Material Safety Data Sheets

1. Product and Company Identification

Product Name	: SS ink Light Magenta
Product Code	: SPC-0347LM-2
General Use	: Ink for ink jet plotter
Product Description	: Solvent pigment ink
MSDS Number	:031-34S012C
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. Acute toxic substance. Stagnant vapor may cause fire. May cause organic solvent poisoning. Do not inhale. Inhalation may cause any of the following symptoms: dizziness, headache, the stimulation of eyes, skin and respiratory tract.
Potential Health Effects	
Inhalation	: Harmful by inhalation. Irritating to respiratory system.
Eye Contact	: Irritating to eyes.
Skin Contact	: Harmful in contact with skin. Irritating to skin.
Ingestion	: Harmful: may cause lung damage if swallowed.
Carcinogens	: No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens.
Potential Environmental Effects	: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Medical conditions	: No medical conditions are known to be aggravated by exposure to SS ink.

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3. Composition / Information On Ingredients

No	Chemical Name	Wt%	CAS No.	Chemical Formula
1	Cyclohexanone	1.0～4.9	108-94-1	$C_6H_{10}O$
2	2-butoxyethyl acetate	70.0～80.0	112-07-2	$C_8H_{16}O_3$
3	2-methoxy-1-methylethyl acetate	1.0～5.0	108-65-6	$C_6H_{12}O_3$
4	2-Propoxyethanol	5.0～15.0	2807-30-9	$C_5H_{12}O_2$
5	Quinacridone Magenta	0.1～1.0	Trade Secret	$C_{22}H_{16}O_2N_2$
6	Vinylchloride-Vinylacetate Copolymer	1.0～5.0	9003-22-9	$-(CH_2CHCl)_n-(CH_2CHOCOCH_3)_m-$

OSHA Hazardous Components (29 CFR 1910. 1200) : Components 1, 2 are hazardous components.

4. First Aid Measures

Inhalation : If inhaled, immediately remove to fresh air and keep warm and calm. If breathing irregularly or not breathing, give artificial respiration. Keep from swallowing vomit.
Consult a doctor immediately.
If inhaled and feeling sick, remove to fresh air, keep warm and calm and consult a doctor.

Eye Contact : Flush eyes with plenty of water for at least 15 minutes.
Consult a doctor immediately.

Skin Contact : Immediately remove from skin with cloth.
Flush thoroughly with plenty of water and soap or skin detergent.
Do not use solvent or thinner.
Consult a doctor in case of change of appearance or ache

Ingestion : If swallowed, keep calm and consult a doctor immediately.
Keep from swallowing vomit.

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

Note To Physician : Treatment may vary with condition of victim and specifics of incident.

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5. Fire Fighting Measures

Flammable Properties : The harmful gas such as carbon monoxide or the low molecule monomer occurs by combustion.
Flash point: 62.6 degree C
Ignition point: 340 degree C
Flammable point: 0.8% to 10.7%

Extinguishing Media : CO_2, foam, powder, dry sand.
Never splash water.

Fire Fighting Instructions : Use proper protection (heat-resisting clothes, etc.).
Promptly remove flammables.

6. Accidental Release Measures

Personal Precautions : Avoid contact with eyes. Do not rub eyes with hands during cleanup.
No special precautions for dermal contact are needed.
Wash hands thoroughly after cleaning up spill or leak.

Land Spill : Use proper protection (gloves, masks, aprons, goggles, etc.)
If Collect spills in a sealing container and remove to safe place.
Dispose of waste according to legal instructions.
Promptly remove ignitable, hot, or flammable items.
Prepare proper fire extinguishers for accidental ignition.
Use plastic or other equipment to prevent sparks during recovery operation. Use dry sand, dirt or other nonflammable absorber.

Water Spill : Avoid discharge to rivers and environmental effects.

7. Handling And Storage

Handling : Use proper protection (gloves, masks, aprons, goggles, etc.)
Handle in well-ventilated area.
Prohibit use of fire, sparks or heat source.
Ground equipment against electrostatics and use explosion-proof electric equipment.
Use spark-proof tools.
Keep used cloths, waste paints or spray dusts in water until disposal.

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Use local exhaust system and proper protection if working in closed area.

Storage : Keep from sunlight.
Store in well-ventilated area.
Keep from open fire or heat source.

8. Exposure Controls / Personal Protection

Exposure Limit Values

Cyclohexanone	OSHA PEL	N.E.	N.E.	N.E.	N.E.	N.E.
	ACGIH TLV	20ppm	50ppm.	N.E.	N.E.	N.E.
2-butoxyethyl acetate	OSHA PEL	N.E.	N.E.	N.E.	N.E.	N.E.
	ACGIH TLV	20ppm	N.E	N.E.	N.E.	N.E.
2-methoxy-1-methyl ethyl acetate	OSHA PEL	N.E	N.E.	N.E.	N.E.	N.E.
	ACGIH TLV	N.E	N.E.	N.E.	N.E.	N.E.

