

Safety Data Sheet

In accordance with OSHA HCS 1910.1200

1. Identification

Product identifier: Eco Solvent Ultra Cyan
VJ-MSINK3A-CY220 / VJ-MSINK3A-CY440 / VJ-MSINK3A-CY1000

Recommended use of the chemical and restrictions on use: Inkjet Printing

Supplier's details:

Name: MUTOH AUSTRALIA PTY. LTD.
Address: Unit 19/76 Reserve Road, Artarmon, NSW 2064, Australia
Contact section: admin@mutoh-au.com or +61 2 9437 1366
Telephone number: +61 2 94371366
Emergency phone number: Emergency phone number (business hours): +61 2 9437 1366

2. Hazards Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

Physical Hazards	FLAMMABLE LIQUID	Category 4
Health Hazards	SKIN CORROSION/IRRITATION	Category 2
	REPRODUCTIVE TOXICITY	Category 1B
Environmental Hazards	Not classified	

Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200;

Symbols:



Signal word: Danger

Hazard Statements: Combustible liquid
Causes skin irritation
May damage fertility or the unborn child

Precautionary Statements

[Prevention]

Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

[Response]

Wear protective gloves/protective clothing/eye protection/face protection.
IF exposed or concerned: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.

[Storage]

Store in a well-ventilated place. Keep cool.

[Disposal]

Dispose of contents/ container in accordance with related laws and local/ regional regulations.

Description of any hazards not otherwise classified;

Ink contact with skin may cause irritation, swelling or redness.

3. Composition/Information on Ingredients

Information on ingredients:

Chemical name	CAS No.	Concentration (wt %)
Diethylene glycol diethyl ether	112-36-7	55-65
Tetraethylene glycol dimethyl ether	143-24-8	10-20
Gamma-butyrolactone	96-48-0	<20
Proprietary organic materials	Trade secret	1-10
Tetraethylene glycol monobutyl ether	1559-34-8	1-5
Colorant	Trade secret	1-5

4. First Aid Measures

Description of first aid measures

Eyes: Immediately flush with room temperature, low pressure and clean water for at least 15 minutes. Seek medical attention if eye irritation continues.

Skin: IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.

Inhalation: IF exposed or concerned: Get medical advice/attention.
Remove subject to ventilated fresh air. If not breathing, give artificial respiration right away. If breathing is difficult, give oxygen.

Ingestion: IF exposed or concerned: Get medical advice/attention.

IF SWALLOWED: Do not induce vomiting.

Most important symptoms and effects, both acute and delayed:

Skin: Ink contact with skin may cause irritation, swelling or redness.

Indication of any immediate medical attention and special treatment needed: Not necessary

5. Fire-Fighting Measures

Extinguishing Media

Suitable extinguishing media: Water spray, dry chemical, carbon dioxide or, alcohol foam

Unsuitable extinguishing media: None

Special hazards arising from the substance or mixture: None

Advice for firefighters: Extinguish to use fire fighting media or plentiful fog water. Put protection wear without fail in case of fire fighting work; do not work in the leeward.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Eye or Skin protection required during clean-up. Use proper ventilation.

For emergency responders: None

Environmental precautions: Do not release to sewer, surface-or ground-water.

Methods and material for containment and cleaning up

Advice on how to contain a spill: Use sponges to wipe-up ink.

Advice how to clean-up a spill: Rinse area with damp cloth. Place waste in closed container for disposal.

Wash hands with soap and water.

Any other information: Do not dispose of waste to the sewer.

Reference to other sections: Please refer SECTION 13 for disposal.

7. Handling And Storage

Precautions for safe handling

Recommendations: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Use proper ventilation and no fire in work place.

Keep out of reach of children and do not drink ink.

Do not dismantle cartridge.

Advice on general occupational hygiene: Avoid contact with skin, eyes or clothing.

In the case of skin contact, wash with soap and water.

Conditions for safe storage, including any incompatibilities:

Store locked up.

Do not store the cartridge in high or freezing temperatures.

Keep cartridge out of direct sunlight.

Do not store the cartridge with oxidizing agents or explosives.

Make sure cartridge is dry before insertion into printer housing.

Specific end use(s): Not specified.

8. Exposure Controls and Personal Protection

Control parameters:

Diethylen glycol diethyl ether(CAS No.112-36-7)

California OELs(California Code of Regulations, Title 8, Section 5155. Airborne Contaminants)

The 8-Hour TWA Exposure Value: 5 ppm

The 8-Hour TWA Exposure Value: 33 mg/m³

Exposure Controls

Appropriate engineering controls: Proper ventilation.

Individual protection measures, such as personal protective equipment

Use of personal protective equipment:

Not required under suitable use as setting the cartridge on the printer under ventilation.

If there is a possibility of exposure to raw ink: Wear protective gloves/ protective clothing/ eye protection/ face protection/ respiratory protection.

Detailed specification on equipment to provide adequate and suitable protection

(a) eye/face protection: Not required under suitable use as setting the cartridge on the printer.

