

# Safety Data Sheets

## 1. Identification

Product Name : LUS-175 Light Cyan  
Order No. : LU175-LC-BA  
General Use : Ink jet printing ink  
Product Description : UV Inkjet ink  
SDS Number : 037-U193158  
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 Singapore  
Company Name : MIMAKI SINGAPORE PTE. LTD.  
Address : 31 Kaki Bukit Road 3 Singapore 417818 TechLink #02-03  
Telephone No. : +65-6508-2789  
Emergency Telephone No. : +81-268-64-2281

## 2. Hazards Identification

### [GHS Classification]

#### Physical Hazards

Flammable Liquids : Not classified

#### Health Hazards

Sensitization – Skin : Category 1

Toxic to Reproduction : Category 2

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

### [Label Elements]

#### Symbol



#### Signal Word

Warning

#### Hazard Statements

H317 - May cause an allergic skin reaction

H361 - Suspected of damaging fertility or the unborn child

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### Precautionary Statements

#### [Prevention]

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

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

P281 - Use personal protective equipment as required

#### [Response]

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P363 - Wash contaminated clothing before reuse

#### [Other hazards]

Not Applicable.

#### [Hazards not otherwise classified (HNOC)]

Not Applicable.

### 3. Composition / Information on Ingredients

Substance/mixture: mixture

Chemical identity: No information available

| Chemical Name                                       | CAS No      | EC No     | weight-% |
|---|-------------|-----------|----------|
| Monomers  | CBI         |           | 80-90    |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide     | 75980-60-8  | 278-355-8 | 5-15     |
| Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)- | 162881-26-7 | 423-340-5 | 1-5      |
| Additives   | CBI         |           | <1       |
| Photoinitiator                                      | CBI         |           | <1       |
| Copper compounds                                    | CBI         |           | <1       |
| Others  | CBI         |           | <1       |

### 4. First Aid Measures

#### [Description of first aid measures]

|                |   |
|----------------|---|
| General advice | : If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.   |
| Inhalation     | : Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.  |
| Skin Contact   | : If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. |

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|  |  |
|--|--|
| Eye Contact  | : Rinse immediately with plenty of water and seek medical advice.<br>Remove contact lenses, if present and easy to do. Continue rinsing.<br>Keep eye wide open while rinsing.      |
| Ingestion  | : If swallowed, call a poison control center or physician immediately.<br>Do not induce vomiting without medical advice. Never give anything<br>by mouth to an unconscious person. |
| [Most important symptoms and effects, both acute and delayed]                |  |
| Symptoms   | : No data available.   |
| [Indication of any immediate medical attention and special treatment needed] |  |
| Self-protection of the first aider   | : Use personal protective equipment as required.   |
| Note to physicians   | : May cause sensitization of susceptible persons.  |

### 5. Fire Fighting Measures

|  |   |
|--|---|
| Flammable Properties                                   | : Flash Point, 95° C / 203° F   |
| Suitable Extinguishing Media                           | : Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.  |
| Unsuitable Extinguishing Media                         | : Do not use a solid water stream as it may scatter and spread fire.  |
| Specific hazards arising from the substance or mixture | : In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors. |
| Advice for firefighters                                | : Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.   |

### 6. Accidental Release Measures

[Personal precautions, protective equipment and emergency procedures]

|                          |   |
|--------------------------|---|
| Personal precautions     | : Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. |
| For emergency responders | : Use personal protection recommended in Section 8.   |

[Environmental Precautions]

|               |   |
|---------------|---|
| Environmental | : Collect spillage. Should not be released into the environment. Do not |
|---------------|---|

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Precautions allow into any sewer, on the ground or into any body of water.

[Methods and material for containment and cleaning up]

Methods for containment : Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Methods for cleaning up : Use personal protective equipment as required. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

[Reference to other sections]

See Section 12: ECOLOGICAL INFORMATION.

### 7. Handling and Storage

[Precautions for Safe Handling]

Advice on safe handling : Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation.

