Material Safety Data Sheets

1. Product and Company Identification

Product Name	: MILD SOLVENT WASHING LIQUID
Product Code	: SPC-0294
General Use	: Cleaning solution for ink jet printer
Product Description	: Solvent clear liquid
MSDS Number	: 031-33C030C
Manufacture	
Company Name	: Mimaki Engineering Co., Ltd
Address	: 2182-3 Otsu, Shigeno, 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.	: 1-678-730-0100
Emergency Telephone No.	: +81-268-64-2413

2. Hazards Identification

Emergency Overview	: Combustible liquid. Ink component is a clear liquid that causes eye, nose or throat irritation, and that effects anesthesia, if inhales. Ink may flash, when under high temperature. Avoid contact with eyes or clothing. In the case of skin contact, wash with soap and water. Keep out of reach of children.
Potential Health Effects	
Inhalation	: Intentional exposure to ink vapors (mist) will cause respiratory irritation and anesthesia.
Eye Contact	: Ink contact with eye will be irritating.
Skin Contact	: Ink contact with skin may cause minimally irritation.
Ingestion	: May cause upset stomach.
Carcinogens	: No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens.
Potential Environmental Effects	: No data available on the adverse effects of this ink on the environment
Medical conditions	: No medical conditions are known to be aggravated by exposure to

Cleaning Solution.

3. Composition / Information On Ingredients

No	Chemical Name	Wt%	CAS No.	Chemical Formula
1	Dipropylene glycol monomethyl ether	35-45	34590-94-8	$C_7H_{16}O_3$
2	Diethylene glycol diethyl ether	35-45	112-36-7	$C_8H_{18}O_3$
3	Triethylene glycol monomethyl ether	20-30	112-35-6	$C_7H_{16}O_4$

OSHA Hazardous Components (29 CFR 1910. 1200) : Component 1 is hazardous component.

4. First Aid Measures

Inhalation : Remove subject to ventilated fresh air. If not breathing, give artificial respiration right away. If breathing is difficult, give oxygen. Seek immediate medical attention.

Eye Contact : Immediately flush with room temperature, low pressure, clean water for at least 15 minutes. Seek medical attention if eye irritation continues.

Skin Contact : Wash surface areas with soap and water. Wash soiled clothing before rewearing. Consult a physician if irritation continues.

Ingestion : Seek medical advice; and attention if stomach continues to be upset.

Protection To First-Aiders : Wear a tool for appropriate protection. Ventilate.

5. Fire Fighting Measures

Flammable Properties : Combustible liquid under Hazard Communication Standard (HCS, U.S.A).
Flash point: about 76°C (Closed cup)
Autoflammability: None
Explosive properties: 1.1~14v/v% as dipropylene glycol mono-methyl ether

Extinguishing Media	: Water spray, dry chemical, carbon dioxide or, alcohol foam
Fire Fighting Instructions	: Extinguish to use fire fighting media or plentiful fog water. Put protection wear without fail in case of fire fighting work; do not work in the leeward. Wear full fire-fighting turn-out gear (full bunker gear) and respiratory protection (self-contained breathing apparatus).

6. Accidental Release Measures

Personal Precautions	: Removed the person of the leeward. Keep away the person from periphery of the place of the leakage. Ventilate sufficiently during clean-up in case of inside of a house.
Methods for cleaning up	: If a spill occurs, use sponges to wipe-up ink, then rinse area with damp cloth. Place waste in closed container for disposal. Do not dispose of waste to the sewer. Wash hands with soap and water.

7. Handling And Storage

Handling	: Use proper ventilation and no fire in work place. Put protection wear that has electrical conductivity in case of work. Keep out of reach of children and do not drink ink. Do not dismantle bottle. Make sure bottle is dry.
Storage	: Do not store the bottle in high or freezing temperatures. Keep bottle out of direct sunlight. Do not store bottle with oxidizing agents or explosives.

