

Safety Data Sheets

1. Identification

| | |
|---|---|
| Product Name | : SS2 ink Cyan |
| Order No. | : SPC-0380C-2A /SPC-0411C-2A |
| General Use | : Ink for ink jet printer |
| Product Description | : Solvent pigment ink |
| SDS Number | : 037-S030518 |
| 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 | : 4851 Thurmon Tanner Parkway, STE 100 Flowery Branch, GA 30542, U.S.A. |
| Telephone No. | : +1-678-730-0170 |
| Emergency Telephone No. | : +1 866 928 0789 (within United States only, Toll free) +1 215 207 0061 |

2. Hazards Identification

[GHS Classification]

Physical Hazards

Flammable Liquids : Category 4

Health Hazards

Acute Toxicity – Oral : Category 4 (78-90% unknown)

Eye Damage / Irritation : Category 2

Germ Cell Mutagenicity : Category 1B

Carcinogenicity : Category 1B

Specific Target Organ Toxicity : Category 2 (central nervous system)
(Single Exposure)

Environmental Hazards

Hazardous to the Aquatic : Category 3

Environment - Acute Hazard

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



Safety Data Sheets

Product Name: SS2 ink Cyan

SDS No. 037-S030518

First issue: 2011/06/24

Revised: 2025/04/08

Safety Data Sheets

[GHS Label Elements]

Symbol



Signal Word

Danger

Hazard Statements

- H227 Combustible liquid
- H302 Harmful if swallowed
- H319 Cause serious eye irritation
- H340 May cause genetic defects
- H350 May cause cancer
- H371 May cause damage to central nervous system
- H402 Harmful to aquatic life

Precautionary Statements

[Prevention]

- P201 Obtain SDS (Safety Data Sheet) and printer's operation manual before use.
- P202 Do not handle until all safety precautions have been read and understood.
- 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.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/clothing and eye/face protection.

[Response]

- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- 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.
- (P301+)P330 IF SWALLOWED: Rinse mouth.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P370+P378 In case of fire: Use appropriate media for extinction.

[Storage]

- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.

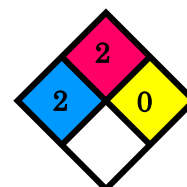
[Disposal]

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

Safety Data Sheets

NFPA Rating (scale 0 – 4)

Health = 2
 Flammability = 2
 Instability = 0
 Special = None



CANADIAN WHMIS SYMBOLS



3. Composition / Information on Ingredients

| No | Chemical Name | Wt% | CAS No. |
|----|-------------------------|----------|--------------|
| 1 | Glycol ether solvents | 75-85 | Trade Secret |
| 2 | Lactone solvent series | 10-20 | Trade Secret |
| 3 | Phthalocyanine blue | 1-10 | Trade Secret |
| 4 | Vinyl resin | 1-5 | Trade Secret |
| 5 | Solvent naphtha | 1-10 | Trade Secret |
| 6 | 1,2,4-Trimethyl benzene | 0.1-1 | 95-63-6 |
| 7 | 1,3,5-Trimethylbenzene | 0.1-1 | 108-67-8 |
| 8 | Cumene | 0.01-0.1 | 98-82-8 |

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. |

Safety Data Sheets

Most Important Symptoms/Effects

| | |
|---|---|
| Acute | : eye irritation, central nervous system damage |
| Delayed | : mutagenic effects, cancer |
| Indication of Immediate | : Treat symptomatically and supportively. |
| Medical Attention and Special Treatment Needed, If Needed | |

5. Fire Fighting Measures

| | |
|---|---|
| Flammable Properties | : Flash point 69.1°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. |

Safety Data Sheets

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.

7. Handling and Storage

Precautions for Safe Handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Do not breathe vapor or mist. 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.

Safety Data Sheets

8. Exposure Controls / Personal Protection

Exposure Limit Values

| No | Chemical Name | | TWA |
|----|-----------------------------------|--------|--|
| 1 | 1,2,4-Trimethyl benzene (95-63-6) | NIOSH | 25 ppm TWA; 125 mg/m ³ TWA |
| 2 | 1,3,5-Trimethylbenzene (108-67-8) | NIOSH | 25 ppm TWA; 125 mg/m ³ TWA |
| 3 | Cumene (98-82-8) | ACGIH | 50 ppm TWA |
| | | OSHA | 50 ppm TWA; 245 mg/m ³ TWA prevent or reduce skin absorption |
| | | NIOSH | 50 ppm TWA; 245 mg/m ³ TWA Potential for dermal absorption |
| | | Mexico | 50 ppm TWA LMPE-PPT; 245 mg/m ³ TWA LMPE-PPT 75 ppm STEL [LMPE-CT]; 365 mg/m ³ STEL [LMPE-CT] Skin - potential for cutaneous absorption |

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 Protection : Consult with a health and safety professional for specific respirators appropriate for your use.



