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### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

#### **Material Name**

Dye Sublimation Ink Sb320 Black D

#### **Product Description**

SB320-KD-BB

### **Product Use**

INK JET ink

#### **Restrictions on Use**

None known.

#### **Manufacturer Information**

Mimaki Engineering Co., Ltd 2182-3 Shigeno-otsu, Tomi-shi, Nagano 389-0512 Japan Telephone number: +81-268-64-2413

### **Importer / Distributor Information**

MIMAKI AUSTRALIA PTY LTD.

Unit 14, 38-46 South Street, Rydalmere, NSW 2116, Australia

Telephone number: + 61-2-8036-4500

### **Emergency telephone number**

+61 2 8014 4558 (within Australia only) 18000 74234 (within Australia only) +65 3158 1074

### **Section 2 - HAZARDS IDENTIFICATION**

Classified to Globally Harmonised System of Classification and Labelling of Chemicals, Third revised edition, published by the United Nations as modified under Schedule 6 of the Work Health and Safety Regulation. GHS Classification

Skin Sensitization - Category 1A

#### **GHS Label Elements**

Symbol(s)



### Signal Word

Warning

#### **Hazard Statement(s)**

May cause allergic skin reaction.

# $Precautionary \ Statement(s) \\$

### **Prevention**

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

Avoid breathing dust/fume/gas/mist/vapours/spray.

Contaminated work clothing should not be allowed out of the workplace.

#### Response

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

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

#### Storage

None needed according to classification criteria.

### **Disposal**



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# **Safety Data Sheets**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Potential Environmental Effects** 

No information available for the product.

Other Hazards Which Do Not Result in Classification

None known.

**Main Symptoms and Emergency Overview** 

May cause allergic skin reaction.

### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| CAS           | Component Name       | Percent |
|---------------|----------------------|---------|
| 7732-18-5     | Water                | 55-65   |
| 57-55-6       | 1,2-Propylene glycol | 5-15    |
| Not Available | Glycerols            | 1-10    |
| Not Available | Dye                  | 1-10    |
| 56-81-5       | Glycerol             | 5-15    |
| Not Available | Other                | <10     |
| Not Available | Preservative         | <0.2    |

### **Section 4 - FIRST AID MEASURES**

#### Inhalation

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician.

#### Skin

Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. If skin irritation or rash occurs: Get medical advice/attention. Contaminated clothing should be removed and laundered before reuse.

#### Eves

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

#### Ingestion

If swallowed, get medical attention.

**Most Important Symptoms/Effects** 

**Symptoms: Immediate** 

mild skin irritation, allergic skin reaction

**Symptoms: Delayed** allergic skin reaction

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

### Section 5 - FIRE FIGHTING MEASURES

### **Extinguishing Media**

#### **Suitable 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

Negligible fire hazard. Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

#### **Hazardous Combustion Products**

oxides of carbon, acrolein

### **Special Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

**Fire Fighting Measures** 

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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.

### Hazchem/Emergency Action Code

No data available

### Section 6 - ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

#### **Environmental Precautions**

Avoid release to the environment.

#### Methods and Materials for Containment and Cleaning Up

Avoid heat, flames, sparks and other sources of ignition. Stop leak if possible without personal risk. Reduce vapors with water spray. Keep unnecessary people away, isolate hazard area and deny entry. Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Large spills: Dike for later disposal. Stay upwind and keep out of low areas.

### **Section 7 - HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Do not eat, drink, or smoke when using this product. Wear suitable protective gloves and eye/face protection. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

### Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria.

Further information on storage conditions: Store and handle in accordance with all current regulations and standards. Store in a well-ventilated area. Keep container tightly closed. Keep cool. Keep separated from incompatible substances.

