

Safety Data Sheet

PRODUCT NAME: MARKING INK



MSDS No: MI02701

Version: 2.0

Revision date: 10/30/2018

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

Product name Marking Ink

Details of the supplier of the safety data sheet:

Manufacturer/Supplier name	Rize Inc.
Address	4C Gill St Woburn, MA 01801 USA
Customer Service	1-978-699-3085
Emergency telephone (English only)	1-978-699-3085

Relevant uses and uses advised against:

Use: Printing ink – professional use. The ink is contained in a cartridge. Under normal conditions of use, the ink is released from the cartridge only inside the printer, therefore exposure is limited

SECTION 2: HAZARD(S) IDENTIFICATION

GHS-US Classification

Chronic aquatic toxicity	Category 3
Aspiration hazard	Category 1

GHS label elements

Signal word	Danger
Hazard statements	H304 – may be fatal if swallowed and enters airways H412 – harmful to aquatic life with long lasting effects



Precautionary statements

Prevention	P273: avoid release to the environment
Response	P301+P310+P331: If swallowed: immediately call a POISON CENTER or doctor. DO NOT induce vomiting
Storage	P405: store locked up Store cartridge in original packaging until ready to use. Do not store opened and/or partially used cartridges.

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Disposal

P501: Dispose of contents and cartridge in accordance with all local, regional, national and international regulations.

Other hazards

Prolonged or repeated contact with ink may dry skin and cause irritation.

Unknown acute toxicity

2% of the mixture consists of ingredients of unknown acute toxicity

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS number	Weight %	GHS classification
Mineral oil	8042-47-5	90-100	Aspiration hazard cat.1
Blue colorant	mixture	1-6	Aspiration hazard cat. 1 Specific target organ toxicity (single exposure) cat.3 Chronic aquatic toxicity cat.2

Additional information

Under normal conditions of use, the ink is released from the cartridge only inside the printer, therefore exposure is limited.

SECTION 4: FIRST AID MEASURES

Inhalation

Move victim to fresh air. Consult a physician. If breathing is irregular or stopped, provide artificial respiration or oxygen by trained personnel. Use barrier to give mouth-to-mouth resuscitation. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband.

Skin contact

Wash skin thoroughly with soap and water. Remove all contaminated clothing and shoes. Wash clothing and clean shoes before reuse. Get medical attention if symptoms occur.

Eye contact

Immediately flush eyes with plenty of water occasionally lifting the upper and lower eyelids. After initial flushing, check for and remove any contact lenses and continue flushing for at least 15min. Get medical attention.

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Ingestion	Get medical attention immediately. DO NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Aspiration hazard if swallowed. Rinse mouth with water. Remove dentures if any. Move victim to fresh air and keep at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband.
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Most important symptoms, both acute and delayed

Inhalation	No known significant effects or critical hazards. Exposure not probable with intended use
Skin contact	May cause skin dryness and irritation. Exposure to ink not probable with intended use
Eye contact	No known significant effects or critical hazards. Exposure to ink not probable with intended use
Ingestion	May be fatal if swallowed and enters airways. Exposure not probable with intended use

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media	Dry chemical, CO ₂ , alcohol-resistant foam or water spray (fog)
Unsuitable extinguishing media	Do not use water jet
Specific hazards during fire fighting	In a fire, a pressure increase will occur and the cartridge may burst

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Hazardous combustion products

Decomposition products may include the following materials: carbon dioxide, carbon monoxide

Special protective equipment for fire-fighters

As in any fire, fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

In case of spill, avoid contact with skin and eyes. Wear personal protective equipment. Remove and wash contaminated clothing before reuse. Do not breathe vapor or mist. Do not eat, drink or smoke. Ensure adequate ventilation

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Try to prevent material from entering drains or water courses. Recover the product in solid form if possible.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Move cartridges from spill area. Absorb spill with an inert dry material and place in appropriate waste disposal container. Use personal protective equipment. Clean contaminated surface thoroughly.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

To avoid damage to cartridge and accidental contact with ink KEEP OUT OF REACH OF CHILDREN. Wash hands and other exposed areas with soap and water before eating, drinking or smoking and when leaving work.