Safety Data Sheets

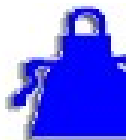
Hand Protection : Wear appropriate chemical resistant gloves.



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

| | | |
|--|------------------|-------------------------|
| Appearance | - Physical State | : Liquid |
| | - Color | : Cyan |
| Odor | | : slight solvent odor |
| pH | | : Not available |
| Boiling Point / Boiling Range | | : ≥ 176 °C |
| Melting Point / Melting Range | | : Not available |
| Decomposition Temperature | | : Not available |
| Flash Point | | : 69.1°C (closed cup) |
| Auto ignition temperature | | : 169°C |
| Flammability (Solid, Gas) | | : Not applicable |
| Explosive Properties | | : Not available |
| Oxidizing Properties | | : Not available |
| Upper / Lower Flammability or Explosive Limits | | : 2.2% to 33.0% |
| Vapor Pressure | | : Not available |
| Specific Gravity | | : 0.972 (20 °C) |
| Solubility | | : Not available |
| Water Solubility | | : Not available |
| Partition Coefficient (n-octanol / Water) | | : Not available |
| Viscosity | | : 3.3 ± 0.3 (20° C) |

Safety Data Sheets

| | |
|------------------|-----------------|
| Vapor Density | : Not available |
| Evaporation Rate | : Not available |
| VOC | : 887.4 g/L |

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 - LD50/LC50 | |

Glycol ether solvents (Proprietary)

Oral LD50 Rat 6500 µL/kg

Lactone solvent series (Proprietary)

Oral LD50 Rat 1540 mg/kg; Inhalation LC50 Rat >5100 mg/m³ 4 h

Solvent naphtha (Proprietary)

Oral LD50 Rat 8400 mg/kg; Dermal LD50 Rabbit >2000 mg/kg;

Inhalation LC50 Rat 3400 ppm 4 h

1,2,4-Trimethyl benzene (95-63-6)

Dermal LD50 Rabbit >3160 mg/kg; Inhalation LC50 Rat 18 g/m³ 4 h;

Oral LD50 Rat 3280 mg/kg

1,3,5-Trimethylbenzene (108-67-8)

Inhalation LC50 Rat 24 g/m³ 4 h

Cumene (98-82-8)

Dermal LD50 Rabbit 12300 µL/kg; Inhalation LC50 Rat >3577 ppm 6

Safety Data Sheets

h: Oral LD50 Rat 1400 mg/kg

Information on Likely Routes of Exposure

Inhalation : irritation, nausea, vomiting, headache, drowsiness, dizziness, loss of coordination, unconsciousness, coma, tremors, nerve damage, cancer, mutagenic effects

Ingestion : irritation, nausea, vomiting, headache, drowsiness, dizziness, loss of coordination, unconsciousness, coma, tremors, heart damage

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

Eye Contact : irritation, eye damage

Immediate Effects : eye irritation, central nervous system damage

Delayed Effects : mutagenic effects, cancer

Medical Conditions : No information available for the product.

Aggravated by Exposure

Irritation/Corrosivity : eye irritation

Data

Respiratory : No information available for the product.

Sensitization

Dermal Sensitization : No information available for the product.

Germ Cell Mutagenicity : Available data characterizes component(s) of this product as a germ cell mutagenic hazard.

Carcinogenicity : Component Carcinogenicity

Lactone solvent series (Proprietary)

| | |
|-------|---|
| IARC: | Monograph 71 [1999]; Supplement 7 [1987]; Monograph 11 [1976] (Group 3 (not classifiable)) |
|-------|---|

Vinyl resin (Proprietary)

| | |
|-------|---|
| IARC: | Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable)) |
|-------|---|

Cumene (98-82-8)

| | |
|-------|---|
| IARC: | Monograph 101 [2012] (Group 2B (possibly carcinogenic to humans)) |
| NTP: | Reasonably Anticipated To Be A Human Carcinogen |
| DFG: | Category 3B (could be carcinogenic for man) |
| OSHA: | Present |

Reproductive Toxicity : No information available for the product.

Safety Data Sheets

Specific Target Organ : central nervous system
 Toxicity - Single Exposure
 Specific Target Organ : No target organs identified.
 Toxicity - Repeated Exposure
 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.

Ecotoxicity : Harmful to aquatic life.

