1. Identification

Product Name : SS21 ink Magenta
Order No. : SPC-0501M / SPC-0588M
General Use : Ink for ink jet printer
Product Description : Solvent pigment ink
SDS Number : 037-S080497

Manufacturer
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
Eye Damage / Irritation : Category 2
Specific Target Organ Toxicity (Single Exposure) : Category 2 (central nervous system)
Specific Target Organ Toxicity (Repeated Exposure) : Category 3 (drowsiness and dizziness)

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

Product Name: SS21 ink Magenta
SDS No. 037-S080497
First issue: 2007/07/31
Revised: 2015/06/15

Symbol

Signal Word
Warning

Hazard Statements
H227 Combustible liquid
H319 Cause serious eye irritation
H371 May cause damage to central nervous system
H336 May cause drowsiness and dizziness

Precautionary Statements

[Prevention]
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260 Do not breathe vapor or mist.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/clothing and eye/face protection.

[Response]
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor/physician.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire: Use appropriate media for extinction.

[Storage]
P405 Store locked up.

[Disposal]
P501 Dispose of contents and container in accordance with local, regional, national and international regulation.

NFPA Rating (scale 0 – 4)
Health = 2
Flammability = 2
Instability = 0
Special = None
3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>No</th>
<th>Chemical Name</th>
<th>Wt%</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Glycol ether solvents</td>
<td>65-75</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>2</td>
<td>Propylene glycol monomethyl ether acetate</td>
<td>10-20</td>
<td>108-65-6</td>
</tr>
<tr>
<td>3</td>
<td>Lactone solvent series</td>
<td>5-15</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>4</td>
<td>Vinyl resin</td>
<td>1-5</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>5</td>
<td>Quinacridone pigment series</td>
<td>1-5</td>
<td>Trade Secret</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Inhalation : Remove person to fresh air and keep comfortable for breathing. 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. Continue rinsing. Get immediate medical attention.

Skin Contact : Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. Get medical attention if irritation develops.

Ingestion : If swallowed, get medical attention.

Most Important Symptoms/Effects

Acute : eye irritation, central nervous system depression, drowsiness and dizziness

Delayed : no information on significant adverse effects

Indication of Immediate Medical Attention and Special Treatment : Treat symptomatically and supportively.
5. Fire Fighting Measures

- **Flammable Properties**
  - Flash point: 64.2°C (TCC)
  - Auto Ignition Temperature: 169°C
  - Flammable point: 2.2% to 33.0%

- **Extinguishing Media**
  - carbon dioxide, regular dry chemical, water spray, alcohol resistant foam

- **Unsuitable Extinguishing Media**
  - Do not scatter spilled material with high-pressure water streams.

- **Special Hazards Arising from the Chemical**
  - Combustible liquid and vapor.

- **Hazardous Combustion Products**
  - oxides of carbon, acid halides

- **Fire Fighting Measures**
  - Move container 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 away from the ends of tanks. Avoid inhalation of material or combustion by-products.
  - For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire.

- **Special Protective Equipment and Precautions for Firefighters**
  - Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

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.
Methods and Materials for Containment and Cleaning Up:

- Eliminate all ignition sources if safe to do so. Stop leak if possible without personal risk. Reduce vapors with water spray.

  **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.

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### 7. Handling and Storage

**Precautions for Safe Handling:**

Keep away from heat, sparks, open flame, and hot surfaces. No smoking. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. 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. Avoid release to the environment.

**Conditions for Safe Storage, including any Incompatibilities:**

- Store and handle in accordance with all current regulations and standards. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Grounding and bonding required. Store locked up. Keep separated from incompatible substances.

---

### 8. Exposure Controls / Personal Protection

**Exposure Limit Values:**

- ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

**Component Biological Limit Values:**

- There are no biological limit values for the component(s) of this product.

**Exposure Controls**

**Occupational Exposure Controls**

**Appropriate Engineering Controls:**

- Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.
Personal Protection
Respiratory : Consult with a health and safety professional for specific respirators appropriate for your use.
Hand Protection : Wear appropriate chemical resistant gloves.
Eye Protection : Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
Skin Protection : Wear appropriate chemical resistant clothing.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance Color</td>
<td>Red</td>
</tr>
<tr>
<td>Odor</td>
<td>slight solvent odor</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point / Boiling Range</td>
<td>&gt;=124 °C</td>
</tr>
<tr>
<td>Melting Point / Melting Range</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>64.2°C</td>
</tr>
<tr>
<td>Auto ignition temperature</td>
<td>169°C</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper / Lower Flammability or</td>
<td>2.2% to 33.0%</td>
</tr>
<tr>
<td>Explosive Limits</td>
<td></td>
</tr>
</tbody>
</table>
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 flames, sparks, and other sources of ignition. Containers may rupture or explode if exposed to heat. Avoid contact with incompatible materials.
Incompatible Materials : acids, bases, oxidizing materials, halogens
Hazardous Decomposition : Combustion: oxides of carbon, acid halides

