

**\*\*\*Section 1 - IDENTIFICATION\*\*\*****Product Identifier: Dye Sublimation Ink Sb411 Black T****Product Description**

SB411-KT-2L

**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 SINGAPORE PTE. LTD.  
31 Kaki Bukit Road 3 Singapore 417818 TechLink #02-03

Telephone number: +65-6508-2789

**Emergency telephone number**+65 3165 2217 (within Singapore only)  
+65 3158 1074**\*\*\*Section 2 - HAZARDS IDENTIFICATION\*\*\*****SPRING/SS 586-2:2014**Serious Eye Damage/Eye Irritation, Category 2A  
Skin sensitizer, Category 1**LABEL ELEMENTS****Symbol(s)****Signal Word**

WARNING

**Hazard Statement(s)****H319** Causes serious eye irritation.  
**H317** May cause an allergic skin reaction.**Precautionary Statement(s)****Prevention****P261** Avoid breathing dust/fume/gas/mist/vapours/spray.  
**P280** Wear protective gloves/protective clothing/eye protection/face protection.  
**P264** Wash thoroughly after handling.

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**P272** Contaminated work clothing should not be allowed out of the workplace.

## Response

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

**P333+P313** If skin irritation or rash occurs: Get medical advice/attention.

**P363** Wash contaminated clothing before reuse.

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

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

## Storage

None needed according to classification criteria.

## Disposal

**P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

## Other Hazards Which Do Not Result in Classification

None known.

### \*\*\*Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\*\*\*

CAS	Component	Percent
7732-18-5	Water	55-65
57-55-6	1,2-Propylene glycol	10-20
Trade Secret	Other	<10
56-81-5	Glycerin	5-15
Trade Secret	Painting material	1-10
Not Available	Preservative	<0.5

### \*\*\*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. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before re-use.

#### Eyes

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.

#### Ingestion

If swallowed, get medical attention.

#### Note to Physicians

Treat symptomatically and supportively.

#### Symptoms: Immediate

allergic skin reaction, mild skin irritation, eye irritation

#### Symptoms: Delayed

allergic skin reaction

### \*\*\*Section 5 - FIRE FIGHTING MEASURES\*\*\*

#### Flammable Properties

Negligible fire hazard.

## 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.

## 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

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.

## Hazardous Combustion Products

**Combustion:** oxides of carbon, acrolein, oxides of sulfur

## \*\*\*Section 6 - ACCIDENTAL RELEASE MEASURES\*\*\*

### Personal Precautions

Wear personal protective clothing and equipment, see Section 8.

### Environmental Precautions

Avoid release to the environment.

### Methods for Containment

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

### Cleanup Methods

**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.

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

### Precautions for Safe Handling

Avoid breathing dust, mist, fumes or vapors. 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. Contaminated work clothing should not be allowed out of the workplace.

### Conditions for Safe Storage

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

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

## \*\*\*Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION\*\*\*

### Component Exposure Limits

#### Glycerin (56-81-5)

Singapore: 10 mg/m<sup>3</sup> PEL (mist)

### Biological exposure limits

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.

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## PERSONAL PROTECTIVE EQUIPMENT

### Eyes/Face

Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

### Protective Clothing

Wear appropriate chemical resistant clothing.

### Glove Recommendations

Wear appropriate chemical resistant gloves.

### Respiratory Protection

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

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

<b>Physical State:</b>	Liquid	<b>Appearance:</b>	black liquid
<b>Color:</b>	black	<b>Physical Form:</b>	liquid
<b>Odor:</b>	characteristic odor	<b>Odor Threshold:</b>	Not available
<b>pH:</b>	7-9	<b>Melting Point:</b>	Not available
<b>Boiling Point:</b>	Not available	<b>Flash Point:</b>	Not flammable
<b>Decomposition Temperature:</b>	Not available	<b>Evaporation Rate:</b>	Not available
<b>LEL:</b>	Not available	<b>UEL:</b>	Not available
<b>Vapor Pressure:</b>	Not available	<b>Vapor Density (air = 1):</b>	Not available
<b>Density:</b>	Not available	<b>Specific Gravity (water = 1):</b>	1-1.2 (25 °C)
<b>Water Solubility:</b>	Easily soluble	<b>Log KOW:</b>	Not available
<b>Coeff. Water/Oil Dist:</b>	Not available	<b>Auto Ignition Temperature:</b>	Not available
<b>Viscosity:</b>	4-6 mPas (25 °C)	<b>Volatility:</b>	Not available
<b>Oxidizing Properties:</b>	Not available	<b>Explosive Properties:</b>	Not available
<b>Flammability (solid, gas):</b>	Not applicable		

## Other Property Information

No additional information is 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. Avoid contact with incompatible materials.