Component Analysis - : Lactone solvent series (Proprietary)

Aquatic Toxicity

| | |
|---------------|--|
| Algae: | 72 Hr EC50 <i>Desmodesmus subspicatus</i> : 360 mg/L; 96 Hr EC50 <i>Desmodesmus subspicatus</i> : 79 mg/L |
| Invertebrate: | 48 Hr EC50 <i>Daphnia magna</i> Straus: >500 mg/L |

Solvent naphtha (Proprietary)

| | |
|---------------|---|
| Fish: | 96 Hr LC50 <i>Oncorhynchus mykiss</i> : 9.22 mg/L |
| Invertebrate: | 48 Hr EC50 <i>Daphnia magna</i> : 6.14 mg/L |

1,2,4-Trimethyl benzene (95-63-6)

| | |
|---------------|---|
| Fish: | 96 Hr LC50 <i>Pimephales promelas</i> : 7.19 - 8.28 mg/L [flow-through] |
| Invertebrate: | 48 Hr EC50 <i>Daphnia magna</i> : 6.14 mg/L |

1,3,5-Trimethylbenzene (108-67-8)

| | |
|-------|---|
| Fish: | 96 Hr LC50 <i>Pimephales promelas</i> : 3.48 mg/L |
|-------|---|

Cumene (98-82-8)

| | |
|--------|--|
| Fish: | 96 Hr LC50 <i>Pimephales promelas</i> : 6.04 - 6.61 mg/L [flow-through]; 96 Hr LC50 <i>Oncorhynchus mykiss</i> : 4.8 mg/L [flow-through]; 96 Hr LC50 <i>Oncorhynchus mykiss</i> : 2.7 mg/L [semi-static]; 96 Hr LC50 <i>Poecilia reticulata</i> : 5.1 mg/L [semi-static] |
| Algae: | 72 Hr EC50 <i>Pseudokirchneriella subcapitata</i> : 2.6 |

Safety Data Sheets

| | |
|---------------|--|
| | mg/L |
| Invertebrate: | 48 Hr EC50 Daphnia magna: 0.6 mg/L; 48 Hr EC50 Daphnia magna: 7.9 - 14.1 mg/L [Static] |

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 : Cumene (98-82-8)

| | | |
|---------|-------|-------------------------------------|
| Numbers | RCRA: | waste number U055 (Ignitable waste) |
|---------|-------|-------------------------------------|

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.

US DOT Information

Shipping Name : Combustible liquid, n.o.s.

(Contains: Glycol ether solvents, Lactone solvent series, Solvent naphtha)

UN Number : NA1993

Hazardous Class : Combustible liquid

Packing Group (PG) : III

Safety Data Sheets

TDG Information : Not regulated as dangerous goods for transport.
 Marine Pollutant : Lactone solvent series (Proprietary)
 IBC Code: Category Y
 1,3,5-Trimethylbenzene (108-67-8)
 IMDG: IMDG regulated marine pollutant (UN2325)

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.

1,2,4-Trimethyl benzene (95-63-6)

| | |
|-----------|--------------------------------|
| SARA 313: | 1.0 % de minimis concentration |
|-----------|--------------------------------|

Cumene (98-82-8)

| | |
|-----------|------------------------------------|
| SARA 313: | 1.0 % de minimis concentration |
| CERCLA: | 5000 lb final RQ; 2270 kg final RQ |

SARA Title III Section 311/312 : Acute Health: Yes
 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 |
|-------------------------|----------|-----|-----|-----|-----|-----|
| 1,2,4-Trimethyl benzene | 95-63-6 | No | Yes | Yes | Yes | Yes |
| 1,3,5-Trimethylbenzene | 108-67-8 | Yes | Yes | No | No | No |
| Cumene | 98-82-8 | Yes | Yes | Yes | Yes | Yes |

California Proposition 65 : **WARNING:**



This product can expose you to chemicals including Cumene, Ethylbenzene, Vinyl Chloride, Ethylene Glycol Monoethyl Ether, Acetaldehyde, Methanol and Benzene which are known to the State of California to cause cancer/ birth defects or other reproductive harm. For more information go to

Safety Data Sheets

www.P65Warnings.ca.gov.

- Canada : WHMIS CLASSIFICATION: B3, D2A, D2B.
- Canadian WHMIS : Components of this material have been checked against the Canadian
 Ingredient Disclosure List (IDL) : 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.
- 1,2,4-Trimethyl benzene (95-63-6) : 0.1%
- 1,3,5-Trimethylbenzene (108-67-8) : 0.1%
- Chemical Inventory : Component Analysis - Inventory

Listings

| Component | US | CA | EU | AU | PHIL | JP | KR | CN | NZ |
|---|-----|-----|-----|-----|------|-----|-----|-----|-----|
| Glycol ether solvents (Proprietary) | Yes | NSL | EIN | No | No | Yes | No | Yes | No |
| Lactone solvent series (Proprietary) | Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | Yes |
| Phthalocyanine blue (Proprietary) | Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | Yes |
| Vinyl resin (Proprietary) | Yes | DSL | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Solvent naphtha (Proprietary) | Yes | DSL | EIN | Yes | Yes | No | Yes | Yes | Yes |
| 1,2,4-Trimethyl benzene (95-63-6) | Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | Yes |
| 1,3,5-Trimethylbenzene (108-67-8) | Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | Yes |
| Cumene (98-82-8) | Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | Yes |

Safety Data Sheets

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

Other Information

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