

# Safety Data Sheets

## 1. Identification

Product Name : Reactive dye ink MLRC500 Black  
Order No. : MLR50-K-BJ  
General Use : Ink jet printing ink  
Product Description : Ink jet printing ink  
SDS Number : 037-W472630  
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 : 150 Satellite Boulevard NE, suite A, Suwanee, Georgia 30024,  
U.S.A.  
Telephone No. : +1-678-730-0170  
Emergency Telephone No. : +81-268-64-2281

## 2. Hazards Identification

[HCS Classification]

Physical Hazards

Flammable Liquids : Not classified

Health Hazards

Acute Toxicity – Oral : Category 4

Skin Corrosion / Irritation : Category 2

Eye Damage / Irritation : Category 2

Specific Target Organ Toxicity : Category 3 (respiratory irritation)  
(Single Exposure)

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

[Label Elements]

Symbol



Signal Word  
Warning

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### Hazard Statements

- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.

### Precautionary Statements

#### [Prevention]

- P261 - Avoid breathing gas/mist.
- P264 - Wash hands and eyes thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P271 - Use only outdoors or in a well-ventilated area.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.

#### [Response]

- P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
- P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
- P330 - Rinse mouth.
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P362+P364 - Take off contaminated clothing and wash it before reuse.

#### [Storage]

- P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
- P405 - Store locked up.

#### [Disposal]

- P501 - Dispose of contents/container in accordance with local/regional/national/international regulation (to be specified).

### 3. Composition / Information on Ingredients

No	Chemical Name	Wt%	CAS No.
1	Water	50-60	7732-18-5
2	Reactive Dye	1-10	Trade Secret
3	Additive B	1-10	Trade Secret
4	ADDITIVE E	1-10	Trade Secret
5	2-Pyrrolidone	1-10	616-45-5
6	Other	1-10	Trade Secret

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### 4. First Aid Measures

Inhalation	: Move the exposed person to fresh air. Seek medical attention if irritation or symptoms persist.
Eye Contact	: Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
Skin Contact	: Remove contaminated clothing. Seek medical attention if irritation or symptoms persist. Wash off immediately with plenty of soap and water.
Ingestion	: If swallowed, rinse mouth with water (only if the person is conscious). Drink 1 to 2 glasses of water. If you feel unwell, seek medical advice (show the label where possible).
General information	: See section 16 for further information.

### 5. Fire Fighting Measures

Extinguishing Media	: Use appropriate water spray, foam, powder, carbon dioxide(CO2).
Advice for firefighters	: Wear suitable respiratory equipment when necessary.

### 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	: Wear suitable protective clothing, gloves and eye/face protection.
Environmental precautions	: Avoid release to the environment.
Methods and material for containment and cleaning up	: For large spills: Clean spillage area thoroughly with plenty of water. For large spills: Water jet. Avoid raising dust. Flush down the drain with plenty of water.

### 7. Handling and Storage

Precautions for Safe Handling	: Occupational exposure controls. Avoid contact with eyes and skin.
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Conditions for Safe : Store in a cool, dry area. Keep containers tightly closed. Keep away  
Storage, including any from water.

Incompatibilities

### 8. Exposure Controls / Personal Protection

#### Exposure Limit Values

Additive B	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m <sup>3</sup> : 10
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m <sup>3</sup> : -

#### Exposure controls

Individual protection : Wear suitable protective equipment.  
measures

Respiratory : Wear suitable respiratory equipment when necessary.  
protection

Occupational : Wear suitable protective equipment.  
exposure controls



### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

Appearance	- Physical State	: liquid
	- Color	: Black
Odor		: Characteristic
pH		: No data available
Boiling Point		: > 100 °C
Melting Point		: No data available
Freezing Point		: No data available
Flash Point		: > 250 °C (BS EN 1234/1960)
Auto ignition temperature		: No data available
Explosive		: No data available
Oxidizing		: No data available
Flammability Limits		: No data available
Vapour Flammability		: No data available
Vapor Pressure		: No data available

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Relative Density	: No data available
Fat Solubility	: No data available
Partition Coefficient (n-octanol / Water)	: No data available
Vapour density	: No data available
Viscosity	: < 10 mPas (Cone & Plate)
Evaporation Rate	: No data available
Other information	
Conductivity	: No data available
Gas group	: No data available
Surface tension	: No data available

### 10. Stability and Reactivity

Reactivity	: Stable under normal conditions.
Chemical Stability	: Stable under normal conditions.
Possibility of Hazardous Reactions	: Avoid contact with: Reducing agents, Alkaline solution.
Conditions to Avoid	: None. Stable under normal conditions.
Incompatible Materials	: Stable under normal conditions.

