

Safety Data Sheets

1. Identification

Product Name : LUS-170 White
Order No. : LUS17-W-BA
General Use : Ink jet printing ink
Product Description : UV Inkjet ink
SDS Number : 037-U183080
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

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

H361 - Suspected of damaging fertility or the unborn child

Precautionary Statements

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[Prevention]

P201 - Obtain special instructions before use

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

P281 - Use personal protective equipment as required

[Response]

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

[Storage]

P405 - Store locked up

[Disposal]

P501 - Dispose of contents/ container to an approved waste disposal plant

[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		75-85
Titanium dioxide	13463-67-7	236-675-5	10-20
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8	1-5
Additives	CBI		1-5
Silicon dioxide	7631-86-9	231-545-4	<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. Wash contaminated clothing before reuse.

Eye Contact : Rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing.

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	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]	
Note to physicians	: Treat symptomatically

5. Fire Fighting Measures

Flammable Properties	: Flash Point, 95 ° C / 203 ° F
Suitable Extinguishing Media	: Dry chemical, CO ₂ , 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 spill/leak. Evacuate personnel to safe areas.
Environmental Precautions	: Collect spillage See Section 12 for additional Ecological Information
[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.

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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 in properly labeled containers Keep container tightly closed Store locked up Avoid direct sunlight or high temperature

Prevents Handling of : No information available

Incompatible

Substances or Mixtures

8. Exposure Controls / Personal Protection

[Control parameters]

Chemical Name	Singapore	Japan
Titanium dioxide 13463-67-7	PEL: 10 mg/m ³	TWA: 0.3 mg/m ³

Chemical Name	ACGIH	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
Silicon dioxide 7631-86-9	-	(vacated) TWA: 6 mg/m ³ <1% Crystalline silica TWA: 20 mppcf : (80)/(%) SiO ₂ mg/m ³ TWA	IDLH: 3000 mg/m ³ TWA: 6 mg/m ³

[Appropriate engineering controls]

Engineering Controls : Showers, Eyewash stations, Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection : Wear safety glasses with side shields (or goggles).

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Hand Protection : Gloves made of plastic or rubber.



9. Physical and Chemical Properties

Appearance	- Physical State	: liquid
	- Color	: white
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		: 1.2-1.3
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		: <20 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
VOC Content (%)		: No data available

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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 : Extremes of temperature and direct sunlight
 Incompatible Materials : Strong oxidizing agents.
 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 : No data available.
 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
Titanium dioxide	> 10000 mg/kg (Rat)	-	-
Silicon dioxide	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat, 1 h)

[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
Titanium dioxide	Group 2B

IARC (International Agency for Research on Cancer)

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Group 2B - Possibly Carcinogenic to Humans.

Reproductive toxicity : No data available.

STOT - single exposure : No data available.

STOT - repeated : No data available.

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 : 91.2% of the mixture consists of ingredient(s) of unknown toxicity.

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.

100% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea	Terrestrial organism
Silicon dioxide	EC50 (72h): = 440 mg/L (Pseudokirchneriella subcapitata)	LC50(96h, static): = 5000 mg/L (Brachydanio rerio)	EC50(48h): = 7600 mg/L (Ceriodaphnia dubia)	

Persistence and : No data available.

Degradability

Bioaccumulation : No data available.

Mobility : No data available.

Other adverse effects : No data available.

13. Disposal Considerations

[Waste treatment methods]

Waste from Residues / : Disposal should be in accordance with applicable regional, national

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Unused Products and local laws and regulations.
Contaminated : Disposal should be in accordance with applicable regional, national
packaging and local laws and regulations.

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]

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

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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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