### Materials to Avoid (Incompatibilities)

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

**Hazardous Decomposition:****Combustion:** oxides of carbon, acrolein, oxides of sulfur**\*\*\*Section 11 - TOXICOLOGICAL INFORMATION\*\*\*****Acute and Chronic Toxicity****Component Analysis - LD50/LC50**

The component(s) of this material have been reviewed in various sources and the following selected endpoints are published:

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

Oral LD50 Rat 20 g/kg; Dermal LD50 Rabbit 20800 mg/kg

**Glycerin (56-81-5)**Oral LD50 Rat 12600 mg/kg; Dermal LD50 Rabbit >10 g/kg; Inhalation LC50 Rat >570 mg/m<sup>3</sup> 1 h**Immediate Effects**

allergic skin reaction, mild skin irritation, eye irritation

**Delayed Effects**

allergic skin reaction

**Irritation/Corrosivity Data**

mild skin irritation, eye irritation

**Respiratory Sensitizer**

No information available for the product.

**Dermal Sensitizer**

May cause an allergic skin reaction.

**Carcinogenicity****Component Carcinogenicity**

No data listed by ACGIH, IARC, NTP, DFG or OSHA is available for the component(s) of this product.

**Mutagenic Data**

No information available for the product.

**Reproductive Effects Data**

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**

No information available for the product.

**\*\*\*Section 12 - ECOLOGICAL INFORMATION\*\*\*****Ecotoxicity****Component Analysis - Aquatic Toxicity****1,2-Propylene glycol (57-55-6)**

**Fish:** 96 Hr LC50 Oncorhynchus mykiss: 51600 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 41 - 47 mL/L [static]; 96 Hr LC50 Pimephales promelas: 51400 mg/L [static]; 96 Hr LC50 Pimephales promelas: 710 mg/L

**Algae:** 96 Hr EC50 Pseudokirchneriella subcapitata: 19000 mg/L

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**Invertebrate:** 48 Hr EC50 Daphnia magna: >1000 mg/L [Static]

**Glycerin (56-81-5)**

**Fish:** 96 Hr LC50 Oncorhynchus mykiss: 51 - 57 mL/L [static]

**Bioaccumulation**

No information available for the product.

**Bioconcentration**

No information available for the product.

**Biodegradation**

No information available for the product.

**Persistence**

No information available for the product.

**Mobility**

No information available for the product.

**Other Information**

No additional information is available.

**\*\*\*Section 13 - DISPOSAL CONSIDERATIONS\*\*\***

**Disposal Methods**

Dispose in accordance with all applicable regulations.

**Component Waste Information**

There is no applicable waste information for this product's components.

**\*\*\*Section 14 - TRANSPORT INFORMATION\*\*\***

**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**

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

**IBC Code:** Category Z

**\*\*\*Section 15 - REGULATORY INFORMATION\*\*\***

**Singapore Regulations**

**Component Analysis**

No information was found for the substance(s) in Singapore regulations.

**Component Analysis - Inventory**

Component	CAS	US	CA	EU	AU	PHIL	JP	KR	CN	NZ
Water	7732-18-5	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
1,2-Propylene glycol	57-55-6	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Glycerin	56-81-5	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes

**\*\*\*Section 16 - OTHER INFORMATION\*\*\***

**Key / Legend**



## Safety Data Sheets

Product Name: Dye Sublimation Ink Sb411  
Black T  
SDS No. 037-W482852  
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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; LC50 - Lethal Concentration, 50%; LD50 - Lethal Dose, 50%; 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

### 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.