

Product Name: Flushing Liquid 03 / Maintenance Liquid 03 MSDS No.031-38C190B First issue: 2012/09/10 Revised: 2016/01/14 Page 1 of 6

Material Safety Data Sheets

1. Product and Company Identification

Product Name	: Flushing Liquid 03 / Maintenance Liquid 03	
Order No.	: FL003-Z-BB / FL003-Z-22 / FL003-Z-2L / ML003-Z-K1	
Ink Ver	:1	
General Use	: Washing liquid of ink	
Product Description	Aqueous liquid	
MSDS Number	:031-38C190B	
Manufacture		
Company Name	: Mimaki Engineering Co., Ltd	
Address	2182-3 Shigeno-otsu, 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.	:+81-268-64-2281	

2. Hazards Identification

Emergency Overview	: Liquid is a clear 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.
Potential Health Effects	
Inhalation	: Intentional exposure to liquid vapors (mist) will cause respiratory irritation and anesthesia.
Eye Contact	: Liquid contact with eye will be irritating.
Skin Contact	: Liquid contact with skin may cause minimally irritation.
Ingestion	: May cause upset stomach.
Carcinogens	: None known.
Potential Environmental	: Not available.
Effects	



3. Composition / Information On Ingredients

No	Chemical Name	Wt%	CAS No.	Chemical Formula
1	Proprietary organic materials	<5	Trade Secret	Trade Secret
2	Water	balance	7732-18-5	H ₂ O

OSHA Hazardous : Not hazardous Components (29 CFR 1910. 1200)

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	: If swallowed, get medical attention. Do not give anything by mouth
	to an unconscious person.
Protection To First-Aiders	: Not available.

5. Fire Fighting Measures

Flammable Properties	: Not flammable.	
Extinguishing Media	: Dry chemical or carbon dioxide.	
Fire Fighting	: Wear full fire-fighting turn-out gear (full bunker gear) and	
Instructions	respiratory protection (self-contained breathing apparatus).	
	No special explosion hazards are known.	

6. Accidental Release Measures

Personal Precautions : Wear personal protective clothing and equipment, see Section 8.



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

7. Handling And Storage

Handling	Avoid contact with eyes, skin and clothing.
	Avoid breathing vapor or mist. Wash thoroughly after handling.
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 : 1	Not available.
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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.

: Not required under suitable use as setting the cartridge on the

Hand Protection



Eye Protection



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

printer; however, wearing gloves is sufficient.

Skin Protection

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

Environmental Exposure Controls

: Not established.



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9. Physical And Chemical Properties

Appearance - Physical state	: liquid	
- Color	: Clear	
Odor	: None	
pH	: About 8-10	
Boiling Point / Boiling Range	: Not available.	
Melting Point / Melting Range	: Not available.	
Flash Point	$:$ Not detected until 100 $^{\circ}$ C	
	(closed cup, ASTM D3278)	
Relative density	: 1.00-1.10 (20°C)	
Solubility	: Not available.	
Water solubility	: Complete	
Viscosity	: About 0.8-1.2 mPa • s (20°C)	
VOC	: 1.0 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	

11. Toxicologocal Information

Acute Toxicity	Oral LD ₅₀	Dermal LD ₅₀	Inhalant LC ₅₀
	No data available.	No data available.	No data available.
Eye Irritation	: No data available.		
Skin Irritation	: No data available.		
Sensitization	: No data available.		
Mutagenicity	: None known.		
Carcinogenicity	: None known.		



12. Ecological Information	n
	: Handling is noted because it might influence the environment when
	leaking and abandoning it.
	Especially, note that the product doesn't flow directly to ground, the
	river, and the drain ditch.
Ecotoxicity	: No data available on the adverse effects of this ink on the
	environment.
Persistence and	: No data available on the adverse effects of this ink on the
Degradability	environment.
Bioaccumulative	: No data available on the adverse effects of this ink on the
Potential	environment.
Other Adverse Effects	: No data available.

13. Disposal Considerations

 Disposal should be in accordance with federal, state, and local requirements.
<u>Do not dump this product into sewers, on the ground or into any body</u> <u>of water.</u>

14. Transport Information

Check a thing without a leak in a container.

Perform prevention of collapse of cargo surely.

Us Department	of Transportation	(DOT)
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Hazardous Materials	: Not Applicable
Sea Transport (IMDG)	
Class	: Not Applicable
Packing Group (PG)	: Not Applicable
UN Number	: Not Applicable
Proper Shipping Name	: Not Applicable
Marine Pollutant	: Not Applicable



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Air Transport (ICAO/IATA)

Class	: Not Applicable
Packing Group(PG)	: Not Applicable
UN Number	: Not Applicable
Proper Shipping Name	: Not Applicable

15. Regulatory Information

TSCA Section 4(a) Final	: Not regulated.			
Test Rules Regulated				
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	2012/09/10	First issue.
2.0	2013/03/25	Revised
3.0	2016/01/14	Revised : add to Order No. FL003-Z-22 / FL003-Z-2L