General Hygiene : Regular cleaning of equipment, work area and clothing is recommended. When using do not eat, drink or smoke. Wash face, hands and any exposed skin thoroughly after handling.

[Conditions for Safe Storage, including any Incompatibilities]

Storage Conditions : Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. Store locked up. Avoid direct sunlight or high temperature.

[Specific end use(s)]

Risk Management : The information required is contained in this Safety Data Sheet.  
 Methods (RMM)

### 8. Exposure Controls / Personal Protection

[Control parameters]

Exposure Limits

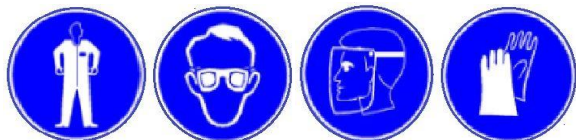
| Chemical Name    | ACGIH                                     | OSHA PEL | NIOSH IDLH  |
|------------------|---|----------|---|
| Copper compounds | TWA: 1 mg/m <sup>3</sup> Cu dust and mist | -        | IDLH: 100 mg/m <sup>3</sup> Cu dust and mist<br>TWA: 1 mg/m <sup>3</sup> Cu dust and mist |

[Appropriate engineering controls]

Engineering Controls : Showers, Eyewash stations, Ventilation systems  
 Individual protection measures, such as personal protective equipment

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Eye/face protection : Tight sealing safety goggles. Face protection shield.  
 Hand Protection : Gloves made of plastic or rubber.  
 Skin and body protection : Suitable protective clothing. Apron. Gloves made of plastic or rubber.



### 9. Physical and Chemical Properties

|                              |                  |   |
|------------------------------|------------------|---|
| Appearance                   | - Physical State | : liquid  |
|                              | - Color          | : blue  |
| Odor                         |                  | : Characteristic odor                                   |
| Odor Threshold               |                  | : No data available                                     |
| pH                           |                  | : No data available                                     |
| Melting point/freezing point |                  | : No data available                                     |
| Boiling point/boiling range  |                  | : No data available                                     |
| Flash point                  |                  | : 95 °C / 203 °F (Acceptance by the lowest flash point) |
| Evaporation rate             |                  | : No data available                                     |
| Flammability (solid, gas)    |                  | : No data available                                     |
| Flammability Limits in Air   |                  | : No data available                                     |
| Upper flammability limits    |                  |   |
| Lower flammability limit     |                  |   |
| Vapor Pressure               |                  | : No data available                                     |
| Vapor density                |                  | : No data available                                     |
| Specific gravity             |                  | : 1.0-1.1   |
| Water solubility             |                  | : Immiscible in water                                   |
| Solubility(ies)              |                  | : No data available                                     |
| Partition coefficient        |                  | : No data available                                     |
| Autoignition temperature     |                  | : No data available                                     |
| Decomposition temperature    |                  | : No data available                                     |
| Kinematic viscosity          |                  | : No data available                                     |
| Dynamic viscosity            |                  | : <20 mPa·s(25 deg.C)                                   |
| [Other information]          |                  |   |
| Molecular weight             |                  | : No data available                                     |
| Explosive properties         |                  | : No data available                                     |

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|                      |                     |
|----------------------|---------------------|
| Oxidizing properties | : No data available |
| Softening point      | : No data available |
| VOC Content (%)      | : No data available |
| Density              | : No data available |
| Bulk density         | : No data available |

### 10. Stability and Reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | : The heat and polymerization may occurred by contamination of thermal, light, metal powder and peroxide. |
| Chemical stability                 | : Polymerization can occur. Combustibility. Stable under the normal storage and use.                      |
| Explosion data                     | : Sensitivity to Mechanical Impact; none.<br>Sensitivity to Static Discharge; none.                       |
| Possibility of Hazardous Reactions | : None under normal processing.   |
| Hazardous polymerization           | : None under normal processing.   |
| Conditions to Avoid                | : Extremes of temperature and direct sunlight.  |
| Incompatible Materials             | : Strong oxidizing agents. Finely powdered metals.  |
| Hazardous decomposition products   | : Thermal decomposition can lead to release of irritating and toxic gases and vapors.                     |

