

*****Section 1 - IDENTIFICATION*******Product Identifier: Flushing Liquid 03 / Maintenance Liquid 03****Product Description**

FL003-Z-BB / FL003-Z-22 / FL003-Z-2L / ML003-Z-K1 / FL003-Z-BJ

Product Use

water-based cleaner

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

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**

Skin sensitizer, Category 1

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

WARNING

Hazard Statement(s)**H317** May cause an allergic skin reaction.**Precautionary Statement(s)****Prevention****P261** Avoid breathing dust/fume/gas/mist/vapours/spray. **P280** Wear protective gloves/protective clothing/eye protection/face protection. **P272** Contaminated work clothing should not be allowed out of the workplace.**Response****P302+P352** IF ON SKIN: Wash with plenty of soap and water. **P333+P313** If skin irritation or rash occurs: Get



Safety Data Sheets

Product Name: Flushing Liquid 03 /
Maintenance Liquid 03
SDS No. 037-C190940
First issue: 2015/9/30
Revised: 2019/12/11

medical advice/attention. **P363** Wash contaminated clothing before reuse.

Storage

None needed according to classification criteria.

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
7732-18-5	Water	balance
Trade Secret	Proprietary organic materials	<5

* * *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 immediate medical attention.

Ingestion

If swallowed, get medical attention.

Note to Physicians

Treat symptomatically and supportively.

Symptoms: Immediate

allergic skin reaction, mild skin irritation

Symptoms: Delayed

allergic skin reaction

* * *Section 5 - FIRE FIGHTING MEASURES* * *

Flammable Properties

Negligible fire hazard.

Extinguishing Media

carbon dioxide, regular dry chemical, water spray, foam

Unsuitable Extinguishing Media

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

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



Safety Data Sheets

Product Name: Flushing Liquid 03 /
Maintenance Liquid 03
SDS No. 037-C190940
First issue: 2015/9/30
Revised: 2019/12/11

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

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

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

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.

Incompatibilities: oxidizing materials

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

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

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.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Respiratory Protection

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



Safety Data Sheets

Product Name: Flushing Liquid 03 /
 Mentenace Liquid 03
 SDS No. 037-C190940
 First issue: 2015/9/30
 Revised: 2019/12/11

*****Section 9 - PHYSICAL AND CHEMICAL PROPERTIES*****

Physical State:	Liquid	Appearance:	clear, colorless liquid
Color:	clear, colorless	Physical Form:	liquid
Odor:	slight odor	Odor Threshold:	Not available
pH:	8-10	Melting Point:	Not available
Boiling Point:	Not available	Flash Point:	Not flammable
Decomposition Temperature:	Not available	Evaporation Rate:	Not available
LEL:	Not available	UEL:	Not available
Vapor Pressure:	Not available	Vapor Density (air = 1):	Not available
Density:	1.00-1.10(20°C)	Specific Gravity (water = 1):	Not available
Water Solubility:	Not available	Log KOW:	Not available
Coeff. Water/Oil Dist:	Not available	Auto Ignition Temperature:	Not available
Viscosity:	0.8-1.2(20°C)	Volatility:	1.0g/l
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 contact with incompatible materials.

Materials to Avoid (Incompatibilities)

oxidizing materials

Hazardous Decomposition:

Combustion: oxides of carbon

*****Section 11 - TOXICOLOGICAL INFORMATION*****

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The component(s) of this material have been reviewed in various sources and no selected endpoints have been identified.

Immediate Effects

allergic skin reaction, mild skin irritation

Delayed Effects



Safety Data Sheets

Product Name: Flushing Liquid 03 /
Maintenance Liquid 03
SDS No. 037-C190940
First issue: 2015/9/30
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allergic skin reaction

Irritation/Corrosivity Data

mild skin irritation

Respiratory Sensitizer

No information available for the product.

Dermal Sensitizer

May cause an allergic skin reaction.

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

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 information available for the product.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Component Analysis - Aquatic Toxicity

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

Bioaccumulation

No information available for the product.

Bioconcentration

No information available for the product.

Biodegradation

No information available for the product.

Mobility

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



Safety Data Sheets

Product Name: Flushing Liquid 03 /
Maintenance Liquid 03
SDS No. 037-C190940
First issue: 2015/9/30
Revised: 2019/12/11

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
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

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.

End of Sheet 037-C190940