

Safety Data Sheets

1. Identification

Product Name : Latex ink LX101 Green
Order No. : LX101-G-60
Ink Ver. : 1
General Use : Ink for ink jet printer
Product Description : Aqueous ink
SDS Number : 037-W350538
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, suite A, Suwanee, Georgia 30024, U.S.A.
Telephone No. : +1-678-730-0170
Emergency Telephone No. : +81-268-64-2281

2. Hazards Identification

[GHS Classification]

Physical Hazards

Flammable Liquids : Not classified

Health Hazards

Skin Corrosion / Irritation : Category 2

Eye Damage / Irritation : Category 2A

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

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

[GHS Label Elements]

Symbol



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Signal Word

Warning

Hazard Statements

H315 Cause skin irritation

H319 Cause serious eye irritation

H335 May cause respiratory irritation.

Precautionary Statements

[Prevention]

P261 Avoid breathing gas/mist.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

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

[Response]

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.

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 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).

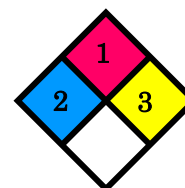
NFPA Rating (scale 0 – 4)

Health = 2

Flammability = 1

Instability = 3

Special = None



3. Composition / Information on Ingredients

| No | Chemical Name | Wt% | CAS No. |
|----|------------------------|-------|--------------|
| 1 | Glucol ether solvents | 10-20 | Trade Secret |
| 2 | Alcohol solvent series | 28-32 | Trade Secret |
| 3 | Pigment | 1-5 | Trade Secret |
| 4 | Organic ingredient | 1-5 | Trade Secret |

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| | | | |
|---|----------------------|---------|----------|
| 5 | Methyldiethanolamine | 0.1-1.5 | 105-59-9 |
|---|----------------------|---------|----------|

4. First Aid Measures

Description of first aid measures

- Eye Contact** : If this product comes in contact with the eyes:
 Wash out immediately with fresh running water.
 Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
 Seek medical attention without delay; if pain persists or recurs seek medical attention.
 Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
- Skin Contact** : If skin contact occurs:
 Immediately remove all contaminated clothing, including footwear.
 Flush skin and hair with running water (and soap if available).
 Seek medical attention in event of irritation.
- Inhalation** : If fumes or combustion products are inhaled remove from contaminated area.
 Lay patient down. Keep warm and rested.
 Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
 Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
 Transport to hospital, or doctor, without delay.
- Ingestion** : If swallowed do NOT induce vomiting.
 If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
 Observe the patient carefully.
 Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
 Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
 Seek medical advice.

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Most important symptoms and effects, both acute and delayed

See Section 11.

5. Fire Fighting Measures

| | |
|--|---|
| Extinguishing Media | : Alcohol stable foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only. |
| Special hazards arising from the substrate or mixture | |
| Fire Incompatibility | : Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result |
| Special protective equipment and precautions for fire-fighters | |
| Fire Fighting | : Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. |
| Fire/Explosion Hazard | : Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). May emit acrid smoke. Mists containing combustible materials may be explosive. Combustion products include: carbon dioxide (CO ₂) other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes. |

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6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

See section 8.

Environmental precautions

See section 12.

Methods and material for containment and cleaning up

Minor Spills

: Slippery when spilt.

Remove all ignition sources.

Clean up all spills immediately.

Avoid breathing vapours and contact with skin and eyes.

Control personal contact with the substance, by using protective equipment.

Contain and absorb spill with sand, earth, inert material or vermiculite.

Wipe up.

Place in a suitable, labelled container for waste disposal.

Major Spills

: Slippery when spilt.

Moderate hazard.

Clear area of personnel and move upwind.

Alert Fire Brigade and tell them location and nature of hazard.

Wear breathing apparatus plus protective gloves.

Prevent, by any means available, spillage from entering drains or water course.

No smoking, naked lights or ignition sources.

Increase ventilation.

Stop leak if safe to do so.

