

Safety Data Sheets

*****Section 1 - IDENTIFICATION*******Product Identifier: PR-200 Maintenance Liquid****Product Description**

ML013-Z-B2/ ML013-Z-K2

Product Use

Maintenance Liquid for ink jet printer

Restrictions on Use

None known.

Manufacturer InformationMimaki Engineering Co., Ltd
2182-3 Shigeno-otsu, Tomi-shi, Nagano
389-0512 Japan

Telephone number: +81-268-64-2413

Emergency telephone number: +81-268-64-2281

Importer / Distributor InformationMIMAKI SINGAPORE PTE. LTD.
31 Kaki Bukit Road 3 Singapore 417818 TechLink #02-03

Telephone number: +65-6508-2789

Emergency telephone number+65 3165 2217 (within Singapore only)
+65 3158 1074*****Section 2 - HAZARDS IDENTIFICATION*******SPRING/SS 586-2:2014**

Acute Toxicity - Oral - Category 4

Toxic to reproduction, Category 2

Specific Target Organ Toxicity - Repeated Exposure, Category 1 (kidneys and liver)

LABEL ELEMENTS**Symbol(s)****Signal Word**

DANGER

Hazard Statement(s)**H302** Harmful if swallowed.**H361** Suspected of damaging fertility or the unborn child**H372** Causes damage to kidneys and liver through prolonged or repeated exposure.**Precautionary Statement(s)****Prevention****P201** Obtain SDS (Safety Data Sheet) and printer's Operation Manual before use

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- P202** Do not handle until all safety precautions have been read and understood.
- P260** Do not breathe dust/fume/gas/mist/vapours/spray.
- P270** Do not eat, drink or smoke when using this product.
- P280** Wear protective gloves/protective clothing/eye protection/face protection.
- P264** Wash thoroughly after handling.

Response

- P308+P313** IF exposed or concerned: Get medical advice/attention.
- P301+P312** IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P330** Rinse mouth.

Storage

- P405** Store locked up.

Disposal

- P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

Other Hazards Which Do Not Result in Classification

None known.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component	Percent
111-46-6	Diethylene glycol	90-100

Section 4 - FIRST AID MEASURES

Inhalation

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician.

Skin

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.

Eyes

Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

Ingestion

If swallowed, get medical attention.

Note to Physicians

Treat symptomatically and supportively.

Symptoms: Immediate

Harmful if swallowed

Symptoms: Delayed

reproductive effects, kidney damage, liver damage

Section 5 - FIRE FIGHTING MEASURES

Flammable Properties

Negligible fire hazard.

Extinguishing Media

carbon dioxide, regular dry chemical, water spray, alcohol resistant foam

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

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Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

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.

Hazardous Combustion Products

Combustion: oxides of carbon, oxides of sulfur, acrolein

* * *Section 6 - ACCIDENTAL RELEASE MEASURES* * *

Personal Precautions

Wear personal protective clothing and equipment, see Section 8.

Environmental Precautions

Avoid release to the environment.

Methods for Containment

Eliminate all ignition sources if safe to do so. Stop leak if possible without personal risk. Reduce vapors with water spray.

Cleanup Methods

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.

* * *Section 7 - HANDLING AND STORAGE* * *

Precautions for Safe Handling

Obtain SDS (Safety Data Sheet) and printer's Operation Manual before use. Do not handle until all safety precautions have been read and understood. Do not breathe gas/mist. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/clothing and eye/face protection.

Conditions for Safe Storage

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

Incompatibilities: acids, bases, oxidizing materials, metal oxides, peroxides, reducing agents, combustible materials, halocarbons, metals, metal salts

* * *Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION* * *

Component Exposure Limits

No information available for the product

Biological exposure limits

There are no biological limit values for any of this product's components.

Engineering Controls

Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face

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

Protective Clothing

Wear appropriate chemical resistant clothing.

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Glove Recommendations

Wear appropriate chemical resistant gloves.

Respiratory Protection

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

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid	Appearance:	clear liquid
Color:	clear	Physical Form:	liquid
Odor:	slight odor	Odor Threshold:	Not available
pH:	7-9	Melting Point:	Not available
Boiling Point:	244°C	Flash Point:	124°C
Decomposition Temperature:	Not available	Evaporation Rate:	Not available
LEL:	1.6 vol.%	UEL:	10.8 vol. %
Vapor Pressure:	0.0057mmHg(25°C) [Converted value 0.76Pa(25°C)] :HSDB(2003)	Vapor Density (air = 1):	3.66; Verschueren (4th, 2001)
Density:	Not available	Specific Gravity (water = 1):	1.12 (20 °C)
Water Solubility:	Not available	Log KOW:	Not available
Coeff. Water/Oil Dist:	Not available	Auto Ignition Temperature:	Not available
Viscosity:	Not available	Volatility:	Not available
Oxidizing Properties:	Not available	Explosive Properties:	Not available
Flammability (solid, gas):	Not applicable		

Other Property Information

No additional information is available.

Section 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 flames, sparks, and other sources of ignition. Avoid contact with incompatible materials.

Materials to Avoid (Incompatibilities)

acids, bases, oxidizing materials, metal oxides, peroxides, reducing agents, combustible materials, halocarbons, metals, metal salts

Hazardous Decomposition:

Combustion: oxides of carbon, oxides of sulfur, acrolein

Section 11 - TOXICOLOGICAL INFORMATION

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Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The component(s) of this material have been reviewed in various sources and the following selected endpoints are published:

Diethylene glycol (111-46-6)

Dermal LD50 Rabbit 11890 mg/kg; Oral LD50 Rat 12565 mg/kg

Immediate Effects

Harmful if swallowed

Delayed Effects

reproductive effects, kidney damage, liver damage

Irritation/Corrosivity Data

No information available for the product.

Respiratory Sensitizer

No information available for the product.

Dermal Sensitizer

No information available for the product.

Carcinogenicity

Component Carcinogenicity

No data listed by ACGIH, IARC, NTP, DFG or OSHA is available for the component(s) of this product.

Mutagenic Data

No information available for the product.

Reproductive Effects Data

Suspected of damaging fertility or the unborn child

Specific Target Organ Toxicity - Single Exposure

No target organs identified.

Specific Target Organ Toxicity - Repeated Exposure

kidneys, liver

Aspiration Hazard

Not expected to be an aspiration hazard.

Medical Conditions Aggravated by Exposure

No information available for the product.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Component Analysis - Aquatic Toxicity

Diethylene glycol (111-46-6)

Fish: 96 Hr LC50 Pimephales promelas: 75200 mg/L [flow-through]

Invertebrate: 48 Hr EC50 Daphnia magna: 84000 mg/L

Bioaccumulation

No information available for the product.

Bioconcentration

No information available for the product.

Biodegradation

No information available for the product.

Persistence

No information available for the product.

Mobility

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No information available for the product.

Other Information

No additional information is available.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose in accordance with all applicable regulations.

Component Waste Information

There is no applicable waste information for this product's components.

Section 14 - TRANSPORT INFORMATION

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.

Section 15 - REGULATORY INFORMATION

Singapore Regulations

Component Analysis

No information was found for the substance(s) in Singapore regulations.

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PHIL	JP	KR	CN	NZ
Diethylene glycol	111-46-6	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes

Section 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

Disclaimer

The information set forth in this Safety Data Sheet does not purport to be all-inclusive and should be used only as a guide. While the information and recommendations set forth herein are believed to be accurate, the company makes no warranty regarding such information and recommendations and disclaims all liability from reliance thereon.



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