

Material Safety Data Sheets

1. Product and Company Identification

Product Name : Latex ink LX100 Black
Product Code : LX100-K-60-2
General Use : Ink for ink jet printer
Product Description : Aqueous ink
MSDS Number : 031-37W28KP
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

[GHS Classification]

Physical Hazards

Out of classification or No classification

Health Hazards

Skin Corrosion / Irritation : Category 3
Eye Damage / Irritation : Category 2A
Carcinogenicity : Category 2
Toxic to Reproduction : Category 2
Specific Target Organ Toxicity : Category 1
(Repeated Exposure)

Environmental Hazards

Out of classification or No classification

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[GHS Label Elements]

Symbol



Signal Word

Danger

Hazard Statements

H316 Causes mild skin irritation.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to the lungs through prolonged or repeated exposure.

Precautionary Statements

[Prevention]

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe gas/mist/vapors.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P281 Use personal protective equipment as required.

[Response]

P308 + P313 If exposed or concerned: Get medical advice/attention.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

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.

P314 Get medical advice/attention if you feel unwell.

[Disposal]

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

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3. Composition / Information on Ingredients

No	Chemical Name	Wt%	CAS No.	Chemical Formula
1	Diethylene glycol derivative	10-30	Trade Secret	Trade Secret
2	Alcohol derivative	20-40	Trade Secret	Trade Secret
3	Carbon black	1-5	1333-86-4	Trade Secret
4	Resin	5 -10	Trade Secret	Trade Secret
5	Amine	0.1-0.5	Trade Secret	Trade Secret
6	Water	30-50	7732-18-5	H ₂ O

OSHA Hazardous : This material is considered hazardous.

Components
 (29 CFR 1910. 1200)

4. First Aid Measures

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, oxygen should be administered by qualified personnel. If breathing has stopped, start artificial respiration at once. Get immediate medical attention.

Eye Contact : Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get immediate medical attention.

Skin Contact : Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Ingestion : If swallowed, get medical attention. Do not give anything by mouth to an unconscious person.

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5. Fire Fighting Measures

See Section 9 for Flammability Properties

NFPA Ratings : Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate
3 = Serious 4 = Severe

Flammable Properties : This product is not a fire hazard, but may burn. Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

Extinguishing Media : regular dry chemical, carbon dioxide, water spray, foam

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

Instructions : Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Dike for later disposal. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

6. Accidental Release Measures

Occupational spill/release : Wear personal protective clothing and equipment, see Section 8.

Collect spilled material in appropriate container for disposal. Keep unnecessary people away, isolate hazard area and deny entry. Avoid creation of vapor or mist.

7. Handling and Storage

Handling : Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Wash thoroughly after handling.

Storage : Store and handle in accordance with all current regulations and standards. Store in a tightly closed container. Keep away from incompatible materials.

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8. Exposure Controls / Personal Protection

Exposure Limit Values

Carbon black

ACGIH	: 3 mg/m ³ TWA (inhalable fraction)
OSHA	: 3.5 mg/m ³ TWA
NIOSH	: 3.5 mg/m ³ TWA; 0.1 mg/m ³ TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)
Mexico	: 3.5 mg/m ³ TWA LMPE-PPT 7 mg/m ³ STEL [LMPE-CT]

Biological Limit Value : There are no biological limit values for any of this product's components.

Exposure Controls

Occupational Exposure Controls

Engineering Controls : Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits

Personal Protection

Respiratory Protection : Any chemical cartridge respirator with organic vapor cartridge(s).

Hand Protection : Wear appropriate chemical resistant gloves.

Eye Protection : Wear splash resistant safety goggles with a faceshield.

Skin Protection : Wear appropriate chemical resistant clothing.

9. Physical and Chemical Properties

Appearance	- Physical State	: liquid
	- Color	: Black
Odor		: faint
pH		: 9
Boiling Point / Boiling Range		: Not available
Melting Point / Melting Range		: Not available
Flash Point		: None
Density		: Not available
Water Solubility		: soluble

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Viscosity : 13 mP · s
 Vapor Density : Not available
 VOC : 51%

10. Stability and Reactivity

Conditions to Avoid : Avoid contact with incompatible materials.
 Stability : Stable at standard temperatures and pressure.
 Materials to Avoid : halogens, oxidizing materials
 Hazardous Reactions / Decomposition Products : No reactivity hazard is expected. Hazardous polymerization will not occur.
 Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

11. Toxicological Information

Acute Toxicity	:	Oral LD50(rat)	Dermal LD50(rabbit)
	:	Water	>90 mL/kg
	:	Alcohol derivative	16 g/kg
	:	Diethylene glycol derivative	4920 µL/kg
	:	Carbon black	>15400 mg/kg
	:		3560µL/kg
Irritation	:	eye irritation, skin irritation, respiratory tract irritation	
Carcinogenicity	:	Carbon black	
	:	ACGIH : A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans	
	:	NIOSH : potential occupational carcinogen	
	:	IARC : Monograph 93 [2010]; Monograph 65 [1996] (Group 2B (possibly carcinogenic to humans))	
Medical Conditions	:	respiratory disorders	
Aggravated by Exposure	:		

12. Ecological Information

: Handling is noted because it might influence the environment when leaking and abandoning it.
 Especially, note that the product doesn't flow directly to ground, the



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river, and the drain ditch.

Ecotoxicity : Components of this product are hazardous to aquatic life

Component Analysis : Carbon black

Aquatic Toxicity Invertebrate: 24 Hr EC50 Daphnia magna: >5600 mg/L

13. Disposal Considerations

Disposal Methods : Dispose in accordance with all applicable regulations.
Do not dump this product into sewers, on the ground or into any body of water.

Component Waste : The U.S. EPA has not published waste numbers for this product's
Numbers components.

14. Transport Information

Check a thing without a leak in a container.
Perform prevention of collapse of cargo surely.

US DOT Information : Not regulated

TDG Information : Not regulated

UN Number : Not regulated

15. Regulatory Information

U.S. Federal Regulations

: None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA 311/312 : Acute Health: Yes Chronic Health: Yes Fire: No Pressure: No
Reactive: No

HMIS Ratings : Health: 1* Fire: 1 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate
3 = Serious 4 = Severe * = Chronic hazard



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U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Carbon black	1333-86-4	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

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 does 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.

Revision history

Version	Date	Content
1.0	2012/03/29	First issue