Contain spill with sand, earth or vermiculite.

Collect recoverable product into labelled containers for recycling.

Absorb remaining product with sand, earth or vermiculite.

Collect solid residues and seal in labelled drums for disposal.

Wash area and prevent runoff into drains.

If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

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7. Handling and Storage

| | |
|--|---|
| Precautions for Safe Handling | : Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. DO NOT allow clothing wet with material to stay in contact with skin |
| Conditions for Safe Storage, including any Incompatibilities | : Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS. Are incompatible with strong acids, acid chlorides, acid anhydrides, oxidising and reducing agents. |

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8. Exposure Controls / Personal Protection

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|--------------|---------------|---------------|---------------|---------------|
| As a product | Not Available | Not Available | Not Available | Not Available |

| Ingredient | Original IDLH | Revised IDLH |
|------------------------|---------------|---------------|
| Glucol ether solvents | Not Available | Not Available |
| Alcohol solvent series | Not Available | Not Available |
| Pigment | Not Available | Not Available |
| Organic ingredient | Not Available | Not Available |
| methyl-diethanolamine | Not Available | Not Available |

Exposure Controls

Occupational Exposure Controls

- Appropriate : General exhaust is adequate under normal operating conditions.
- Engineering Controls : Local exhaust ventilation may be required in special circumstances. If risk of overexposure exists, wear approved respirator. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection. Provide adequate ventilation in warehouses and enclosed storage areas.

Personal Protection

- Respiratory Protection : Consult with a health and safety professional for specific respirators appropriate for your use.



- Hand Protection : Wear chemical protective gloves, e.g. PVC.



- Eye Protection : Safety glasses with side shields.

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Skin Protection



Chemical goggles.

Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

: Wear appropriate chemical resistant clothing.

Wear safety footwear or safety gumboots, e.g. Rubber

9. Physical and Chemical Properties

| | | |
|---|------------------|-----------------------|
| Appearance | - Physical State | : Liquid |
| | - Color | : Green |
| Odor | | : slight solvent odor |
| pH | | : 9.0-10.0 |
| Boiling Point / Boiling Range | | : Not available |
| Melting Point / Melting Range | | : Not available |
| Decomposition Temperature | | : Not available |
| Flash Point | | : Not flammable |
| Flammability (Solid, Gas) | | : Not applicable |
| Explosive Properties | | : Not available |
| Oxidizing Properties | | : Not available |
| Specific Gravity | | : 1.02-1.04 |
| Solubility | | : Not available |
| Water Solubility | | : Not available |
| Partition Coefficient (n-octanol / Water) | | : Not available |
| Viscosity | | : Not available |
| Vapor Density | | : Not available |
| Evaporation Rate | | : Not available |
| VOC | | : Not available |

10. Stability and Reactivity

| | |
|--------------------------|--|
| Reactivity | : No reactivity hazard is expected. |
| Chemical Stability | : Unstable in the presence of incompatible materials. Product is considered stable. |
| Possibility of Hazardous | : Hazardous polymerisation will not occur. |

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Reactions

Conditions to Avoid : Avoid flames, sparks, and other sources of ignition. Avoid contact with incompatible materials.

Incompatible Materials : Strong acids, acid chlorides, acid anhydrides, oxidising and reducing agents.

Hazardous : See section 5

Decomposition

11. Toxicological Information

Acute Toxicity : **methyldiethanolamine**

Component Analysis - Dermal (rabbit) LD50: 10244 mg/kg

LD50/LC50 Oral (rat) LD50: 1945 mg/kg

Information on Likely Routes of Exposure

Inhalation : Respiratory tract irritation

Ingestion : no information on significant adverse effects

Skin Contact : irritation

Eye Contact : irritation

Immediate Effects : Skin irritation, eye irritation

Delayed Effects : Respiratory tract irritation

Medical Conditions : No information available for the product.