#### **Incompatible Materials**

acids, bases, oxidizing materials, metal oxides, peroxides, reducing agents, combustible materials, halocarbons, metals, metal salts

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Component Exposure Limits** 

| 1,2-Propylene | 57-55-6  |
|---------------|--|
| glycol        |  |
| Safe Work     | 150 ppm TWA total vapour and particulates; 474 mg/m3 TWA total vapour and particulates; 10 mg/m3 |
| Australia.    | TWA particulates only  |
| Glycerol      | 56-81-5  |
| Safe Work     | 10 mg/m3 TWA (containing no asbestos and <1% crystalline silica ) inhalable dust, mist           |
| Australia.    |  |

# $EU-Occupational\ Exposure\ (98/24/EC)-Binding\ Biological\ Limit\ Values\ and\ Health\ Surveillance\ Measures$

There are no biological limit values for any of this product's components.

### **Engineering Controls**

Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

### Individual Protection Measures, such as Personal Protective Equipment

#### **Eye/face 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.

#### **Respiratory Protection**

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

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#### **Glove Recommendations**

Wear appropriate chemical resistant gloves.

### **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

| Appearance                      | black liquid         | Physical State                         | liquid        |
|---------------------------------|----------------------|--|---------------|
| Odor                            | characteristic odor  | Color                                  | black         |
| Odor Threshold                  | Not available        | рН                                     | 7 - 9         |
| Melting Point                   | Not available        | <b>Boiling Point</b>                   | Not available |
| <b>Boiling Point Range</b>      | Not available        | Freezing point                         | Not available |
| Evaporation Rate                | Not available        | Flammability (solid, gas)              | Not available |
| <b>Autoignition Temperature</b> | Not available        | Flash Point                            | (None)        |
| Lower Explosive Limit           | Not available        | Decomposition temperature              | Not available |
| Upper Explosive Limit           | Not available        | Vapor Pressure                         | Not available |
| Vapor Density (air=1)           | Not available        | Specific Gravity (water=1)             | Not available |
| Water Solubility                | (Easily soluble)     | Partition coefficient: n-octanol/water | Not available |
| Viscosity                       | 4 - 6 mPa-s (25 °C ) | Solubility (Other)                     | Not available |
| Density                         | 1 - 1.2 g/cm3        | Physical Form                          | liquid        |
| Molecular Weight                | Not available        |  |               |

# **Section 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, metal oxides, peroxides, reducing agents, combustible materials, halocarbons, metals, metal salts

#### **Hazardous decomposition products**

oxides of carbon, acrolein

### **Section 11 - TOXICOLOGICAL INFORMATION**

### **Information on Likely Routes of Exposure**

#### Inhalation

irritation, difficulty breathing, nausea, vomiting

### **Skin Contact**

irritation, allergic skin reaction

### **Eve Contact**

irritation

#### **Ingestion**

nausea, vomiting, diarrhea, headache, dizziness, drowsiness, stomach pain

### **Acute and Chronic Toxicity**

### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

#### Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

1,2-Propylene glycol (57-55-6)

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Oral LD50 Rat 20 g/kg

Dermal LD50 Rabbit 20800 mg/kg

Glycerol (56-81-5)

Oral LD50 Rat 12600 mg/kg

Dermal LD50 Rabbit >10 g/kg

Inhalation LC50 Rat >570 mg/m3 1 h

**Immediate Effects** 

mild skin irritation, allergic skin reaction

**Delayed Effects** 

allergic skin reaction

**Irritation/Corrosivity Data** 

mild skin irritation

**Respiratory Sensitization** 

No information available for the product.

**Dermal Sensitization** 

May cause an allergic skin reaction.

**Component Carcinogenicity** 

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA

**Germ Cell Mutagenicity** 

No information available for the product.

**Reproductive Toxicity** 

No information available for the product.

Specific Target Organ Toxicity - Single Exposure

No target organs identified.

**Specific Target Organ Toxicity - Repeated Exposure** 

No target organs identified.

**Aspiration hazard** 

Not expected to be an aspiration hazard.

