

Safety Data Sheet

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the substance or preparation

Product Name : SS21 ink Black

Product Code : SPC-0501K

1.2. Use of the substance/preparation

General Use : Ink for ink jet plotter

Product Description : Solvent pigment ink

1.3. Company/undertaking identification

MANUFACTURER

Company Name : Mimaki Engineering Co., Ltd

Address : 2182-3 Otsu, Shigeno, Tomi-shi, Nagano 389-0512 Japan

Telephone No. : +81-268-64-2413

Charge post : Inks and Media Division

Person in charge : Isao Tabayashi

E-mail address : tabayashi@mimaki.co.jp

IMPORTER/DISTRIBUTOR ESTABLISHED IN EU

Company Name : MIMAKI EUROPE B.V.

Address : Joan Muyskenweg 42-44, 1099CK Amsterdam

Telephone No. : +31-20-4627-640

Person in charge : Sakae Sagane

1.4. Emergency telephone

EMERGENCY TELEPHONE NUMBER : +81-268-64-2413

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW :

Flammable liquid, acute toxic substance.

Stagnant vapor 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.

This product is classified as 'Irritant (Xi)' and 'Harmful (Xn)'.

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POTENTIAL HEALTH EFFECTS

- Inhalation : Harmful by inhalation.
 Irritating to respiratory system.
- Eye : R36 Irritating to eyes.
- Skin : R38 Irritating to skin.
 Harmful in contact with skin.
- Ingestion : Harmful if swallowed.
- Cancer-causing : No classification.

POTENTIAL ENVIROMENTAL EFFECTS

- : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

No	Chemical Name	Wt%	CAS No.	EINECS No.	Symbol letters	Risk Phrase	Chemical Formula
1	Diethylene glycol derivative	75-85	Trade Secret	Trade Secret	not classified	not classified	Trade Secre
2	Lactone compound	10-20	Trade Secret	Trade Secret	not classified	not classified	Trade Secre
3	Carbon black	1.0-5.0	1333-86-4	215-609-9	not classified	not classified	C
4	Vinylchloride -Vinylacetate Copolymer	1.0-5.0	9003-22-9	Trade Secret	not classified	not classified	$-(CH_2CHCl)_n-$ $(CH_2CHOCO$ $CH_3)_m-$
5	Diol type inhibitor	0.1-1.0	Trade Secret	Trade Secret	Xi	R:36/38	Trade Secret

*The wording of the symbol(s) and risk phrase(s) is specified in 16.OTHER INFORMATION.

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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** : Flush eyes with plenty of water for at least 15 minutes.
Consult a doctor immediately.
- SKIN** : 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.

5. FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES

- : The harmful gas such as carbon monoxide or the low molecule monomer occurs by combustion.
- Flash point: 71.1 degree C
- Ignition point: 169 degree C
- Flammable point: 2.2% to 33.0%

EXTINGUISHING MEDIA

- : CO₂, foam, powder, dry sand.
Never splash water.

FIRE FIGHTING INSTRUCTIONS

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

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6. ACCIDENTAL RELEASE MEASURES

- 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.
 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

8.1. Exposure limit values

No	Chemical Name		TWA	STEL	Ceiling	Skin	SEN
1	Carbon black	2000/39/EC	N.E.	N.E.	N.E.	N.E.	N.E.
		ACGIH TLV	3.5mg/m ³	N.E.	N.E.	N.E.	N.E.

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8.2. Exposure controls

8.2.1. 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.
Hand Protection : Wear gloves that resist organic solvents and chemicals.
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.

8.2.2. Environmental exposure controls

: Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information

Appearance - Physical state : liquid
- Color : Black
Odor : Slight solvent odor

9.2. Important health, safety and environmental information

pH : Not applicable
Boiling Point / Boiling Range : 176 degree C or higher
Flash Point : 71.1 degree C
Flammability(solid, gas) : Not Applicable
Explosive Properties : Flammable point: 2.2% to 33.0%
Vapour Pressure : Less than 133Pa(20 degree C)
Relative density : Not available
Solubility : Not available
Water solubility : Not available

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Viscosity : 3.6±0.3 mPa.s (20 degree C)

9.3. Other information

Melting Point / Melting Range : Not available
Auto-Ignition Temperature : 169 degree C
Specific Gravity : 0.975±0.01(20 degree C)
VOC : 911.2 g/L

10. STABILITY AND REACTIVITY

CONDITONS : Excessive heat and cold. Sparks. Ignition sources. Direct sunlight.
TO AVOID High humidity.
STABILITY : Stable
MATERIALS : Strong acid. Strong bases.
TO AVOID
HAZARDOUS : Will not occur.
DECOMPOSITION : To burn this product may be produce toxic gases such as CO and
PRODUCTS low-molecular-weight monomers.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY : Oral Diethylene glycol derivative LD50 rat 6,500 mg/kg
Lactone compound LD50 rat 1,540 mg/kg
: Dermal Not available
: Inhalation Not available
EYE IRRITATION : Lactone compound
Irritating to eyes. (rabbit eyes, OECD Guideline 405)
SKIN IRRITATION : Diethylene glycol derivative P.I.I 2.5 (Draiza)
SENSITIZATION : Not available
MUTAGENICITY : Not available

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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 river, and the drain ditch.

ECOTOXICITY : Not Available

PERSISTENCE AND DEGRADABILITY

: Not Available

BIOACCUMULATIVE POTENTIAL

: Not Available

RESULTS OF PBT ASSESSMENT

: 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.

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14. TRANSPORT INFORMATIONS

Check a thing without a leak in a container.

Perform prevention of collapse of cargo surely.

LAND TRANSPORT

ADR, RID Class : No classification assigned.

SEA TRANSPORT

IMDG Class : No classification assigned.

AIR TRANSPORT

ICAO/IATA Class : No classification assigned.

15. REGULATORY INFORMATION

This product is classified as follows and labeled accordingly.

Symbol : Xi Irritant

Xn Harmful

Risk Phrase : 22 Harmful if swallowed.

36/38 Irritating to eyes and skin.

41 Risk of serious damage to eyes.

Safety Advice : 25 Avoid contact with eyes.

26 In case of contact with eyes, rinse immediately with plenty of water medical advice.

37/39 Wear suitable gloves and eye/face protection.

Please refer to any other EU, national and local measures.

16. OTHER INFORMATION

References

- 1) "Raw material data base" Redacted by Japan Paint Manufacturers Association
- 2) "Solvent pocketbook" by Ohmsha, Ltd.
- 3) First-aid manual for disaster prevention of dangerous goods
- 4) International Chemical Safety Cards

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From clause 3

Symbol letters : Xi Irritant

Risk phrase : R36/38 Irritating to eyes and skin

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

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Revision history

Version	Date	Content
1.0	2007/07/31	First issue