### 11. Toxicological Information

Toxicological Information	: No data available
Information on toxicological effects	
Sensitization	: May cause sensitisation by skin contact.
Respiratory or skin sensitisation	: May cause sensitisation by skin contact.
Germ cell mutagenicity	: No mutagenic effects reported.
Repeated or prolonged exposure	: See section 16 for further information.

### 12. Ecological Information

Handling is noted because it might influence the environment when leaking and abandoning it.

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Especially, note that the product doesn't flow directly to ground, the river, and the drain ditch.

Ecotoxicity	: No data available. Aquatic toxicity against Bacteria, IC50/3hr 10 mg/l (OECD 209). Algae EC50/72h = oECD 201, No Information. Daphnia EC50/48h = oECD 202, No Information. Brachydanio Rerio LC50/96h = OECD 203, > 200 mg/L.
BOD5	: No data is available on this product.
COD	: No data is available on this product.
Metal content	: Metal content under the ETAD recommended limits. Chromium (Cr) None. Cobalt (Co) None. Copper (Cu) None.
Phosphorus content	: < 0.1%.
Biodegradability	: 82 % tested by OECD 302 B.
AOX	: < 1.0%.

### 13. Disposal Considerations

General information	: Dispose of in compliance with all local and national regulations.
Disposal methods	: Can be incinerated if in compliance with local and national regulations. Can be sent to landfill if in compliance with local and national regulations.
Disposal of packaging	: Can be incinerated if in compliance with local and national regulations. Empty containers can be sent to landfill after cleaning, if in compliance with local and national regulations.

### 14. Transport Information

Check a thing without a leak in a container.

Perform prevention of collapse of cargo surely.

ADR/RID	: The product is not classified as dangerous for carriage.
IMDG	: The product is not classified as dangerous for carriage.
IATA	: The product is not classified as dangerous for carriage.

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### 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation by : No data is available on this product.

Occupation Safety and  
Health Acts

Regulation by Toxic : No data is available on this product.

Chemicals Control Act

Regulation by Safety : No data is available on this product.

Control of Dangerous  
Substances Act

Regulation by Wastes : No data is available on this product.

Control Act

Persistent Organic : No data is available on this product.

Pollutants Control Act

Japanese regulatory : No data is available on this product.

information

American Management : No data available.

Information (OSHA

Regulations)

American Management : No data available.

Information (CERCLA

Regulations)

American Management : No data available.

Information (EPCRA

302 Regulations)

American Management : No data available.

Information (EPCRA

304 Regulations)

American Management : No data available.

Information (Material

by Montreal Protocol)

American Management : No data available.

Information (Material

by Rotterdam

Convention)

## Safety Data Sheets

### 16. Other Information

#### Data sources

The Chemical Database, The Department of Chemistry at the University of Akron(<http://ull.chemistry.uakron.edu/erd>) (Description(state))

The Chemical Database, The Department of Chemistry at the University of Akron(<http://ull.chemistry.uakron.edu/erd>) (Colour)

The Chemical Database, The Department of Chemistry at the University of Akron(<http://ull.chemistry.uakron.edu/erd>) (Odour)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Melting Point/Freezing Point)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Initial Boiling Point & Boiling Point Range)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Flash Point)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Upper / Lower Flammability or Explosive Limits)

National Institute of Technology and Evaluation(NITE)  
([http://www.safe.nite.go.jp/ghs/h18\\_bunrui.html](http://www.safe.nite.go.jp/ghs/h18_bunrui.html)) (Vapor Pressure)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)  
(Solubility)

International Programme on Chemical Safety(IPCS INCHEM)(<http://www.inchem.org/>) (Vapor Density)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Specific Gravity)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)  
(n-octanol / water partition coefficient)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)  
(Autoignition Temperature)

The Chemical Database, The Department of Chemistry at the University of Akron(<http://ull.chemistry.uakron.edu/erd>) (Molecular Weight)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Oral)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Dermal)  
OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>) (Skin Corrosion or Irritation)

OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>) (Serious Eye



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Damage or Irritation)

OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>) (Skin Sensitization)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Skin Sensitization)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Mutagenicity)

OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>) (Germ Cell Mutagenicity)

OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>) (Reproductive Toxicity)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Reproductive Toxicity)

OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>) (Specific Target Organ Toxicity (Single Exposure))

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Specific Target Organ Toxicity (Single Exposure))

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Specific Target Organ Toxicity (Repeated Exposure))

OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>) (Specific Target Organ Toxicity (Repeated Exposure))

SIDS (Fish)

SIDS (Shellfish)

SIDS (Algae)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>) (Persistence)

OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>) (Biodegradability).

### Further information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.