Conditions for safe storage

Store cartridge in a dry, cool, well-ventilated area away from heat and direct sunlight. Keep in the original unopened package until ready to use.
Recommended storage temperature: 15-30°C

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredient name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Mineral oil	TWA: 5mg/m ³ 8 hours. Form: inhalable fraction	TWA: 5mg/m ³ 8 hours	TWA: 5mg/m ³ 10 hours Form: mist STEL: 10mg/m ³ 15 min Form: mist
Glycol ether DPM CAS # 34590-94-8	TWA: 100ppm 606mg/m ³ STEL: 150ppm 909mg/m ³	Not established	IDLH: 600ppm TWA: 100ppm TWA: 600mg/m ³ STEL: 150ppm STEL: 900mg/m ³

Engineering measures

None required for intended use

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Hand protection	None required when used as intended in Rize printer. In case of spill, wear protective gloves
Eye protection	None required when used as intended in Rize printer. Wear safety glasses in case of spill to avoid exposure to liquid splashes or mists.
Skin protection	None required when used as intended in Rize printer. Wear impervious protective clothing, as appropriate in case of spill to prevent skin contact.
Respiratory protection	None required when used as intended in Rize printer.
Hygiene measures	Wash hands before eating, drinking or smoking and using the lavatory. Wash contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Color	Dark blue

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Odor	Aromatic
Odor threshold	Not available
pH	Not available
Viscosity (dynamic)	17 cPs
Relative density	Not available
Freezing point	Not available
Boiling point/range	> 218°C
Flash point	> 95°C
Water solubility	insoluble
Evaporation rate	Not available
Explosion limits	Not available
Vapor pressure	Not available
Relative vapor density	Not available
Decomposition temperature	Not available
Autoignition temperature	Not available
Explosive properties	Not available
Oxidizing properties	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or ingredients
Chemical stability	Stable under recommended storage conditions
Possibility of hazardous reactions	None under normal conditions of storage and use
Conditions to avoid	Extreme temperatures and direct sunlight
Incompatible materials	No specific data
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: TOXICOLOGICAL INFORMATION**Acute toxicity**

Chemical name	LD50 Oral (Rat)	LD50 Dermal (Rabbit)	LC50 Inhalation
Mineral oil 8042-47-5	>5000 mg/kg	>2000 mg/kg	Dusts and mists >5mg/L (Rat) 4 hours

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Glycol ether DPM 34590-94-8	5400 µL/kg	9500 mg/kg	No data available
Ethylhexylamine 104-75-6	450 mg/kg	600 µL/kg	No data available

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

Skin corrosion/irritation	Not available
Serious eye damage/eye irritation	Not available
Skin sensitization	Not available
Respiratory sensitization	Not available
Germ cell mutagenicity	Not available
Reproductive toxicity	Not available
Specific target organ toxicity (single exposure)	Not available
Specific target organ toxicity (repeated exposure)	Not available
Aspiration hazard	Risk of serious damage to the lungs (by aspiration). May be fatal if swallowed and enters airways.
Carcinogenicity	
IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by OSHA
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

Unknown acute toxicity

2% of the mixture consists of ingredient(s) of unknown acute toxicity

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

2% of the mixture consists of components of unknown hazards to the aquatic environment

Chemical name	Algae	Fish	Daphnia
Mineral oil (petroleum)		LC50 > 10000 mg/L 96h	LC50 > 100 mg/L 48h

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Naphta(petroleum),heavy aromatic	EC50 : 2.5 mg/L 72h skeletonema costatum	LC50 pimephales promelas: 19 mg/L 96h static; 45 mg/L 96h flow-through; 41 mg/L 96h LC50 lepomis macrochirus: 1740 mg/L 96h static LC50 oncorhynchus mykiss: 2.34 mg/L 96h	EC50 : 0.95 mg/L 48h daphnia magna
Glycol ether DPM		LC50 : 10000 mg/L 96h pimephales promelas static	LC50 : 1919 mg/L 48h daphnia magna

Persistence and degradability Not available

Mobility in soil Not available

Other adverse effects Not available

Bioaccumulative potential

Chemical name	Log Pow
Mineral oil (petroleum)	> 6
Naphta(petroleum),heavy aromatic	2.9 – 6.1
Glycol ether DPM	-0.064

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose in a safe manner in accordance with local/national regulations

SECTION 14: TRANSPORT INFORMATION

Domestic regulation

DOT: not regulated

International regulations

IATA: not regulated

IMDG: not regulated

TDG: not regulated

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SECTION 15: REGULATORY INFORMATION

EPA SARA TITLE III CHEMICAL LISTINGS

Section 311/312: Immediate (acute) health hazard

US State Right to Know

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois
Mineral oil		X		
Glycol ether DPM	X	X	X	X
Ethylhexylamine	X	X	X	

California Prop. 65

This product is not known to contain any chemicals currently listed as carcinogens

International regulations

TSCA	All ingredients included or exempt from listing
EINECS/ELINCS	All ingredients listed or exempt
KECL	All ingredients listed, exempt or notified
AICS	All ingredients listed or exempt
IECSC	All ingredients listed or exempt
PICCS	All ingredients listed or exempt
DSL	All ingredients listed or exempt
ENCS/ISHL	All ingredients listed or exempted from inventory listing
NZIoC	All ingredients listed or exempt

SECTION 16: OTHER INFORMATION

HMIS

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant; 1=slight; 2=moderate; 3=high; 4=extreme

First issue date : 07/26/2016

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Disclaimer

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End of safety data sheet