Aggravated by Exposure

Irritation/Corrosivity : Skin irritation, eye irritation

Data

Respiratory : No information available for the product.

Sensitization

Dermal Sensitization : No information available for the product.

Germ Cell Mutagenicity : No information available for the product.

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

Reproductive Toxicity : No information available for the product.

Specific Target Organ : Respiratory tract irritation.

Toxicity - Single

Exposure

Specific Target Organ : No target organs identified.

Toxicity - Repeated

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Exposure

Aspiration Hazard : Not expected to be an aspiration hazard.

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 river, and the drain ditch.

Ecotoxicity

Product: Not classified

Component Analysis - Aquatic Toxicity

Methyldiethanolamine

| ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|----------|-----------------------|-------------------------------|----------|--------|
| LC50 | 96 | Fish | 320mg/L | 1 |
| EC50 | 48 | Crustacea | =230mg/L | 1 |
| EC50 | 96 | Algae or other aquatic plants | =20mg/L | 1 |
| NOEC | 96 | Fish | =460mg/L | 1 |

SOURCE: Extracted from 1. IUCLID Toxicity Data

Persistence and : No information available for the product.

Degradability

Bioaccumulation : No information available for the product.

Mobility : No information available for the product.

Other Toxicity : No information available for the product.

13. Disposal Considerations

: Comply with all USA, national and local regulations.

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

Disposal Methods : Dispose in accordance with all applicable regulations.

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

Disposal of : Empty containers may contain product residue. Dispose in
Contaminated accordance with all applicable regulations.

Packaging

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14. Transport Information

Check a thing without a leak in a container.

Perform prevention of collapse of cargo surely.

Land transport (DOT) : NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport : NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

(ICAO-IATA / DGR)

Sea transport : NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

(IMDG-Code / GGVSee)

Transport in bulk : Not Applicable

according to Annex II of

MARPOL and the IBC

code

Marine Pollutant : NO

15. Regulatory Information

Safety, health and environmental regulations / legislation specific for the substance or mixture
 METHYLDIETHANOLAMINE (105-59-9) IS FOUND ON THE FOLLOWING REGULATORY
 LISTS

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

| | |
|---|----|
| Flammable (Gases, Aerosols, Liquids, or Solids) | No |
| Gas under pressure | No |
| Explosive | No |
| Self-heating | No |
| Pyrophoric (Liquid or Solid) | No |
| Pyrophoric Gas | No |
| Corrosive to metal | No |
| Oxidizer (Liquid, Solid or Gas) | No |
| Organic Peroxide | No |
| Self-reactive | No |
| In contact with water emits flammable gas | No |

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| | |
|--|-----|
| Combustible Dust | No |
| Carcinogenicity | No |
| Acute toxicity (any route of exposure) | No |
| Reproductive toxicity | No |
| Skin Corrosion or Irritation | Yes |
| Respiratory or Skin Sensitization | No |
| Serious eye damage or eye irritation | Yes |
| Specific target organ toxicity (single or repeated exposure) | Yes |
| Aspiration Hazard | No |
| Germ cell mutagenicity | No |
| Simple Asphyxiant | No |

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

None Reported

State Regulations

California Proposition 65

: WARNING:



This product can expose you to chemicals including Acetaldehyde, Formaldehyde, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

National Inventory Status

| National Inventory | Status |
|-------------------------------|--------|
| Australia - AICS | Y |
| Canada - DSL | N |
| Canada - NDSL | Y |
| China - IECSC | N |
| Europe - EINEC / ELINCS / NLP | Y |
| Japan - ENCS | Y |
| Korea - KECI | Y |
| New Zealand - NZIoC | N |
| Philippines - PICCS | N |
| USA - TSCA | Y |

Y = All ingredients are on the inventory

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing



Product Name: Latex ink LX101 Green

SDS No. 037-W350538

First issue: 2013/06/25

Revised: 2018/10/03

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16. Other Information

Other Information

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