### 11. Toxicological Information

[Information on likely routes of exposure]

|              |   |
|--------------|---|
| INHALATION   | : No data available.  |
| INGESTION    | : May be harmful if swallowed May cause additional affects as listed under "Inhalation" Ingestion may cause irritation to mucous membranes. |
| Skin Contact | : No data available.  |
| Eye contact  | : No data available.  |

[Information on toxicological effects]

|                |                      |
|----------------|----------------------|
| Acute toxicity | : No data available. |
|----------------|----------------------|

[Delayed and immediate effects as well as chronic effects from short and long-term exposure]

|                           |                      |
|---------------------------|----------------------|
| Skin corrosion/irritation | : No data available. |
|---------------------------|----------------------|

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Serious eye damage/eye irritation : No data available.

Sensitization : No data available.

Germ cell mutagenicity : No data available.

Carcinogenicity : No data available.

Reproductive toxicity : No data available.

STOT - single exposure : No data available.

STOT - repeated exposure : No data available.

exposure

Chronic toxicity : Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.

Subchronic toxicity : No data available.

Neurological effects : No data available.

Other adverse effects : No data available.

Aspiration hazard : No data available.

[Numerical measures of toxicity]

Unknown Acute Toxicity : 73.2% of the mixture consists of ingredient(s) of unknown toxicity.

### 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 : The table below indicates component(s) of known hazards to the aquatic environment.  
 97.8% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name    | Algae/aquatic plants | Fish  | Crustacea | Terrestrial organism |
|------------------|----------------------|---|-----------|----------------------|
| Copper compounds | -                    | LC50( 48h, static ): > 100 mg/L ( Oryzias latipes ) | -         | -                    |

Persistence and Degradability : No data available.

Bioaccumulation : No data available.

Mobility : No data available.

Other adverse effects : No data available.

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### 13. Disposal Considerations

[Waste treatment methods]

|                                       |   |
|---------------------------------------|---|
| Waste from Residues / Unused Products | : Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| Contaminated packaging                | : Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| Other Information                     | : Waste codes should be assigned by the user based on the application for which the product was used. |

### 14. Transport Information

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

[IMDG]

|                      |                  |
|----------------------|------------------|
| UN/ID no             | : Not regulated  |
| Proper shipping name | : Not regulated  |
| Hazard Class         | : Not regulated  |
| Packing Group        | : Not regulated  |
| Special Provisions   | : none           |
| Marine pollutant     | : Not Applicable |
| Environmental hazard | : Not Applicable |

[IATA]

|                      |                 |
|----------------------|-----------------|
| UN/ID no             | : Not regulated |
| Proper shipping name | : Not regulated |
| Hazard Class         | : Not regulated |
| Packing Group        | : Not regulated |
| Special Provisions   | : none          |

[RID]

|                      |                  |
|----------------------|------------------|
| UN/ID no             | : Not regulated  |
| Proper shipping name | : Not regulated  |
| Hazard Class         | : Not regulated  |
| Packing Group        | : Not regulated  |
| Environmental hazard | : Not Applicable |
| Special Provisions   | : none           |

[ADR]



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UN/ID no : Not regulated  
Proper shipping name : Not regulated  
Hazard Class : Not regulated  
Packing Group : Not regulated  
Environmental hazard : Not Applicable  
Special Provisions : none

### [ADN]

UN/ID no : Not regulated  
Proper shipping name : Not regulated  
Hazard Class : Not regulated  
Packing Group : Not regulated  
Environmental hazard : Not Applicable  
Special Provisions : none

## 15. Regulatory Information

### [National Regulations]

Poisons Act : Not Applicable  
Fire Safety Act : Not Applicable  
Environmental : Not Applicable  
Protection Management  
Law

We adopted 1.0% or more as a threshold value in case of no provision in a law.

## 16. Other Information

### [Reference]

LOLI Database (ChemADVISOR, Inc.)

### [The reference on GHS classification results]

EU CLP(1272/2008)Annex VI Table 3.1

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