

Safety Data Sheets

1. Identification

Product Name	: Flushing Liquid 12 / Washing Liquid 12 Maintenance Kit
Order No.	: FL012-Z-22/ML012-Z-K1
Ink Ver.	: 1
General Use	: Cleaning solution for ink jet printer
Product Description	: Aqueous liquid
SDS Number	: 037-C221385
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.	: +1-678-730-0700
Emergency Telephone No.	: +81-268-64-2281

2. Hazards Identification

[HCS Classification]

Physical Hazards

Flammable Liquids : Not classified

Health Hazards

Acute Toxicity – Oral : Not classified

Acute Toxicity – Dermal : Not classified

Skin Corrosion / Irritation : Not classified

Eye Damage / Irritation : Category 2A

Sensitization – Skin : Category 1

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

[HCS Label Elements]

Symbol



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Signal Word

Warning

Hazard Statements

H317 May cause an allergic skin reaction

H319 Cause serious eye irritation

Precautionary Statements

[Prevention]

P261 Avoid breathing gas/mist/vapors.

P264 Wash hands thoroughly after handling.

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.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

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

[Disposal]

P501 Dispose of contents/container in accordance with

local/regional/national/international regulation (to be specified).

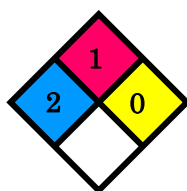
NFPA Rating (scale 0 – 4)

Health = 2

Flammability = 1

Instability = 0

Special =



3. Composition / Information on Ingredients

No	Chemical Name	Wt%	CAS No.
1	Water	70-85	7732-18-5
2	Propanol, 1(or 2)-(2-methoxymethylethoxy)-	5-15	34590-94-8
3	1,2-Propylene glycol	5-15	57-55-6
4	Other	0.5-1.5	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	: eye irritation, allergic skin reaction, mild skin irritation
Delayed	: allergic skin reaction.
Indication of Immediate Medical Attention and Special Treatment Needed, If Needed	: Treat symptomatically and supportively.

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.

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8. Exposure Controls / Personal Protection

Exposure Limit Values

No	Chemical Name		TWA
1	Propanol, 1(or 2)-(2-methoxymethylethoxy)- Cas No.34590-94-8	ACGIH	TLV-TWA : 100ppm TLV-STEL : 150ppm

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.



Glove : Wear appropriate chemical resistant gloves.

Recommendations



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.



Skin Protection : Wear appropriate chemical resistant clothing.



Environmental Exposure Controls

: Not available

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9. Physical and Chemical Properties

Appearance	- Physical State	: liquid
	- Color	: Clear
Odor		: Slight solvent odor
pH		: 9~10
Boiling Point / Boiling Range		: Not available
Melting Point / Melting Range		: Not available
Decomposition Temperature		: Not available
Flash Point		: Not flammable
Auto ignition temperature		: Not available
Flammability (Solid, Gas)		: Not available
Explosive Properties		: Not available
Oxidizing Properties		: Not available
Upper / Lower Flammability or Explosive Limits		: Not available
Vapor Pressure		: Not available
Specific Gravity		: 1~1.1(25°C)
Solubility		: Not available
Water Solubility		: Not available
Partition Coefficient (n-octanol / Water)		: Not available
Viscosity		: ≤ 5 mPa · s(25°C)
Vapor Density		: Not available
Evaporation Rate		: Not available
VOC		: Not available

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	: Acid, oxidizable compound

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Hazardous : **Combustion:** oxides of carbon.
 Decomposition

11. Toxicological Information

Acute Toxicity		Oral (rat)	Dermal (rabbit)
	Product	ATEmix=37,861mg/kg	ATEmix=49,850mg/kg

Information on Likely Routes of Exposure

Inhalation : irritation, difficulty breathing.
 Ingestion : nausea, vomiting, stomach pain.
 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 : 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 : No target organs identified.
 Toxicity - Single
 Exposure
 Specific Target Organ : No target organs identified.
 Toxicity - Repeated
 Exposure
 Aspiration Hazard : Not expected to be an aspiration hazard.

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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 - : No LOLI ecotoxicity data are available for the component(s) of this product.

Aquatic Toxicity

Persistence and Degradability : No information available for the product.

Bioaccumulation : No information available for the product.

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

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

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.



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15. Regulatory Information

U.S. Federal Regulations

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

OSHA Status : Propanol, 1(or 2)-(2-methoxymethylethoxy)- is hazardous under 29 CFR 1910. 1200. (CAS No. 34590-94-8)

TSCA Section 8(a) : Ingredient: Propanol, 1(or 2)-(2-methoxymethylethoxy)- (CAS# Preliminary Assessment 34590-94-8)

Information Rule (PAIR) Reference: 60FR34879 (The reporting date, 10/3/1995 has passed.)

SARA Section 311/312 : Acute Health: Yes Chronic Health: No Fire: No Pressure: No (40 CFR 370) Reactivity: No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
1,2-Propylene glycol	57-55-6	No	No	Yes	Yes	Yes

California Proposition 65 : Not listed under California Proposition 65

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



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Other Information

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