

## Safety Data Sheets

### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

**Material Name**

Maintenance Liquid 15

**Product Description**

ML015-Z-44 / ML015-Z-B1 / ML015-Z-K1 / ML015-Z-K2

**Product Use**

Cleaning solution for ink jet printer.

**Restrictions on Use**

None known.

**Manufacturer Information**Mimaki Engineering Co., Ltd  
2182-3 Shigeno-otsu, Tomi-shi, Nagano 389-0512 Japan  
Phone: +81-268-64-2413**Importer / Distributor Information**MIMAKI AUSTRALIA PTY LTD.  
Unit 14, 38-46 South Street, Rydalmere, NSW 2116, Australia  
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18000 74234 (within Australia only)  
+65 3158 1074

### Section 2 - HAZARDS IDENTIFICATION

Classified to Globally Harmonised System of Classification and Labelling of Chemicals, Third revised edition, published by the United Nations as modified under Schedule 6 of the Work Health and Safety Regulation.

**GHS Classification**

Serious Eye Damage/Eye Irritation - Category 2A

**GHS Label Elements****Symbol(s)****Signal Word**

Warning

**Hazard Statement(s)**

Causes serious eye irritation.

**Precautionary Statement(s)****Prevention**Wear protective gloves/protective clothing/eye protection/face protection.  
Wash thoroughly after handling.**Response**

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IF IN EYES: 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.

### Storage

None needed according to classification criteria.

### Disposal

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 Name	Percent
112-15-2	Diethylene glycol monoethyl ether acetate	90-100

## Section 4 - FIRST AID MEASURES

### Inhalation

Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

### Skin

Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

### Eyes

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

#### Symptoms: Immediate

eye irritation

#### Symptoms: Delayed

No information on significant adverse effects.

### Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

## Section 5 - FIRE FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

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

#### Unsuitable Extinguishing Media

Do not scatter spilled material with high-pressure water streams.

### Special Hazards Arising from the Chemical

Slight fire hazard. Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

### Hazardous Combustion Products

oxides of carbon

### Special Protective Equipment and Precautions for Firefighters

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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. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Keep unnecessary people away, isolate hazard area and deny entry. Avoid inhalation of material or combustion by-products.

### Hazchem/Emergency Action Code

2Z

## Section 6 - ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

### Environmental Precautions

Avoid release to the environment.

### Methods and Materials for Containment and Cleaning Up

Avoid heat, flames, sparks and other sources of ignition. 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.

## Section 7 - HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid contact with eyes, skin and clothing. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling.

### Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria.

Further information on storage conditions: Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

### Incompatible Materials

acids

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Exposure Limits

Australia and ACGIH have not developed exposure limits for any of this product's components.

### EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures

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

### Engineering Controls

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

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

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

#### Skin Protection

Wear chemical resistant protective clothing.

#### Respiratory Protection

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

#### Glove Recommendations

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Wear appropriate chemical resistant gloves.

### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear liquid	<b>Physical State</b>	liquid
<b>Odor</b>	solvent odor	<b>Color</b>	clear
<b>Odor Threshold</b>	Not available	<b>pH</b>	(neutral )
<b>Melting Point</b>	<-25 °C	<b>Boiling Point</b>	Not available
<b>Boiling Point Range</b>	217 °C	<b>Freezing point</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition Temperature</b>	>360 °C	<b>Flash Point</b>	116 °C
<b>Lower Explosive Limit</b>	0.9 %	<b>Decomposition temperature</b>	Not available
<b>Upper Explosive Limit</b>	8.5 %	<b>Vapor Pressure</b>	13 Pa (20 °C )
<b>Vapor Density (air=1)</b>	6.1	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	(Completely soluble )	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	soluble in organic solvent
<b>Density</b>	1.01 g/cm <sup>3</sup> (20 °C )	<b>Molecular Weight</b>	Not available

### Section 10 - STABILITY AND REACTIVITY

**Reactivity**

No reactivity hazard is expected.

**Chemical Stability**

Stable at normal temperatures and pressure.

**Possibility of Hazardous Reactions**

Will not polymerize.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat. Keep separated from incompatible substances.

**Incompatible Materials**

acids

**Hazardous decomposition products**

oxides of carbon

### Section 11 - TOXICOLOGICAL INFORMATION

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### Information on Likely Routes of Exposure

#### Inhalation

central nervous system effects

#### Skin Contact

irritation

#### Eye Contact

irritation

#### Ingestion

No information on significant adverse effects.

#### Acute and Chronic Toxicity

##### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

##### Diethylene glycol monoethyl ether acetate (112-15-2)

Oral LD50 Rat 11 g/kg

#### Product Toxicity Data

##### Acute Toxicity Estimate

Oral	> 2000 mg/kg
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#### Immediate Effects

eye irritation

#### Delayed Effects

No information on significant adverse effects.

#### Irritation/Corrosivity Data

eye irritation

#### Respiratory Sensitization

No information available for the product.

#### Dermal Sensitization

No information available for the product.

#### Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA

#### Germ Cell Mutagenicity

No information available for the 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.

#### Medical Conditions Aggravated by Exposure

No data available.

## Section 12 - ECOLOGICAL INFORMATION

#### Component Analysis - Aquatic Toxicity

No LOLI ecotoxicity data are available for this product's components

#### Persistence and Degradability

No information available for the product.

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### Bioaccumulative Potential

No information available for the product.

### Mobility in soil

No information available for the product.

### Other adverse effects

No additional information is available.

## Section 13 - DISPOSAL CONSIDERATIONS

### Disposal Methods

Dispose in accordance with all applicable regulations.

## Section 14 - TRANSPORT INFORMATION

### ADG Information:

No Classification assigned.

### IATA Information:

No Classification assigned.

### ICAO Information:

No Classification assigned.

### IMDG Information:

No Classification assigned.

### Component Marine Pollutants (IMDG)

Not regulated as dangerous goods.

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

<b>Diethylene glycol monoethyl ether acetate</b>	<b>112-15-2</b>
IBC Code:	Category Y (related to Poly(2-8)alkylene glycol monoalkyl (C1-6) ether acetate)

### Transportation Special Precautions

No additional information is available.

### Hazchem/Emergency Action Code

2Z

## Section 15 - REGULATORY INFORMATION

### Australia Regulations

#### Work Health and Safety Regulations - Prohibited Carcinogens

No component(s) are listed on the Prohibited Carcinogens list.

#### Work Health and Safety Regulations - Restricted Carcinogens

No component(s) are listed on the Restricted Carcinogens list.

#### Work Health and Safety Regulations - Restricted Hazardous Chemicals

No component(s) are listed on the Restricted Hazardous Chemicals list:

#### Australia Work Health and Safety Regulations - Hazardous Chemicals Requiring Health Monitoring

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None of this product's components are on the list.

### Component Analysis - Inventory

#### Diethylene glycol monoethyl ether acetate (112-15-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes

### Section 16 - OTHER INFORMATION

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*; CAS - Chemical Abstracts Service; CFR - Code of Federal Regulations (US); CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KECI - Korea Existing Chemicals Inventory; KECL - Korea Existing Chemicals List; KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; NDSL - Non-Domestic Substance List (Canada); NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL - Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH - Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); WHMIS - Workplace Hazardous Materials Information System (Canada).

#### Other Information

##### 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.