11. Toxicological Information

Acute Toxicity : The component(s) of this material have been reviewed in various sources and the following selected endpoints are published:
Component Analysis - Propylene glycol monomethyl ether acetate (108-65-6)
LD50/LC50
Dermal LD50 Rabbit >5 g/kg; Oral LD50 Rat 8532 mg/kg
Lactone solvent series (Proprietary)
Inhalation LC50 Rat >5100 mg/m3 4h; Oral LD50 Rat 1540 mg/kg

Information on Likely Routes of Exposure
Inhalation : irritation, nausea, headache, drowsiness, dizziness, loss of coordination, unconsciousness, coma, kidney damage, liver damage
Ingestion: irritation, nausea, headache, drowsiness, dizziness, loss of coordination, unconsciousness, coma

Skin Contact: irritation, nausea, headache, drowsiness, dizziness, unconsciousness, coma

Eye Contact: irritation

Immediate Effects: eye irritation, central nervous system depression, drowsiness, dizziness

Delayed Effects: no information on significant adverse effects

Medical Conditions: No information available for the product.

Aggravated by Exposure: No information available for the product.

Irritation/Corrosivity: eye irritation

Respiratory Sensitization: No information available for the product.

Dermal Sensitization: No information available for the product.

Germ Cell Mutagenicity: No information available for the product.

Carcinogenicity: Component Carcinogenicity

<table>
<thead>
<tr>
<th>Lactone solvent series (Proprietary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC: Monograph 71 [1999]; Supplement 7 [1987]; Monograph 11 [1976] (Group 3 (not classifiable))</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vinyl resin (Proprietary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC: Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable))</td>
</tr>
</tbody>
</table>

Reproductive Toxicity: No information available for the product.

Specific Target Organ Toxicity - Single Exposure: central nervous system, drowsiness, dizziness

Specific Target Organ Toxicity - Repeated Exposure: No target organs identified.

Aspiration Hazard: No information available for the product.
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.

Component Analysis:

Aquatic Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Aquatic Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>96 Hr LC50 Pimephales promelas: 161 mg/L [static]</td>
</tr>
<tr>
<td>Invertebrate</td>
<td>48 Hr EC50 Daphnia magna Straus: &gt;500 mg/L</td>
</tr>
</tbody>
</table>

Lactone solvent series (Proprietary)

<table>
<thead>
<tr>
<th>Component</th>
<th>Aquatic Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algae</td>
<td>72 Hr EC50 Desmodesmus subspicatus: 360 mg/L; 96 Hr EC50 Desmodesmus subspicatus: 79 mg/L</td>
</tr>
<tr>
<td>Invertebrate</td>
<td>48 Hr EC50 Daphnia magna Straus: &gt;500 mg/L</td>
</tr>
</tbody>
</table>

Persistence and Degradability: Not available

Bioaccumulation: Not available

Mobility: Not available

Other Toxicity: Not available

13. Disposal Considerations

: Comply with all USA, national and local regulations.

Do not dump this product into sewers, on the ground or into any body of water.

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.
14. Transport Information

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

IATA Information: 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: Propylene glycol monomethyl ether acetate (108-65-6)
   IBC Code: Category Z
   Lactone solvent series (Proprietary)
   IBC Code: Category Y
TDG Information: Not regulated as dangerous goods for transport.
US DOT Information: Not regulated as dangerous goods for transport. *1

*1 Class combustible liquid (NA1993), Packing group III for quantities of 450 liters (119 gallons) or more; not regulated for smaller quantities

15. Regulatory Information

U.S. Federal Regulations: None of this product's components are listed 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), or require an OSHA process safety plan.
SARA Title III Section 311/312: Acute Health: Yes
   Chronic Health: No
   Fire: Yes
   Pressure: No
   Reactive: No
U.S. State Regulations: None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.

Canada: WHMIS CLASSIFICATION: B3, D2B.
Canadian WHMIS Ingredient Disclosure List (IDL): None of the product component(s) are listed on the Ingredients Disclosure List (IDL).
Chemical Inventory Listings

<table>
<thead>
<tr>
<th>Component</th>
<th>US</th>
<th>CA</th>
<th>EU</th>
<th>AU</th>
<th>PHIL</th>
<th>JP</th>
<th>KR</th>
<th>CN</th>
<th>NZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycol ether solvents (Proprietary)</td>
<td>Yes</td>
<td>NSL</td>
<td>EIN</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Propylene glycol monomethyl ether acetate(108-65-6)</td>
<td>Yes</td>
<td>DSL</td>
<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Lactone solvent series (Proprietary)</td>
<td>Yes</td>
<td>DSL</td>
<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Vinyl resin (Proprietary)</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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; 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
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