

Safety Data Sheets

1. Identification

Product Name : LUS-120 White
Order No. : LUS12-W-BA
General Use : Ink jet printing ink
Product Description : UV Inkjet Ink
SDS Number : 037-U110995
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. : +1-678-730-0100
Emergency Telephone No. : +81-268-64-2281

2. Hazards Identification

[GHS Classification]

Physical Hazards

Flammable Liquids : Not classified

Health Hazards

Eye Damage / Irritation : Category 2B

Carcinogenicity : Category 2

Toxic to Reproduction : Category 2

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

[GHS Label Elements]

Symbol



Signal Word

Warning

Safety Data Sheets

Hazard Statements

H320 Causes eye irritation

H351 Suspected of causing cancer

H361 Suspected of damaging fertility or the unborn child

Precautionary Statements

[Prevention]

P201 Obtain SDS (Safety Data Sheet) and printer's Operation Manual before use.

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

P264 Wash hands thoroughly after handling.

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

[Response]

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

[Storage]

P405 Store locked up.

[Disposal]

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

international regulation (to be specified).

HMIS Rating (scale 0 – 4)

Health = 2

Flammability= 1

Reactivity = 1

Protective Equipment = X

②	Health
①	Flammability
①	Reactivity
ⓧ	Protective Equipment

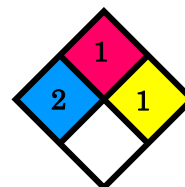
NFPA Rating (scale 0 – 4)

Health = 2

Flammability = 1

Instability = 1

Special = -



CANADIAN WHMIS SYMBOLS

D2A



Safety Data Sheets

3. Composition / Information on Ingredients

No	Chemical Name	Wt%	CAS No.
1	Monomers	75-85	Trade Secret
2	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	1-5	75980-60-8
3	Titanium dioxide	10-20	13463-67-7
4	Additives	1-5	Trade Secret
5	Others	<1	Trade Secret

4. First Aid Measures

Inhalation	: Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
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.
Skin Contact	: If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Wash contaminated clothing before reuse.
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.
Protection To First-Aiders	: Use personal protective equipment as required.
Note To Physician	: Treat symptomatically.

5. Fire Fighting Measures

Flammable Properties	: Flash point : 95°C/ 203° F
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.

Safety Data Sheets

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.
Fire Fighting Instructions	: Wear full fire-fighting turn-out gear (full bunker gear) and respiratory protection (self-contained breathing apparatus).

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 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

Handling	: Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not breathe gas/ mist. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.
Storage	: Keep in properly labeled containers. Keep container tightly closed. Store locked up. Avoid direct sunlight or high temperature.
Incompatible materials	: Strong oxidizing agents.

Safety Data Sheets

8. Exposure Controls / Personal Protection

Exposure Limit Values

No	Chemical Name	OSHA PEL	ACGIH TLV	NIOSH IDLH
1	Titanium dioxide	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	TWA: 10 mg/m ³	IDLH: 5000 mg/m ³
2	Silicon dioxide	(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

NIOSH IDLH : Immediately Dangerous to Life or Health

Other Information : Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure Controls

Occupational Exposure Controls

Engineering Controls : Showers, Eyewash stations, Ventilation systems

Personal Protection

Respiratory

Protection



: An air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where air-borne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited.

Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or in any other circumstances where air-purifying respirators may not provide adequate protection.

Hand Protection



Gloves

: Gloves made of plastic or rubber.

Eye Protection

: Wear safety glasses with side shields (or goggles).

