



Product Name : Dye Sublimation Ink 51

Black

MSDS No.031-33W08KC

First issue : July 31, 2007

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## Material Safety Data Sheets

### 1. Product and Company Identification

Product Name : Dye Sublimation Ink 51 Black  
Product Code : SPC-0493K  
General Use : Ink jet printing ink  
Product Description : Sublimation ink  
MSDS Number :031-33W08KC  
Manufacture  
Company Name : Mimaki Engineering Co., Ltd  
Address : 2182-3 Otsu, Shigeno, 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. : +81-268-64-2413

### 2. Hazards Identification

Emergency Overview : Wear full face shield if splashing hazard exists.  
Wear protective clothing.  
Allowed uses: hard surface cleaners; textile printing inks.  
Use with local exhaust ventilation.

Potential Health Effects : Virtually nontoxic after a single ingestion.

Inhalation : Not available.  
Eye Contact : Not available.  
Skin Contact : Not available.  
Ingestion : Not available.

Carcinogens : No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens.

HMIS III Rating (scale 0 – 4)  
Health = 1  
Flammability= 0  
Physical hazard = 0

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### 3. Composition / Information On Ingredients

No	Chemical Name	Wt%	CAS No.	Chemical Formula
1	Water	>=70.0-<=80.0	7732-18-5	H <sub>2</sub> O
2	Polyethylene glycol	>=1.0-<=10.0	25322-68-3	(C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> H <sub>2</sub> O
3	Glicerina-525	>=1.0-<=10.0	56-81-5	C <sub>3</sub> H <sub>8</sub> O <sub>3</sub>
4	Proprietary polymer additive	>=1.0-<=5.0	Trade Secret	Trade Secret
5	Trade secret 489909-5312-P-CH	>=1.0-<=5.0	Trade Secret	Trade Secret

OSHA Hazardous : Not hazardous

Components

(29 CFR 1910.1200)

### 4. First Aid Measures

Inhalation : Remove the affected individual into fresh air and keep the person calm.

Eye Contact : Wash affected eyes for at least 15 minutes under running water with eyelids held open.

Skin Contact : Wash thoroughly with soap and water.

Ingestion : Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

Protection To First-Aiders : Not available

Note To Physician : Treat according to symptoms (decontamination, vital functions), no known specific antidote.

### 5. Fire Fighting Measures

Flammable Properties : Flash point : >100 degree C (DIN 51758)  
 Autoignition: >200 degree C (DIN 51794)  
 Flammability: does not ignite

Extinguishing Media : water spray, dry extinguishing media, foam

Fire Fighting : Wear a self-contained breathing apparatus in confined areas or

Instructions : when exposed to combustion products.

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### 6. Accidental Release Measures

Personal Precautions	: Use personal protective clothing.
Environmental precautions	: Do not discharge into drains/surface waters/groundwater.
Cleanup	: Spills should be contained, solidified, and placed in suitable containers for disposal. For small amounts: Pick up with absorbent material(e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in accordance with regulations. For large amounts: Pump off product.

### 7. Handling And Storage

Handling	: No special measures necessary provided product is used correctly.
Storage	: Protect from temperatures below: 0 degree C Protect from temperatures above: 40 degree C

### 8. Exposure Controls / Personal Protection

#### Exposure Controls

##### Occupational Exposure Controls

Engineering Controls : It is better to place local exhaust equipment.

Components with workplace control parameters	Glicerina-525	OSHA	PEL 5mg/m3 Respirable fraction ; PEL 15mg/m3 Total dust
		ACGIH	TWA value 10mg/m3 Mist

##### Personal Protection

Respiratory Protection : Wear respiratory protection if ventilation is inadequate. Breathing protection if breathable aerosols/dust are formed.



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Hand Protection : Chemical resistant protective gloves.



Gloves

Eye Protection : Tightly fitting safety goggles(chemical goggles).



Safety Glasses

Skin Protection : To prevent ANY contact, wear impervious clothing such as gloves, apron, boots, or whole body suits made from neoprene, as appropriate.



Protective Apron



Boots



Gloves



Full Suit

Environmental Exposure Controls

: Not available.

### 9. Physical And Chemical Properties

Appearance	- Physical state	: liquid
	- Colour	: black
Odour		: product specific
pH		: 7-9 (20 degree C)
Boiling Point / Boiling Range		: approx. 100 degree C
Melting Point / Merging Range		: Not available
Flash Point		: >100 degree C
Flammability(solid, gas)		: does not ignite
Vapour Pressure		: approx. 23mbar (20 degree C)
Relative density		: approx. 1.05g/cm <sup>3</sup>
Solubility		: soluble
		Solvent(s): organic solvents
Water solubility		: dispersible
Viscosity		: 2.5-3.5mPa.s (20 degree C)
VOC		: < 2.5 g/l

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### 10. Stability And Reactivity

Conditions To Avoid	: Not available.
Stability	: No hazardous reactions when stored and handled according to instructions. The product is chemically stable.
Materials To Avoid	: Not available.
Hazardous Reactions/ Decomposition Products	: No hazardous reactions when stored and handled according to instructions. The product is chemically stable. Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

### 11. Toxicological Information

Acute Toxicity	: Oral: LD50/rat: > 2,000mg/kg
Eye Irritation	: Rabbit: non-irritant (OECD Guideline 405)
Skin Irritation	: Rabbit: non-irritant (OECD Guideline 404)
Sensitization	: Not available.
Mutagenicity	: Not applicable.
Others	: The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

### 12. Ecological Information

Ecotoxicity	: Acute and prolonged toxicity to fish: golden orfe/ LC50 (96 h): >100mg/l  Toxicity to microorganisms: OECD Guideline 209 bacterium/EC50: >1,000 mg/l Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.
Persistence And Degradability	: Not available.
Bioaccumulative Potential	: Not available.

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Other Adverse Effects : Adsorbable organically-bound halogen (AOX): 0%

### 13. Disposal Considerations

Must be dumped or incinerated in accordance with local regulations.

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

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

RCRA: None

### 14. Transport Information

Not classified as a dangerous good under transport regulations.

(USDOT / IMDG / IATA / ICAO)

### 15. Regulatory Information

OSHA Status : Not hazardous.

TSCA Status : released / listed

SARA Title III

Section 311/312 : Not hazardous.

(40 CFR 370)

State regulations	<u>CAS Number</u>	<u>Chemical name</u>	<u>State RTK</u>
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State RTK	56-81-5	Glicerina-525	MA, PA
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Others : This product contains a chemical(s) known to the state of California to cause cancer and birth defects or other reproductive harm.

### 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 dose 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.



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### Revision history

Version	Date	Item No.	Content
1.0	July 31, 2007		First issue
2.0	Oct 19, 2007	1	Change of address
3.0	Jun 16, 2008	3, 8, 9, 15	Add