



Reactive dye Ink Cartridge Black

Revised 3 August, 2004

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Reactive Dye Ink Cartridge Black**
 Product Code: **SPC-0291/0357 K**
 Company Identification
 Manufacturer's Name/Supplier Address: **Mimaki Engineering Co., Ltd.**
 5-9-41 Kita Shinagawa, Shinagawa-ku Tokyo 14-0001
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 Contact Person: **Masaaki Fujita**

2. COMPOSITION / INGREDIENT INFORMATION

Components (% by weight)

<u>Material</u>	<u>CAS Number</u>	<u>Contents%</u>	<u>Note</u>
Proprietary dyes and pigments		5-15%	
Diethylene glycol	111-46-6	5-15%	
Proprietary organic materials		<5%	
Water	7732-18-5	balance	

3. HAZARDS IDENTIFICATION

3.1 Emergency overview:

Ink component is a Black liquid that unlikely to cause harmful effects under normal conditions of handling and use. Avoid contact with eyes or clothing. In the case of skin contact, wash with soap and water. Keep out of reach of children.

3.2 Potential Health Effects:

- Eye:** Ink contact with eye may be mildly irritating. See section 11 for toxicology.
- Skin:** Ink contact with skin may cause irritation, swelling, or redness. See section 11 for toxicology.

- Inhalation:** Intentional exposure to ink vapors may cause respiratory irritation. Reactive dyes, of which this is one type, have been associated with Respiratory sensitization. See section 11 for toxicology.
- Ingestion:** May cause upset stomach. See section 11 for toxicology.

- Target Organ Effect:** Not enough data

4 FIRST AID MEASURES

- Eyes:** Immediately flush with room temperature, low pressure, and clean water for at least 15 minutes. Seek medical attention if eye irritation continues.

- Skin:** Wash surface area with soap and water. Wash soiled clothing before rewearing. Consult a physician if irritation continues.

- Inhalation:** Remove subject to ventilate fresh air. Consult physician if necessary.

- Ingestion:** Wash out mouth with water and give 200~300 ml (half a point) of water to drink. Do not induce vomiting. Obtain medical attention if ill effects occur.

5 FIRE FIGHTING MEASURES

- Flammability:** Not Flammable

- Extinguishing Media:** Dry chemical, carbon dioxide.

- Fire Fighting Instructions:** no special fire fighting procedures are required other than breathing apparatus. No special explosion hazards are known .

6 ACCIDENTAL RELEASE MEASURES

If spill occurs, use sponges to wipe-up ink, and then rinse area with damp cloth. Please waste in close container for disposal. Use proper ventilation. Do not dispose of waste to the sewer. No eye or skin protection required during clean-up. Wash hands with soap and water.

7 HANDLING AND STORAGE**7.1 Handling:**

Keep out of reach of children and do not drink ink. Do not store the cartridge in high or freezing temperatures. Keep cartridge out of direct sunlight. Do not dismantle cartridge. Do not store cartridges with oxidizing agents or explosives. Make sure cartridge is dry before insertion into printer housing.

7.2 Storage:

Store away from heat and humidity. Store out of direct sunlight. Keep container in a well-ventilated area.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: None

Exposure Control: None

Personal Protection: None required when cartridges are used as intended.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Black Liquid
Odor: None
pH: About 8
Boiling point: No Data
Steam pressure: No data available
Flash point: No data
Auto flammability: None
Explosion lower limit: None
Explosion upper limit: None
Oxidizing properties: None
Vapor density: No data
Relative density: No data available
Solubility in water: miscible
Solubility in fat: No data available
Partition coefficient: No data available
Viscosity: less than 5mPa's

10 STABILITY AND REACTIVITY

Stability: Stable

Hazardous Polymerization: No data available

Hazardous decomposition products: If involved in a fire, it may emit noxious and toxic fume.

Incompatibility: Oxidizers and explosives

11 TOXICOLOGICAL INFORMATION

Routes of Overexposure: Eye, skin, inhalation, and oral ingestion

Acute Health Hazards:

Inhalant toxicity: high concentration of mist may be irritant to the upper respiratory tract. Reactive dye, which is one type, have been associated with respiratory sensitization.

Oral toxicity: Unlikely to be hazardous if swallowed.

Chronic Health Hazards: None Known

Carcinogenicity: Short term test and consideration of the structure have shown that it is unlikely to present a carcinogenic hazard to man.

Toxicity: No data Available

Eye Irritating: Unlikely to cause eye irritation

Skin Irritating: Unlikely to cause skin irritation

Skin sensitizing: It is not skin sensitizer in animal test. Unlikely to cause skin sensitization.

12 ECOLOGICAL INFORMATION

Solubility: This product is soluble in water.

Toxicity to fish: Expected to be of low toxicity to fish, based on a consideration of the components.

DISPOSAL CONSIDERATIONS

Disposal should be in accordance with national and local requirements.

13 TRANSPORTATION INFORMATION

Not regulated as a hazardous material..

14 REGULATORY INFORMATION

Not classified as dangerous preparation under council directive 88/379/EEC

US information:

U.S. DOT Hazard Class Regulated? NO

U.S. OSHA Inhalation Hazard? NO

15 OTHER INFORMATION

This "Material Safety Data Sheet" contains health, safety, and environmental information. It does not replace any precautionary language or use and disposal information which accompanies the product. The information contained herein is believed to be accurate at the time of preparation, but should only be used as a guide. It is subject to revision from time to time. Mimaki Engineering does not warrant the completeness or accuracy of the information contained herein.

End of MSDS