects after inhalation	: May cause drowsiness or dizziness.		
Symptoms/effects after eye contact	: Eye irritation.		
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.		

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general :	This material has not been tested for environmental effects.	
isopropanol (67-63-0)		
LC50 - Fish [1]	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
EC50 - Crustacea [1]	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
LC50 - Fish [2]	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])	
EC50 72h - Algae [1]	> 1000 mg/l (Species: Desmodesmus subspicatus)	
EC50 96h - Algae [1]	> 1000 mg/l (Species: Desmodesmus subspicatus)	
12.2. Persistence and degradability		
isopropanol (67-63-0)		
Persistence and degradability	Biodegradable.	
12.3. Bioaccumulative potential		
isopropanol (67-63-0)		
Partition coefficient n-octanol/water (Log Kow)	≤ 3	
Bioaccumulative potential	Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.	

12.4. Mobility in soil

No additional information available

 12.5. Other adverse effects

 Other information
 : Avoid release to the environment.

SECTION 13: Disposal considerations	
13.1. Disposal methods	
Waste treatment methods Product/Packaging disposal recommendations	 Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose in a safe manner in accordance with local/national regulations.

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Additional information Ecology - waste materials : Flammable vapours may accumulate in the container.

: Avoid release to the environment.

SECTION 14: Transport information

DOT	TDG	IMDG	ΙΑΤΑ
14.1. UN number			I
1210	UN1210	1210	1210
14.2. Proper Shipping Name			
Printing ink	PRINTING INK	PRINTING INK	Printing ink
14.3. Transport hazard class(es	;)		
3	3	3	3
PLANSATE LIQUE			
14.4. Packing group			I
II	II	II	II
14.5. Environmental hazards		1	1
Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
Consult the associated transport regu			

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.		
isopropanol	CAS-No. 67-63-0	40 – 45%

15.2. International regulations

CANADA

isopropanol (67-63-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

isopropanol (67-63-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

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National regulations

isopropanol (67-63-0)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemical Inventory)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Propanol, 1(or 2)-(2-methoxymethylethoxy)-(34590- 94-8)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Minnesota - Hazardous Substance List; U.S Massachusetts - Right To Know List
isopropanol(67-63-0)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Minnesota - Hazardous Substance List; U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List

SECTION 16: Other information

according to US HazCom 2012 Revision date Other information

: 30 November 2022

: None.

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.