

Material Safety Data Sheets

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

1. Product and Company Identification

Product Name	: Pigment Ink Cyan
Product Code	: SPC-0180C, 0494C
General Use	: Ink jet printing ink
Product Description	: Pigment ink
MSDS Number	:031-34W01CC
Manufacture	
Company Name	: Mimaki Engineering Co., Ltd
Address	: 2182-3 Otsu, Shigeno, Tomi-shi, Nagano 389-0512 Japan
Telephone No.	: +81-268-64-2413
Importer/Distributor Established in USA	
Company Name	: MIMAKI USA. INC.
Address	: 150 Satellite Boulevard, suite A, Suwanee, Georgia 30024, U.S.A
Telephone No.	: 1-678-730-0100
Emergency Telephone No.	: +81-268-64-2413

2. Hazards Identification

Emergency Overview	: Ink component is a cyan liquid that cause eye, nose or throat irritation, and that effects anesthesia, if inhales. Ink may flash, when under high temperature. Avoid contact with eyes or clothing. In the case of skin contact, wash with soap and water. Keep out of reach of children. This product is not classified.
Potential Health Effects	
Inhalation	: Intentional exposure to ink vapors (mist) will cause respiratory irritation and anesthesia.
Eye Contact	: Ink contact with eye will be irritating.
Skin Contact	: Ink contact with skin may cause minimally irritation.
Ingestion	: May cause upset stomach.
Carcinogens	: None known.
Potential Environmental Effects	: Not available.

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3. Composition / Information On Ingredients

No	Chemical Name	Wt%	CAS No.	Chemical Formula
1	Proprietary dyes and pigments	<5	Trade Secret	Trade Secret
2	Proprietary organic materials	10-15	Trade Secret	Trade Secret
3	Glycerols	10-15	Trade Secret	Trade Secret
4	Ethylene glycol	5-10	107-21-1	C ₂ H ₆ O ₂
5	Water	balance	7732-18-5	H ₂ O

4. First Aid Measures

- Inhalation : Remove subject to ventilated fresh air. Consult physician if necessary.
- Eye Contact : Immediately flush with room temperature, low pressure, and clean water for at least 15 minutes. Seek medical attention if eye irritation continues.
- Skin Contact : Wash surface areas with soap and water. Wash soiled clothing before rewearing. Consult a physician if irritation continues.
- Ingestion : Seek medical advice; and attention if stomach continues to be upset.
- Protection To First-Aiders : Not available.

5. Fire Fighting Measures

- Flammable Properties : Not flammable.
- Extinguishing Media : Dry chemical or carbon dioxide.
- Fire Fighting : No special fire fighting procedures are required other than breathing apparatus. No special explosion hazards are known.
- Instructions

6. Accidental Release Measures

- Personal Precautions : No eye or skin protection required during clean-up. Use proper ventilation.
- Land Spill : If a spill occurs, use sponges to wipe-up ink, and then rinse with damp cloth. Place waste in closed container for disposal.

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Water Spill : Do not dispose of waste to the sewer.

7. Handling And Storage

Handling : Keep out of reach of children and do not drink ink.
Do not dismantle cartridge.
Make sure cartridge is dry before insertion into printer housing.

Storage : Do not store the cartridge in high or freezing temperatures.
Keep cartridge out of direct sunlight.
Do not store cartridges with oxidizing agents or explosives.

8. Exposure Controls / Personal Protection

Exposure Limit Values

Chemical Name	ACGIH: TLV	OSHA: PEL
Ethylene glycol	100m ³	-

Exposure Controls

Occupational Exposure Controls

Engineering Controls : Not special measures required.

Personal Protection

Respiratory Protection : Not required under suitable use as setting the cartridge on the printer; however, self-contained breathing apparatus or organic canister mask is sufficient when used for work.

Hand Protection : Not required under suitable use as setting the cartridge on the printer; however, wearing gloves is sufficient.



Gloves

Eye Protection : Not required under suitable use as setting the cartridge on the printer; however, wearing safety goggles is sufficient.

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**Safety
Glasses**

Skin Protection : Not required under suitable use as setting the cartridge on the printer; however, wearing gloves is sufficient.

**Protective
Apron**

Environmental Exposure Controls : Not established.

9. Physical And Chemical Properties

Appearance	- Physical state	: liquid
	- Colour	: Cyan
Odour		: None
pH		: 8.5-10.0 (20 degree C)
Boiling Point / Boiling Range		: Not available.
Melting Point / Merging Range		: Not available.
Flash Point		: Not detected until 95 degree C (closed cup, ASTM D3278)
Flammability(solid, gas)		: Not available.
Relative density		: 1.00-1.10 (20 degree C)
Solubility		: Not available.
Water solubility		: Complete
Viscosity		: 3.5-4.5 (20 degree C)
VOC		: 100.0 g/l

10. Stability And Reactivity

Conditions To Avoid	: High and freezing temperatures.
Stability	: Stable under temperature.
Materials To Avoid	: Oxidizers and explosives
Hazardous Reactions/	: None
Decomposition Products	

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11. Toxicological Information

Acute Toxicity	Oral LD ₅₀	Dermal LD ₅₀	Inhalant LC ₅₀
	>2000mg/kg(Rat)*	>2000mg/kg(Rat)*	No data available.
Eye Irritation	: Overexposure of eye surface to ink may be mildly irritating.		
Skin Irritation	: Overexposure of skin to ink contact may cause irritation and in some people swelling and redness.		
Sensitization	: Not available		
Mutagenicity	: Negative (Ames assay)*		
Carcinogenicity	: None known.		

12. Ecological Information

Ecotoxicity	: No data available on the adverse effects of this ink on the environment.
Persistence And Degradability	: No data available on the adverse effects of this ink on the environment.
Bioaccumulative Potential	: No data available on the adverse effects of this ink on the environment.
Other Adverse Effects	: No data available.

13. Disposal Considerations

Disposal should be in accordance with federal, state, and local requirements.

Do not dump this product into sewers, on the ground or into any body of water.

14. Transport Information

UN Class/UN Number : Not applicable.

DOT, IMO, or IATA : Not hazardous classification

15. Regulatory Information

TSCA Section 4(a) Final : Not regulated.

Test Rules Regulated



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TSCA Section 8(a) : Not regulated.

Preliminary Assessment
Information Rule(PAIR)

TSCA Section12(b) : Not regulated.

One-Time Export

Notification Regulated

California Proposition 65 : Not regulated.

16. Other Information

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of Mimaki Engineering Corporation.

It relates only to the specific material designated herein, and dose not relate to use in combination with any other material or process.

Mimaki Engineering Corporation assumes no legal responsibility for use or reliance upon this information.

Revision history

Version	Date	Content
1.0	Apr 10, 2008	First issue.