

# Safety Data Sheets

## 1. Identification

Product Name : SS21 ink Silver  
Order No. : SPC-0504Si  
General Use : Ink for ink-jet printer  
Product Description : Solvent pigment ink  
SDS Number : 037-S080271  
Manufacture  
Company Name : Mimaki Engineering Co., Ltd.  
Address : 2182-3 Shigeno-otsu, 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. : +81-268-64-2281

## 2. Hazards Identification

### [GHS Classification]

#### Physical Hazards

Flammable Liquids : Category 4

#### Health Hazards

Acute Toxicity – Oral : Not classified  
Acute Toxicity – Dermal : Not classified  
Skin Corrosion / Irritation : Category 2  
Eye Damage / Irritation : Category 2  
Sensitization – Skin : Not classified  
Toxic to Reproduction : Not classified  
Specific Target Organ Toxicity : Category 1 (lung)  
(Repeated Exposure)

#### Environmental Hazards

Hazardous to the Aquatic : Not classified  
Environment - Long Term Hazard

The above list does not include category being non-classifiable or not-applicable.

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### [GHS Label Elements]

#### Symbol



#### Signal Word

Danger

#### Hazard Statements

H227 Combustible liquid

H315 Causes skin irritation

H319 Causes serious eye irritation

H372 Causes damage to organs through prolonged or repeated exposure (lung)

#### Precautionary Statements

##### [Prevention]

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

##### [Response]

P314 Get medical advice/attention if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see 4-Response on our website/SDS

URL: [www.mimaki.co.jp/msds](http://www.mimaki.co.jp/msds)).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P370+P378 In case of fire: Use carbon dioxide, foam, dry chemical for extinguish.

##### [Storage]

P403+P235 Store in a well-ventilated place. Keep cool.

##### [Disposal]

P501 Dispose of contents/container in accordance with local/ regional / national/ international regulation (to be specified).

#### HMIS Rating (scale 0 – 4)

Health = 2

Flammability = 2

Reactivity = 0

Protective Equipment =

2	Health
2	Flammability
0	Reactivity
○	Protective Equipment

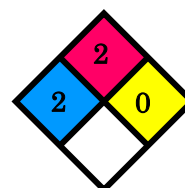
#### NFPA Rating (scale 0 – 4)

Health = 2

Flammability = 2

Instability = 0

Special = 0



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### 3. Composition / Information on Ingredients

No	Chemical Name	Wt%	CAS No.	Chemical Formula
1	Glycol ether -A	65-75	Trade Secret	Trade Secret
2	Glycol ether -B	20-30	Trade Secret	Trade Secret
3	Resin	5-10	Trade Secret	Trade Secret
4	Aluminum	0.8-1.5	7429-90-5	Al

### 4. First Aid Measures

Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, oxygen should be administered by qualified personnel. If breathing has stopped, start artificial respiration at once. Call a POISON CENTER or doctor/physician.
Eye Contact	: Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get immediate medical attention.
Skin Contact	: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes before reuse.
Ingestion	: Call a POISON CENTER or doctor/physician if swallowed. Do not give anything by mouth to an unconscious person. Rinse mouth and then drink plenty of water.
Most Important Symptoms/ Effects	
Acute	: Skin irritation, eye irritation
Delayed	: Lung damage

### 5. Fire Fighting Measures

Flammable Properties	: The harmful gas such as low molecule weight hydrocarbons or oxides of carbon occurs by combustion.
Flash point	: 62.0 °C
Ignition point	: Not available
Flammable point	: Not available

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Extinguishing Media	: Suitable extinguishing media Carbon dioxide, regular dry chemical, foam,
	: Unsuitable extinguishing media High-pressure water streams
Special Hazards Arising from the Chemical	: Combustible liquid and vapor.
Fire Fighting Instructions	Wear full fire-fighting turn-out gear (full bunker gear) and respiratory protection (self-contained breathing apparatus). Move material from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Cool containers with water spray until well after the fire is out. Stay upwind and keep out of low areas. Avoid inhalation of material or combustion by-products.

### 6. Accidental Release Measures

#### Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

#### Method and Materials for Containment and Cleaning UP

Stop leak if possible without personal risk. Collect spilled material in appropriate container for disposal.

Large spills: Dike for later disposal. Keep unnecessary people away, isolate hazard area and deny entry.

Water Spill: The material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

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### 7. Handling and Storage

Handling	<ul style="list-style-type: none"><li>: Keep away from flames and hot surfaces. -No smoking.</li><li>Do not breathe vapor or mist.</li><li>Do not eat, drink, or smoke when using this product.</li><li>Avoid contact with eyes, skin and clothing.</li><li>Use non-sparking tools and equipment.</li><li>Wear protective gloves and eye/face protection.</li><li>Wash thoroughly after handling.</li><li>Avoid release to the environment.</li></ul>
Storage	<ul style="list-style-type: none"><li>: Store in accordance with all current regulations and standards.</li><li>Store in a well-ventilated place. Keep cool.</li><li>Keep separated from incompatible substances.</li><li>Do not store with oxidizing materials, acids, combustible materials and reducing agents.</li></ul>

### 8. Exposure Controls / Personal Protection

Exposure Limit Values	: Not available.
Exposure Controls	
Occupational Exposure Controls	
Engineering Controls	<ul style="list-style-type: none"><li>: Provide local exhaust ventilation system.</li><li>Ensure compliance with applicable exposure limits.</li></ul>

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### Personal Protection

#### Respiratory Protection



: 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.  
 Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or in any other circumstances where air-purifying respirators may not provide adequate protection.