If there is a possibility of exposure to raw ink: Wear eye protection/ face protection.

(b) skin protection: hand protection & others:

Not required under suitable use as setting the cartridge on the printer.

If there is a possibility of exposure to raw ink: Wear protective gloves/ protective clothing

(c) respiratory protection: Not required under suitable use as setting the cartridge on the printer under ventilation.

In case of inadequate ventilation wear respiratory protection.

(d) thermal hazards: Not required under suitable use as setting the cartridge on the printer.

Environmental exposure controls: Not established

9. Physical and Chemical Properties

Information on basic physical and chemical properties:

Appearance:	Cyan Liquid
Odor:	Slightly
Odour threshold:	No data available
pH:	No data available
Melting point/ freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point:	about 71°C (Closed cup)
Evaporation rate:	No data available
Flammability(solid,gas):	Not applicable (liquid)
Upper/lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	Greater than 1 (air=1)
Relative density:	No data available
Solubility(ies):	Soluble
Partition coefficient:n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Explosive properties:	Explosive limits: 1.4-6.9v/v% as Gamma-butyrolactone
Oxidizing properties:	None
Other information	None

10. Stability and Reactivity

Reactivity:	Stable under normal temperature
Chemical stability:	Stable under normal temperature
Possibility of hazardous reactions:	None
Conditions to avoid:	High and freezing temperatures
Incompatible materials:	Oxidizers and explosives
Hazardous decomposition products:	No data available

11. Toxicological Information

Information on toxicological effects:

Acute toxicity:	Oral LD50: > 2500 mg/kg (Rat) Dermal LD50: > 2000 mg/kg (Rat)
Irritation	Eye: Mild irritant (Rabbit, OECD 405) Skin: Mild irritant (Rabbit, OECD 404)
Corrosivity:	Not meet the criteria for classification according to EU Directive 1999/45/EC
Sensitisation	Skin: Non-sensitizer (LLNA, OECD 429)
Carcinogenicity:	Not meet the criteria for classification according to EU Directive 1999/45/EC Not contain any substances listed in IARC Monographs (1,2A and 2B)
Mutagenicity:	Negative (by Ames Test)
Toxicity for reproduction:	T; R61,62 for classification according to EU Directive 1999/45/EC Category 1B for classification according to EU Directive (EC) No 1272/2008

12. Ecological Information

Toxicity:	No data available
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT and vPvB assessment:	Has not carried out PBT and vPvB assessment
Other adverse effects:	No data available

13. Disposal Considerations

Waste treatment methods: Disposal should be in accordance with federal, state, and local requirements.
in accordance with applicable laws and regulations, and product characteristics at time of disposal.

14. Transport Information

UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user:	Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Not applicable

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the product in question:

US Information:

TSCA Section 4(a) Final Test Rules Regulated:	Not regulated
TSCA Section 5 Significant New Use Rule Regulation:	Proposed
Ingredient:	Diethylene glycol diethyl ether CAS Number 112-36-7
Reference:	76FR40850
Ingredient:	Tetraethylene glycol dimethyl ether CAS Number 143-24-8
Reference:	76ER40850

TSCA Section 8(a) Preliminary Assessment Information Rule (PAIR):	Not regulated
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TSCA Section 12(b) One-Time Export Notification Regulated:

Ingredient:	Diethylene glycol diethyl ether	CAS Number 112-36-7
Regulation:	TSCA 5 Proposed SNUR	
Ingredient:	Tetraethylene glycol dimethyl ether	CAS Number 143-24-8
Regulation:	TSCA 5 Proposed SNUR	

Clean Air Act Section 112, Hazardous Air Pollutants:	Diethylene glycol diethyl ether	CAS Number 112-36-7
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EPCRA (SARA Title III) Section 313:	Diethylene glycol diethyl ether	CAS Number 112-36-7
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NFPA/HMIS Hazard Rating :	Health (3), Flammability (2), Instability/Reactivity (0), Other (0)
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HMIS Hazard Rating :	Health (3), Flammability (2), Instability/Reactivity (0), PPE (D)
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California Proposition 65:	Not regulated
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Canada Information:

WHMIS Controlled Product:	Not applicable(Manufactured article)
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Australia Information:

Statement of Hazardous Nature: Classified as Toxic and Irritant according to criteria of NOHSC

New Zealand Information:

Hazardous Substances and New Organisms Act 1996 Not applicable (Manufactured article)

Chemical safety assessment:	This ink has not carried out any Chemical Safety Assessment yet.
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16. Other Information

Update history:

Date of issue: July 22, 2015

This "Material Safety Data Sheet" contains health, safety, and environmental information. It does not replace any precautionary language or use and disposal information which accompanies the product. The information contained herein is believed to be accurate at the time of preparation, but should only be used as a guide. It is subject to revision from time to time. MUTOH does not warrant the completeness or accuracy of the information contained herein.