Safety Data Sheets



Environmental Exposure Controls

: Not available

9. Physical and Chemical Properties

Appearance	- Physical State	: liquid
	- Color	: white
Odor		: Specific odor
pH		: Not Available
Boiling Point / Boiling Range		: Not Available
Melting Point / Melting Range		: Not Available
Decomposition Temperature		: Not Available
Flash Point		: 95°C/ 203° F (Acceptance by the lowest flash point)
Auto ignition temperature		: Not Available
Upper / Lower Flammability or Explosive Limits		: Not Available
Vapor Pressure		
Specific Gravity		: 1.2-1.3
Solubility		: Not Available
Water Solubility		: Immiscible in water
Viscosity		: <20 mPa·s(25 deg.C)
VOC		: Not Available

10. Stability and Reactivity

Conditions to Avoid	: Extremes of temperature and direct sunlight.
Stability	: Stable under normal conditions.
Materials to Avoid	: Strong oxidizing agents.
Hazardous Reactions / Decomposition Products	: Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Safety Data Sheets

11. Toxicological Information

Acute Toxicity : 76.9% of the mixture consists of ingredient(s) of unknown toxicity
LD/LC50 values that relevant for classification.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide	> 10000 mg/kg (Rat)	-	-

Eye Irritation : Category2B as a product.

Skin Irritation : Not Available

Sensitization : Not Available

Repeated Dose Toxicity : Not Available

Chronic Toxicity : Not Available

Mutagenicity : Not Available

Carcinogenicity : Category2 as a product.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide	-	Group 2B	-	X

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive and Developmental Toxicity

: Category 2 as a product.

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 : 99.7% of the mixture consists of component(s) of unknown hazards to the aquatic environment

The table below indicates component(s) of known hazards to the

Safety Data Sheets

aquatic environment.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
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 : Not Available

Degradability

Bioaccumulative : Not Available

Potential

Other Adverse Effects : Not Available

13. Disposal Considerations

Disposal of wastes : Comply with all USA, national and local regulations.

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

14. Transport Information

Check a thing without a leak in a container.

Perform prevention of collapse of cargo surely.

Us Department of Transportation (DOT)

UN Number : Not Applicable

Proper Shipping Name : Not Applicable

Hazardous Class : Not Applicable

Packing Group : Not Applicable

Special Provisions : none

Marine pollutant : Not Applicable

TDG

UN Number : Not Applicable

Proper Shipping Name : Not Applicable

Hazardous Class : Not Applicable



Product Name: LUS-120 White
SDS No. 037-U110995
First issue: 2015/10/19
Revised:

Safety Data Sheets

Packing Group : Not Applicable
Special Provisions : none
Marine pollutant : Not Applicable

MEX

UN Number : Not Applicable
Proper Shipping Name : Not Applicable
Hazardous Class : Not Applicable
Special Provisions : none
Packing Group : Not Applicable

IATA

UN Number : Not Applicable
Proper Shipping Name : Not Applicable
Hazardous Class : Not Applicable
Packing Group : Not Applicable
Special Provisions : none

IMDG

UN Number : Not Applicable
Proper Shipping Name : Not Applicable
Hazardous Class : Not Applicable
Packing Group : Not Applicable
Special Provisions : none
Marine pollutant : Not Applicable
Environment hazard : Not Applicable

15. Regulatory Information

TSCA Status : All ingredients are listed.
CERCLA : This material, as supplied, does not contain any substances regulated
Reportable Quantity as hazardous substances under the Comprehensive Environmental
(40 CFR 302) Response Compensation and Liability Act (CERCLA) (40 CFR 302) or
the Superfund Amendments and Reauthorization Act (SARA) (40
CFR 355). There may be specific reporting requirements at the local,
regional, or state level pertaining to releases of this material

SARA Title III

Section 311/312 :
(40 CFR 370)

Acute health hazard

No

Safety Data Sheets

Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Section 313
(40 CFR 372)

: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No.	wt%	SARA313 Threshold Values
Glycol ethers	Trade Secret	<25	1.0%

CWA (Clean Water Act)

: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

California Proposition
65

: This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Titanium dioxide	Carcinogen

U.S. EPA Label
Information

: EPA Pesticide Registration Number
Not Applicable

Canada

: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR

Others

Please refer to any other federal, state and local regulations.

16. Other Information

References

- 1) LOLI Database (ChemADVISOR, Inc.)
- 2) Japan National Institute of Technology and Evaluation (NITE)
- 3) EU CLP(1272/2008)Annex VI Table 3.1

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