

Safety Data Sheets

1. Identification

Product Name : LUS-175 Black
Order No. : LU175-K-BA
General Use : Ink jet printing ink
Product Description : UV Inkjet ink
SDS Number : 037-U193154
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

H361f - Suspected of damaging fertility

Safety Data Sheets

Precautionary Statements

P201 - Obtain special instructions before use

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

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

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

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

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

[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	CBI	80-90
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8	5-10
Photoinitiator	CBI	CBI	1-5
Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-	162881-26-7	423-340-5	1-5
CARBON BLACK	1333-86-4	215-609-9	1-5
Additives	CBI	CBI	1-5
Others	CBI	CBI	<1
Copper compounds	CBI	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. Wash contaminated clothing before

Safety Data Sheets

	reuse.
Eye Contact	: Rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing.
Ingestion	: If swallowed, call a poison control center or physician immediately. Do not induce vomiting without medical advice. Never give anything 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. Treat symptomatically

5. Fire Fighting Measures

Flammable Properties	: Flash Pont、 109 ° C / 228 ° F
Suitable Extinguishing Media	: Dry chemical, CO2, water spray or alcohol-resistant foam.
Unsuitable Extinguishing Media	: Do not use a solid water stream as it may scatter and spread fire.
Specific extinguishing methods	: No data available
Specific hazards arising from the chemical	: 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.
Protective equipment and precautions for firefighters	: Wear self-contained breathing apparatus and protective suit.

6. Accidental Release Measures

Personal precautions	: Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of
----------------------	---

Safety Data Sheets

spill/leak. Evacuate personnel to safe areas.

Environmental : Collect spillage. Do not allow into any sewer, on the ground or into
 Precautions any body of water. Should not be released into the environment.

[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. Soak up with inert
 absorbent material. Pick up and transfer to properly labeled
 containers. Clean contaminated surface thoroughly.

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.

[Conditions for Safe Storage, including any Incompatibilities]

Storage Conditions : Keep out of the reach of children. Keep in properly labeled containers.
 Keep containers tightly closed in a cool, well-ventilated place. Avoid
 direct sunlight or high temperature.

Prevents Handling of : No information available

Incompatible

Substances or Mixtures

8. Exposure Controls / Personal Protection

[Control parameters]

Exposure Limits

Chemical Name	ACGIH	Singapore
CARBON BLACK 1333-86-4	TWA: 3 mg/m ³ inhalable particulate matter	PEL: 3.5 mg/m ³
Copper compounds	TWA: 1 mg/m ³ Cu dust and mist	

[Appropriate engineering controls]

Engineering Controls : Ensure adequate ventilation, especially in confined areas

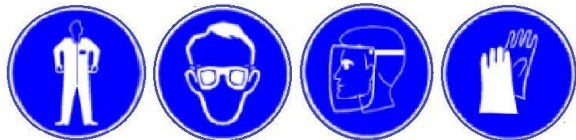
Individual protection measures, such as personal protective equipment

Eye/face protection : Tight sealing safety goggles. Face protection shield.

Hand Protection : Gloves made of plastic or rubber.

Safety Data Sheets

Skin and body protection : Suitable protective clothing. Apron. Gloves made of plastic or rubber.



9. Physical and Chemical Properties

Appearance	- Physical State	: liquid
	- Color	: black
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 (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		: 1.0-1.3
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		: 7-12 mPa·s(25 deg.C)
[Other information]		
Molecular weight		: No data available
Explosive properties		: No data available
Oxidizing properties		: No data available
Softening point		: No data available

Safety Data Sheets

VOC Content (%) : No data available
 Density : No data available
 Bulk density : No data available

10. Stability and Reactivity

Stability : Stable under normal conditions.
 Possibility of Hazardous : None under normal processing.
 Reactions
 Conditions to Avoid : Heat, flames and sparks
 Incompatible Materials : Strong oxidizing agents.
 Hazardous : Thermal decomposition can lead to release of irritating and toxic decomposition products 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 : LD/LC50 values that relevant for classification.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
CARBON BLACK	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-

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

Skin : No data available.
 corrosion/irritation
 Serious eye damage/eye : No data available.
 irritation
 Sensitization : No data available.
 Germ cell mutagenicity : No data available.
 Carcinogenicity : The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	IARC
---------------	------

Safety Data Sheets

CARBON BLACK	Group 2B
--------------	----------

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans.

Reproductive toxicity : No data available.

STOT - single exposure : No data available.

STOT - repeated : 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 : 98.4% of the mixture consists of ingredient(s) of unknown toxicity.

Toxicity

Acute oral toxicity : 98.4 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

Acute dermal toxicity : 98.4 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

Acute inhalation toxicity - gas : 98.4 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

Acute inhalation toxicity - Vapor : 98.4 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

Acute inhalation toxicity -dust/mist : 98.4 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

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.
 98.2% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Safety Data Sheets

Chemical Name	Algae/aquatic plants	Fish	Crustacea	Terrestrial organism
CARBON BLACK	-	-	EC50(24h): > 5600 mg/L (Daphnia magna)	-

Persistence and Degradability : No data available.
 Bioaccumulation : No data available.
 Mobility : No data available.
 Other adverse effects : No data available.

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.
 Safe handling and methods of disposal : No data available.

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

Safety Data Sheets

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]	
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 Protection Management Law	: Not Applicable

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

[Disclaimer]

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



Safety Data Sheets

information.

Product Name: LUS-175 Black
SDS No. 037-U193154
First issue: 2017/09/13
Revised: