

Safety Data Sheets

1. Identification

Product Name : Maintenance Liquid 03
Order No. : ML003-Z-BA / ML003-Z-K1
Ink Ver. : 1
General Use : Maintenance liquid of ink
Product Description : Aqueous liquid
SDS Number : 037-C195935
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 : 4851 Thurmon Tanner Parkway, STE 100 Flowery Branch, GA
30542, U.S.A.
Telephone No. : +1-678-730-0170
Emergency Telephone No. : +1 866 928 0789 (within United States only, Toll free)
+1 215 207 0061

2. Hazards Identification

[HCS Classification]

Physical Hazards

Flammable Liquids : Not classified

Health Hazards

Sensitization – Skin : Category 1

Environmental Hazards

Hazardous to the Aquatic : Not classified

Environment - Acute Hazard

Hazardous to the Aquatic : Not classified

Environment - Long Term Hazard

The above list does not include category being non-classifiable or not-applicable.

[HCS Label Elements]

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Symbol



Signal Word

Warning

Hazard Statements

H317 May cause an allergic skin reaction.

Precautionary Statements

[Prevention]

P261 Avoid breathing gas/mist/vapors.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

[Response]

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash before reuse.

[Storage]

None needed according to classification criteria.

[Disposal]

P501 Dispose of contents and container in accordance with local, regional, national and international regulation(to be specified).

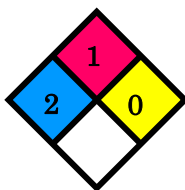
NFPA Rating (scale 0 – 4)

Health = 2

Flammability = 1

Instability = 0

Special =



CANADIAN WHMIS SYMBOLS : D2B



3. Composition / Information on Ingredients

No	Chemical Name	Wt%	CAS No.
1	Water	95-100	7732-18-5
2	Surfactant	0.5-1.5	Trade Secret

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3	Preservative	0.1-1.0	Trade Secret
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4. First Aid Measures

- Inhalation : Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician.
- Eye Contact : Flush eyes with plenty of water for at least 15 minutes.
Remove contact lenses, if present and easy to do.
Continue rinsing. Get immediate medical attention.
- Skin Contact : Wash with plenty of soap and water. If skin irritation or rash occurs:
Get medical advice/attention. Take off contaminated clothing and wash before re-use.
- Ingestion : If swallowed, get medical attention.
- Most Important Symptoms/Effects
- Acute : allergic skin reaction, mild skin irritation
- Delayed : allergic skin reaction.
- Indication of Immediate : Treat symptomatically and supportively.
- Medical Attention and Special Treatment
- Needed, If Needed

5. Fire Fighting Measures

- Extinguishing Media : carbon dioxide, regular dry chemical, water spray, foam.
- Unsuitable Extinguishing Media : Do not scatter spilled material with high-pressure water streams.
- Special Hazards Arising from the Chemical : Negligible fire hazard.
- Hazardous Combustion Products : **Combustion:** oxides of carbon
- Fire Fighting Measures : Move container from fire area if it can be done without risk.
Do not scatter spilled material with high-pressure water streams.
Cool containers with water spray until well after the fire is out.
Stay away from the ends of tanks. Avoid inhalation of material or combustion by-products.
- Special Protective Equipment and : Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

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Precautions for
Firefighters

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	: Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.
Methods and Materials for Containment and Cleaning Up	: Eliminate all ignition sources if safe to do so. Stop leak if possible without personal risk. Reduce vapors with water spray. Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Large spills: Dike for later disposal. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.

7. Handling and Storage

Precautions for Safe Handling	: Avoid breathing dust, mist, fumes or vapors. Avoid contact with eyes, skin and clothing. Do not eat, drink, or smoke when using this product. Wear protective gloves and eye/face protection. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Conditions for Safe Storage, including any Incompatibilities	: Store and handle in accordance with all current regulations and standards. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Keep separated from incompatible substances.

8. Exposure Controls / Personal Protection

Exposure Limit Values	ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.
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Component Biological Limit Values : There are no biological limit values for the component(s) of this product.

Exposure Controls

Occupational Exposure Controls

Appropriate : Provide local exhaust or process enclosure ventilation system.

Engineering Controls Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Respiratory Protection : Consult with a health and safety professional for specific respirators appropriate for your use.



Vapor
Respirator

Glove : Wear appropriate chemical resistant gloves.

Recommendations



Gloves

Eye /Face Protection : Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.



Safety
Glasses

Skin Protection : Wear appropriate chemical resistant clothing.



Protective
Apron

Environmental Exposure Controls : Not available

9. Physical and Chemical Properties

Appearance - Physical State : liquid
- Color : clear
Odor : slight odor
pH : 8-10
Boiling Point / Boiling Range : Not available
Melting Point / Melting Range : Not available

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Decomposition Temperature	: Not available
Flash Point	: Not flammable
Auto ignition temperature	: Not available
Flammability (Solid, Gas)	: Not applicable
Explosive Properties	: Not available
Oxidizing Properties	: Not available
Upper / Lower Flammability or Explosive Limits	: Not available
Vapor Pressure	: Not available
Relative Density	: Approx 1.0 (25 °C)
Water Solubility	: Complete
Partition Coefficient (n-octanol / Water)	: Not available
Viscosity	: <5mPa·s (25 °C)
Vapor Density	: Not available
Evaporation Rate	: Not available
VOC	: 1.0g/L

10. Stability and Reactivity

Reactivity	: No reactivity hazard is expected.
Chemical Stability	: Stable under normal conditions of use.
Possibility of Hazardous Reactions	: Will not polymerize.
Conditions to Avoid	: Avoid contact with incompatible materials.
Incompatible Materials	: oxidizing materials.
Hazardous Decomposition	: Combustion: oxides of carbon.

11. Toxicological Information

Acute Toxicity	
Component Analysis - LD50/LC50	: The component(s) of this material have been reviewed in various sources and no selected endpoints have been identified.
Information on Likely Routes of Exposure	
Inhalation	: irritation, difficulty breathing.
Ingestion	: nausea, vomiting, stomach pain.

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Skin Contact	: allergic reactions, irritation.
Eye Contact	: irritation.
Immediate Effects	: allergic skin reaction, mild skin irritation.
Delayed Effects	: allergic skin reaction.
Medical Conditions	: No information available for the product.
Aggravated by Exposure	
Irritation/Corrosivity	: mild skin irritation.
Data	
Respiratory	: No information available for the product.
Sensitization	
Dermal Sensitization	: May cause an allergic skin reaction.
Germ Cell	: No information available for the product.
Mutagenicity	
Carcinogenicity	
Component Carcinogenicity	: No data listed by ACGIH, IARC, NTP, DFG or OSHA is available for the component(s) of this product.
Reproductive Toxicity	: No information available for the product.
Specific Target Organ Toxicity - Single Exposure	: No target organs identified.
Specific Target Organ Toxicity - Repeated Exposure	: No target organs identified.
Aspiration Hazard	: Not expected to be an aspiration hazard.

12. Ecological Information

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.

Component Analysis - Aquatic Toxicity	: No LOLI ecotoxicity data are available for the component(s) of this product.
Persistence and Degradability	: No information available for the product.
Bioaccumulation	: No information available for the product.



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Mobility : No information available for the product.
 Other Toxicity : No additional information is available.

13. Disposal Considerations

Disposal Methods : Comply with all USA, national and local regulations.
Do not dump this product into sewers, on the ground or into any body of water.

Component Waste : The U.S. EPA has not published waste numbers for this product's
 Numbers components.

Disposal of : Empty containers may contain product residue. Dispose in
 Contaminated accordance with all applicable regulations.

Packaging

14. Transport Information

Check a thing without a leak in a container.
 Perform prevention of collapse of cargo surely.

US DOT Information : Not regulated as a hazardous material for transport.

TDG Information : Not regulated as dangerous goods for transport.

Marine Pollutant : No component(s) of this material is specifically listed in the IMDG Code as an identified marine pollutant.

15. Regulatory Information

U.S. Federal : None of this products components are listed under SARA Sections
 Regulations 302/304 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA 311/312

Acute Health:	Chronic Health	Fire	Pressure	Reactive
Yes	No	No	No	No

U.S. State Regulations : None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.
 Not regulated under California Proposition 65.



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Canada : WHMIS CLASSIFICATION: D2B.

Canadian WHMIS Ingredient Disclosure List (IDL)

: None of the product component(s) are listed on the Ingredients Disclosure List (IDL).

Chemical Inventory Listings

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PHIL	JP	KR	CN	NZ
Water	7732-18-5	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
Proprietary organic materials	Trade Secret	Yes	DSL	No	Yes	Yes	Yes	Yes	Yes	Yes

16. Other Information

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; CAS - Chemical Abstracts Service; CLP - Classification, Labelling and Packaging; EEC - European Economic Community; EIN (EINECS) - European Inventory of Existing Commercial Chemical Substances; ELN (ELINCS) - European List of Notified Chemical Substances; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IMDG - International Maritime Dangerous Goods; IBC Code - International Bulk Chemical Code; Kow - Octanol/water partition coefficient; LC50 - Lethal Concentration, 50%; LD50 - Lethal Dose, 50%; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NTP = National Toxicology Program; REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - European Rail Transport; STEL - Short-term Exposure Limit; TWA - Time Weighted Average; UEL - Upper Explosive Limit

Other Information

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