Exposure Controls

Occupational Exposure Controls

Engineering Controls : Use explosion-proof handling equipment.
Use exhaust system to prevent vapor build-up
Ground transporting, scooping, agitating or other liquid handling equipment.
Keep heat or fire sources from handling area.
If working indoors, use automatic coating machine or other proper equipment to protect workers from direct exposure or use local exhaust system to protect workers from exposure.

Personal Protection

Respiratory Protection : Wear gas masks for organic gases.
Wear ventilation masks when working in closed area.
An air-purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where air-borne concentrations are expected to exceed exposure limits.
Protection provided by air purifying respirators is limited.

Hand Protection : Wear gloves that resist organic solvents and chemicals.

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Eye Protection : Wear coverall, chemical goggles and face shield when handling.

Skin Protection : To prevent any contact, wear impervious clothing such as gloves, apron, boots, or whole body suits made from neoprene, as appropriate.

Environmental Exposure Controls

: Not available

9. Physical And Chemical Properties

Appearance	- Physical state	: liquid
	- Color	: Light Magenta
Odor		: Solvent odor
pH		: Not applicable
Boiling Point / Boiling Range		: 150 degree C
Melting Point / Melting Range		: Not available
Flash Point		: 62.6 degree C
Auto-Ignition Temperature		: 340 degree C
Flammability(solid, gas)		: Not Applicable
Explosive Properties		: Flammable point: 0.8% to 10.7%
Vapor Pressure		: 220Pa(20 degree C)
Specific Gravity		: 0.955 (20 degree C)
Solubility		: Not available
Water solubility		: Not available
Partition Coefficient(n-octanol / water)		: Not available
Viscosity		: Not available
Vapor density		: Not available

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VOC : 879.6g/l

10. Stability And Reactivity

Conditions To Avoid	: Excessive heat and cold. Sparks. Ignition sources. Direct sunlight. High humidity.
Stability	: Stable
Materials To Avoid	: Strong acid. Strong bases.
Hazardous Reactions/ Decomposition Products	: Will not occur. To burn this product may be produce toxic gases such as CO and low-molecular-weight monomers.

11. Toxicologocal Information

Acute Toxicity	: Oral		LD50(rat)	
	Cyclohexanone		1353mg/kg	
	2-butoxyethl acetate		3000mg/kg	
	2-methoxy-1-methylethl	acetate	8532mg/kg	
	: Dermal		LD50(rabbit)	
	Cyclohexanone		950mg/kg	
	2-butoxyethl acetate		1500mg/kg	
	2-methoxy-1-methylethl	acetate	>5000mg/kg	
	: Inhalation		LC50(rat)	LC50(rabbit)
	Cyclohexanone			8000ppm/4Hr
	2-methoxy-1-methylethl	acetate	4345ppm	24700ppm
Eye Irritation	: 2-methoxy-1-methylethl acetate compound Irritating to eyes.			
Skin Irritation	: Not available			
Sensitization	: Not available			
Mutagenicity	: Not available			

12. Ecological Information

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

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river, and the drain ditch.

Ecotoxicity	: Not Available
Persistence And Degradability	: Not Available
Bioaccumulative Potential	: Not Available
Other Adverse Effects	: Not Available

13. Disposal Considerations

: Have waste liquids, containers and other materials disposed of by licensed industrial waste contractors.
Keep waste liquids from flushing containers, machines or other equipment from flowing directly to the ground or drainage.
Dispose of wastes from drainage, combustion, etc, in compliance with laws and regulations on waste disposal or cleaning, or have them disposed of by contractors.
To avoid harmful gases, do not use incinerators without flushing systems to burn wastes and other materials.
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)

Class	: No classification assigned.
Packing Group (PG)	: -
UN Number	: -
Proper Shipping Name	: -
Marine Pollutant	: -

Air Transport (ICAO/IATA)

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Class	: No classification assigned.
Packing Group(PG)	: -
UN Number	: -
Proper Shipping Name	: -

15. Regulatory Information

OSHA Status	: Not Applicable
TSCA Status	: All components on TSCA INVENTORY.
Cercla Reportable Quantity (40 CFR 117, 302)	: Not Applicable
SARA TitleⅢ	
Section 302 (40 CFR 355)	: Not Applicable
Section 311/312 (40 CFR 370)	: Not Applicable
Section 313 (40 CFR 372)	: Not Applicable
Others	: Please refer to any other federal, state and local regulations.

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	2008/06/18	First issue.
2.0	2012/04/26	No.3 Revise CAS No. and Chemical Formula