

Safety Data Sheets

1. Identification

Product Name : Maintenance Liquid 15
Order No. : ML015-Z-44 / ML015-Z-B1 / ML015-Z-K1 / ML015-Z-K2
Ink Ver. : 1
General Use : Cleaning solution for ink jet printer
Product Description : Solvent liquid
SDS Number : 037-C275913
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 NE , suite A, Suwanee, Georgia 30024, 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

[GHS Classification]

Physical Hazards

Flammable Liquid : Not classified

Health Hazards

Eye Damage / Irritation : Category 2A

Specific Target Organ Toxicity : Category 3

(Single Exposure)

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.

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[GHS Label Elements]

Symbol



Signal Word

Warning

Hazard Statements

H319 Cause serious eye irritation

H336 May cause drowsiness and dizziness.

Precautionary Statements

[Prevention]

P261 Avoid breathing gas/mist.

P264 Wash hands and eyes thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

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

[Response]

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

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

[Storage]

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]

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

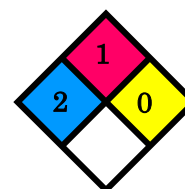
NFPA Rating (scale 0 – 4)

Health = 2

Flammability = 1

Instability = 0

Special = None



CANADIAN WHMIS SYMBOLS : D2B



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Chemical Name	Wt%	CAS No.
Diethylene glycol monoethyl ether acetate	90-100	112-15-2

The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

4. First Aid Measures

Inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin Contact	: Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention.
Eye Contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.
Ingestion	: If swallowed, get medical attention.
Most Important Symptoms/Effects	
Acute	: eye irritation
Delayed	: No information on significant adverse effects.
Indication of Immediate	: Treat symptomatically and supportively.
Medical Attention and	
Special Treatment	
Needed, If Needed	

5. Fire Fighting Measures

Flammable Properties	: Flash point 99.4°C Explosive Limits: 0.9-19.4 vol%
Extinguishing Media	: carbon dioxide, regular dry chemical, water spray, alcohol resistant foam
Unsuitable Extinguishing Media	: None known.
Special Hazards Arising from the Chemical	: Slight fire hazard.
Hazardous Combustion Products	: oxides of carbon
Fire Fighting	: Move container from fire area if it can be done without risk. Do not

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Measures	scatter spilled material with high-pressure water streams. Cool containers with water spray until well after the fire is out. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.
Special Protective Equipment and Precautions for Firefighters	: Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

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	: 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 vapor or mist. Avoid contact with eyes, skin and clothing. Do not eat, drink, or smoke when using this product. Wear protective eye/face protection. Wash thoroughly after handling. Avoid release to the environment.
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. Store locked up. Keep away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure Limit Values	: ACGIH, OSHA, and NIOSH have not developed exposure limits for
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any of this product's components.

Component Biological Limit Values : There are no biological limit values for the component(s) of this product.

Exposure Controls

Occupational Exposure Controls

Appropriate Engineering Controls : Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Personal Protection

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



Vapor Respirator

Hand Protection : Wear appropriate chemical resistant gloves.



Gloves

Eye Protection : Wear splash resistant safety glasses.



Safety Glasses

Skin Protection : Wear appropriate chemical resistant clothing.



Protective Apron

9. Physical and Chemical Properties

Appearance	- Physical State	: Liquid
	- Color	: Clear
Odor		: solvent odor
pH		: Not Applicable
Melting point		: Not Applicable
Boiling Point		: 217.2 °C
Flash Point		: 211 °F [Test Method:Closed Cup]

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Evaporation rate	: No Data Available
Flammability (solid, gas)	: Not Applicable
Flammable Limits(LEL)	: 0.9 %
Flammable Limits(UEL)	: 19.4 %
Vapor Pressure	: 6.7 Pa [@ 20 °C]
Vapor Density	: > 1 [Ref Std:AIR=1]
Density	: 1.01 g/ml
Specific Gravity	: 1.01 [Ref Std:WATER=1]
Solubility in Water	: Complete
Solubility- non-water	: No Data Available
Partition coefficient: n-octanol/ water	: No Data Available
Autoignition temperature	: 360 °C
Decomposition temperature	: No Data Available
Viscosity	: No Data Available
Molecular weight	: No Data Available
Volatile Organic Compounds	: 1010 g/l
Percent volatile	: 100 %
VOC Less H2O & Exempt Solvents	: 1010 g/l

10. Stability and Reactivity

Reactivity	: No reactivity hazard is expected.
Chemical Stability	: Stable at standard temperatures and pressure.
Possibility of Hazardous	: Hazardous polymerization will not occur.
Reactions	
Conditions to Avoid	: Avoid heat, flames, sparks and other sources of ignition.
Incompatible Materials	: Strong oxidizing agents.
Hazardous	: Combustion: oxides of carbon
Decomposition	

11. Toxicological Information

Acute Toxicity	: Component Analysis - LD50/LC50 Diethylene glycol monoethyl ether acetate (112-15-2) Ingestion Rat LD50 11,000 mg/kg Dermal Rabbit LD50 15,000 mg/kg
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Information on Toxicological effects

Inhalation	: May cause additional health effects (see Specific Target Organ Toxicity - Single Exposure).
Ingestion	: Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. May cause additional health effects (see Specific Target Organ Toxicity - Single Exposure).
Skin Contact	: Contact with the skin during product use is not expected to result in significant irritation.
Eye Contact	: Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision. Contact with the eyes during product use is not expected to result in significant irritation.
Immediate Effects	: eye irritation
Delayed Effects	: No information on significant adverse effects.
Medical Conditions	: No information available for the product.
Aggravated by Exposure	
Irritation/Corrosivity	: Causes eye irritation
Data	
Respiratory	: No information available for the product.
Sensitization	
Dermal Sensitization	: No information available for the product.
Germ Cell Mutagenicity	: No information available for the product.
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	: Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.
Specific Target Organ Toxicity - Repeated Exposure	: No target organs identified.
Aspiration Hazard	: Not expected to be an aspiration hazard.

12. Ecological Information

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

13. Disposal Considerations

Comply with all USA, national and local regulations.

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

Disposal Methods	: Dispose of contents/ container in accordance with the local/regional/national/international regulations.
EPA Hazardous Waste Number (RCRA)	: Not regulated.
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.
IATA Information	: Not regulated as dangerous goods for transport.
ICAO Information	: Not regulated as dangerous goods for transport.
IMDG 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

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- U.S. Federal Regulations : None of this products components are listed under SARA Sections 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 TitleIII Section 311/312 : Acute Health: Yes, Chronic Health: No, Fire: No, Pressure: No, Reactive: No
- EPCRA 311/312 Hazard Classifications (effective January 1, 2018) : Physical Hazards: Not applicable
 Health Hazards; Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)
- Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA) : Diethylene glycol monoethyl ether acetate (112-15-2)
 90-100%
- 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
- 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	US	CA	EU	AU	PHIL	JP	KR	CN	NZ
Diethylene glycol monoethyl ether acetate (112-15-2)	Yes	DSL	EIN	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

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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; 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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