8. Exposure Controls / Personal Protection

Exposure Limit Values

No	Chemical Name		TWA	STEL	Ceiling	Skin	SEN
1	Dipropylene glycol monomethyl ether	OSHA PEL	600mg/m3, 100ppm	900mg/m3, 150ppm	N.E.	N.E.	N.E.
		ACGIH TLV	100ppm	N.E	N.E	N.E	N.E

Exposure Controls

Occupational Exposure Controls

Engineering Controls : Closed system or local ventilation is recommended

Personal Protection

Respiratory Protection : Put self-contained breathing apparatus or organic canister mask.

Hand Protection : Put safety gloves that resist organic solvents and chemicals.

Eye Protection : Put eye shields.

Skin Protection : To prevent any contact, put long sleeve jacket, head trousers and apron.

Environmental Exposure Controls

: Not established

9. Physical And Chemical Properties

Appearance	- Physical state	: Liquid
	- Colour	: Clear
Odour		: Slight solvent odor
pH		: Not Applicable
Boiling Point / Boiling Range		: Not available
Melting Point / Merting Range		: Not available
Flash Point		: About 76°C (Closed cup)
Flammability(solid, gas)		: Not Applicable
Explosive Properties		: 1.1~14v/v% as dipropylene glycol mono methyl ether

Relative density	: Not available
Solubility	: Not available
Water solubility	: Soluble
Viscosity	: Not available
Vapour density	: Greater than 1 (air = 1)

10. Stability And Reactivity

Conditions To Avoid	: High and freezing temperatures Direct sunlight
Stability	: Stable under normal temperature
Materials To Avoid	: Oxidizers and explosives
Hazardous Reactions/ Decomposition Products	: Not available

11. Toxicologocal Information

*Based on toxicology data of chemically similar material

Acute Toxicity	: Oral LD_{50}	Dermal LD_{50}	Inhalant LC_{50}
	> 2500mg/kg (Rat)*	> 2000mg/kg (Rat)*	No data available

Eye Irritation	: Mild irritant (Rabbit, OECD405)*
Skin Irritation	: Mild irritant (Rabbit OECD 404)*
Sensitization	: Non-sensitiser (Guinea pig OECD 406)*
Mutagenicity	: Negative (Ames assay)*
Acute Health Hazards	: Overexposure of eye surface to ink may be mildly irritating. Overexposure of skin to ink contact may cause irritation and in some people swelling and redness. Intentional inhalation overexposure to ink vapors may result in respiratory tract irritation and anesthesia. Intentional or accidental oral ingestion may cause an upset stomach

12. Ecological Information

Ecotoxicity	: No data available on the adverse effects of this ink on the environment
Persistence And Degradability	: No data available on the adverse effects of this ink on the environment

Bioaccumulative Potential	: No data available on the adverse effects of this ink on the environment
Other Adverse Effects	: No data available

13. Disposal Considerations

: Disposal should be in accordance with federal, state, and local requirements.
Comply with all EU, national and local regulations.
Do not dump this product into sewers, on the ground or into any body of water.

14. Transport Information

Check a thing without a leak in a container.
Perform prevention of collapse of cargo surely.

Us Department of Transportation (DOT)

Hazardous Materials	: Not Applicable
Sea Transport (IMDG)	: No classification assigned.
Air Transport (ICAO/IATA)	: No classification assigned.

15. Regulatory Information

TSCA Section 4(a) Final Test Rules Regulated	: Dipropylene glycol monomethyl ether
TSCA Section 8(a) Preliminary Assessment Information Rule(PAIR)	: Dipropylene glycol monomethyl ether
TSCA Section 8(a) Inventory Update Rule	: Dipropylene glycol monomethyl ether
TSCA Section 12(b) One-Time Export Notification Regulated	: Dipropylene glycol monomethyl ether
California Proposition 65	: Not regulated

16. Other Information

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of Mimaki Engineering Corporation.

It relates only to the specific material designated herein, and dose not relate to use in combination with any other material or process.

Mimaki Engineering Corporation assumes no legal responsibility for use or reliance upon this information.

Revision history

Version	Date	Content
1.0	2008/03/22	First issue