**Medical Conditions Aggravated by Exposure** 

kidney disorders, skin disorders and allergies

# **Section 12 - ECOLOGICAL INFORMATION**

**Component Analysis - Aquatic Toxicity** 

| 1,2-Propylene | 57-55-6   |
|---------------|---|
| glycol        |   |
| Fish:         | LC50 96 h Oncorhynchus mykiss 51600 mg/L [static]; LC50 96 h Oncorhynchus mykiss 41 - 47 mL/L       |
|               | [static]; LC50 96 h Pimephales promelas 51400 mg/L [static]; LC50 96 h Pimephales promelas 710 mg/L |
| Algae:        | EC50 96 h Pseudokirchneriella subcapitata 19000 mg/L IUCLID   |
| Invertebrate: | EC50 48 h Daphnia magna >1000 mg/L [Static ] EPA  |
| Glycerol      | 56-81-5   |
| Fish:         | LC50 96 h Oncorhynchus mykiss 51 - 57 mL/L [static ]  |

### Persistence and Degradability

No information available for the product.

### **Bioaccumulative Potential**

No information available for the product.

#### Mobility in soil

No information available for the product.

#### Other adverse effects

No additional information available.

### **Section 13 - DISPOSAL CONSIDERATIONS**

| Disposai Metnods |             |
|------------------|-------------|
|                  |             |
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Dispose in accordance with all applicable regulations.

# **Section 14 - TRANSPORT INFORMATION**

ADG Information:

No Classification assigned.

IATA Information:

No Classification assigned.

ICAO Information:

No Classification assigned.

**IMDG** Information:

No Classification assigned.

### **Component Marine Pollutants (IMDG)**

Not regulated as dangerous goods.

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

| 1,2-Propylene glycol | 57-55-6    |
|----------------------|------------|
| IBC Code:            | Category Z |

### **Transportation Special Precautions**

No information available for the product.

### **Hazchem/Emergency Action Code**

No data available

# **Section 15 - REGULATORY INFORMATION**

### **Australia Regulations**

### Work Health and Safety Regulations - Prohibited Carcinogens

No component(s) are listed on the Prohibited Carcinogens list.

# Work Health and Safety Regulations - Restricted Carcinogens

No component(s) are listed on the Restricted Carcinogens list.

# Work Health and Safety Regulations - Restricted Hazardous Chemicals

No component(s) are listed on the Restricted Hazardous Chemicals list:

### Australia Work Health and Safety Regulations - Hazardous Chemicals Requiring Health Monitoring

None of this product's components are on the list.

### **Component Analysis - Inventory**

Water (7732-18-5)

| US  | CA  | EU  | AU  | PH  | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN  | NZ  | MX  | TW  |
|-----|-----|-----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|-----|-----|
| Yes | DSL | EIN | Yes | Yes | No        | No        | Yes            | No        | Yes | Yes | Yes | Yes |

### **1,2-Propylene glycol (57-55-6)**

| US  | CA  | EU  | AU  | PH  | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN  | NZ  | MX  | TW  |
|-----|-----|-----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|-----|-----|
| Yes | DSL | EIN | Yes | Yes | Yes       | Yes       | Yes            | No        | Yes | Yes | Yes | Yes |

### Glycerol (56-81-5)

| US  | CA  | EU  | AU  | PH  | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN  | NZ  | MX  | TW  |
|-----|-----|-----|-----|-----|-----------|-----------|----------------|-----------|-----|-----|-----|-----|
| Yes | DSL | EIN | Yes | Yes | Yes       | No        | Yes            | No        | Yes | Yes | Yes | Yes |



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### **Section 16 - OTHER INFORMATION**

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA -

California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*; CAS - Chemical Abstracts Service; CFR - Code of Federal Regulations (US); CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP -Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC – European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS -Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F -Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO -International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID -International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KECI - Korea Existing Chemicals Inventory; KECL - Korea Existing Chemicals List; KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX -Mexico; NDSL - Non-Domestic Substance List (Canada); NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL -Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV -Threshold Limit Value; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations / North American; US - United States; VLE - Exposure Limit Value (Mexico); WHMIS - Workplace Hazardous Materials Information System (Canada).

#### **Other Information**

#### Disclaimer:

The information set forth in this Safety Data Sheet does not purport to be all-inclusive and should be used only as a guide. While the information and recommendations set forth herein are believed to be accurate, the company makes no warranty regarding such information and recommendations and disclaims all liability from reliance thereon.