#### 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.

### Environmental Exposure Controls

: Not available

## 9. Physical and Chemical Properties

Appearance	- Physical State	: Liquid
	- Color	: Silver
Odor		: Slight solvent odor
pH		: Not Applicable
Boiling Point / Boiling Range		: =>79°C
Melting Point / Melting Range		: Not available
Decomposition Temperature		: Not available
Flash Point		: 62.0°C
Auto ignition temperature		: Not available

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Flammability (Solid, Gas)	: Not Applicable
Explosive Properties	: Not available
Upper / Lower Flammability or Explosive Limits	: Not available
Vapor Pressure	: Not available
Specific Gravity	: 0.97
Solubility	: Not Applicable
Water Solubility	: Not Applicable
Partition Coefficient (n-octanol / Water)	: Not Applicable
Viscosity	: Not available
Vapor Density	: Not Applicable
VOC	: 910 g/L

### 10. Stability and Reactivity

Reactivity	: No reactivity hazard is expected.
Conditions to Avoid	: Avoid heat, flames, sparks and other sources of ignition.
Stability	: Stable at standard temperatures and pressure.
Materials to Avoid	: Oxidizing materials, acids, combustible materials, reducing agents.
Hazardous Reactions	: Will not polymerize.
Decomposition Products	: Low molecular weight hydrocarbons, oxides of carbon

### 11. Toxicological Information

Acute Toxicity	Chemical Name	LD50 (oral-rat)	LD50(dermal-rabbit)
	Glycol ether -A	6500mg/kg	7070mg/kg
Inhalation	: irritation, difficulty breathing, lung damage		
Ingestion	: irritation, vomiting, diarrhea		
Skin Contact	: irritation		
Eye Contact	: irritation		
Immediate Effects	: skin irritation, eye irritation		
Delayed Effects	: lung damage		
Medical Conditions Aggravated by Exposure	: respiratory disorders		

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Irritation/Corrosivity Data : skin irritation, eye irritation

Glycol ether: Primary Skin Irritation Index 2.5, The material was found to be moderately irritating.

Respiratory Sensitization : Not available

Dermal Sensitization : Not available

Germ Cell Mutagenicity : Not available

Glycol ether: No mutagenicity was observed (Ames test).

Carcinogenicity : Aluminum (CAS No. 7429-90-5)

ACGIH: A4- Not Classifiable as a Human Carcinogen

Reproductive Toxicity : Not available

Specific Target Organ Toxicity –Single Exposure

: Not available

Specific Target Organ Toxicity –Repeated Exposure

: lungs

Aspiration Hazard : 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 river, and the drain ditch.

Ecotoxicity : Glycol ether -B

### Fish

LC50(96h) Fish, fresh water (brachydanio rerio) > 5,000mg/L

LC50(96h) Fathead minnow (Pimephales promelas) > 10,000mg/L

### Algae

EC50(72h) Desmodesmus subspicatus >500mg/L

### Invertebrate

EC50(48h) Daphnia magna > 500mg/L

Persistence and : Not Available

Degradability

Bioaccumulative : Not Available

Potential

Mobility : Not Available



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Other Adverse Effects : Not Available

### 13. Disposal Considerations

Disposal Methods : Dispose in accordance with all applicable regulations.

Component Waste Numbers : The U.S. EPA has not published waste numbers for this product's components.

Disposal of Contaminated Packaging : Empty containers may contain product residue. Dispose in accordance with all applicable regulations.

Comply with all USA, 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)

Shipping Name : Printing ink

UN Number : Not Applicable

Hazardous Materials : Not Applicable

Sea Transport (IMDG)

Proper Shipping Name : Printing ink

UN Number : Not Applicable

Marine Pollutant : No component of this material is specifically listed in the IMDG Code as an identified marine pollutant.

Air Transport (ICAO/IATA)

Proper Shipping Name : Printing ink

UN Number : Not Applicable

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## 15. Regulatory Information

U.S. Federal Regulations : This material contains one or more of the following chemicals required to be identified under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA(40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Aluminum(7429-90-5)

SARA 313 : 1.0% de minimis concentration (dust or fume only)

SARA 311/312 : Acute Health Yes  
(40 CFR 370) Chronic Health Yes  
Fire Yes  
Pressure No  
Reactive No

U.S State Regulations : The following components appear on one or more of the following state hazardous substances lists:

Component	CAS No.	CA	MA	MN	NJ	PA
Aluminum	7429-90-5	Yes	Yes	Yes	Yes	Yes

California Proposition 65 : Not regulated

Others : Please refer to any other federal, state and local regulations.

Canadian WHMIS : Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which fall under WHMIS criteria specified in the Controlled Products Regulations and present above the threshold limits listed on the IDL.

Aluminum(7429-90-5) : 1%

Chemical Inventory Listings: Component Analysis -Inventory

Component	CAS No.	US	CA	EU	AU	PHIL	JP	KR	CN	NZ
Glycol ether-A	Trade Secret	Yes	NSL	EIN	No	No	Yes	No	Yes	No
Glycol ether-B	Trade Secret	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Aluminum	7429-90-5	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes



Product Name: SS21 ink Silver  
SDS No.: 037-S080271  
First issue: 2014/06/18  
Revised:

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### 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 does 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.