

Safety Data Sheets

1. Identification

Product Name	: SU100 Yellow
Order No.	: SU100-Y-60
Ink Ver.	: 1
General Use	: Ink jet printing ink
Product Description	: UV / solvent Inkjet Ink
SDS Number	: 037-S160593
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

[HCS Classification]

Physical Hazards

Flammable Liquids : Category 4

Health Hazards

Skin Corrosion / Irritation : Category 2

Eye Damage / Irritation : Category 1

Sensitization – Skin : Category 1

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

[GHS Label Elements]

Symbol



Signal Word

Danger

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Hazard Statements

- H227 Combustible liquid
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H318 Causes serious eye damage

Precautionary Statements

[Prevention]

- P210 Keep away from open flames and other ignition sources. No smoking.
- P261 Avoid breathing gas/mist.
- P264 Wash face, hands and any exposed skin thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

[Response]

- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER or doctor/physician.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P370+P378 In case of fire: Use CO₂, dry chemical, or foam for extinguish.

[Storage]

- P403+P235 Store in a well-ventilated place. Keep cool.

[Disposal]

- P501 Dispose of contents and container in accordance with local, regional, national and international regulation.

Hazards not otherwise classified (HNOC)

Not classified

Other hazards

May be harmful if swallowed

Unknown Acute Toxicity

76.46% of the mixture consists of ingredient(s) of unknown toxicity

HMIS Rating (scale 0 – 4)

Health = 2*

Flammability = 2

Reactivity = 0

Protective Equipment = B

②	Health
②	Flammability
①	Reactivity
⊖	Protective Equipment

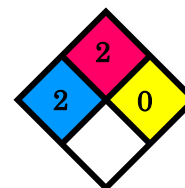
NFPA Rating (scale 0 – 4)

Health = 2

Flammability = 2

Instability = 0

Special = -



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CANADIAN WHMIS SYMBOLS : B3, D2B



3. Composition / Information on Ingredients

No	Chemical Name	Wt%	CAS No.
1	Diethylene glycol diethyl ether	40-60	112-36-7
2	Butyrolactone	10-20	96-48-0
3	phenylbis(2,4,6-trimethylbenzoyl)-phosphine oxide	1-5	162881-26-7
4	Pentaerythritol tetraacrylate	1-5	4986-89-4

4. First Aid Measures

- General advice : If symptoms persist, call a physician.
- Inhalation : Move to fresh air. If symptoms persist, call a physician.
- Eye Contact : In case of contact with substance, immediately flush eyes with running water for at least 30 minutes. Keep eye wide open while rinsing. Do not rub affected area. Call a physician immediately.
- Skin Contact : IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
- Ingestion : Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required. Rinse mouth.
- Protection To First-Aiders : Use personal protective equipment.
- Most important symptoms/effects, acute and delayed : May cause redness, itching, and pain. Burning feeling and temporary redness. May cause allergic skin reaction.
- Indication of immediate medical attention and special treatment needed, if necessary : May cause sensitization of susceptible persons.

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5. Fire Fighting Measures

Flammable Properties	: Flash point : >194°F / >90°C Flammability Limit in Air : upper 15.6% Vol Lower 2.7% Vol
Extinguishing Media	: Water spray. Carbon dioxide (CO ₂). Dry chemical. Alcohol resistant foam.
Unsuitable Extinguishing Media	: None known.
Specific hazards arising from the chemical	: Flammable. Will be easily ignited by heat, sparks or flames.
Hazardous Combustion Products	: Nitrogen oxides (NO _x). Carbon oxides.
Explosion Data	: Sensitivity to Mechanical Impact none Sensitivity to Static Discharge Yes
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, protective equipment and emergency procedures	: Use personal protective equipment. Remove all sources of ignition. Avoid contact with skin, eyes or clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Environmental precautions	: Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.
Methods and materials for containment and cleaning up	: Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water. Use personal protective equipment. Cover liquid spill with sand, earth or other noncombustible absorbent material. Take precautionary measures against static discharges. Pay attention to flashback. Use only non-sparking tools. Clean contaminated surface thoroughly.

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7. Handling and Storage

Handling	: Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges.
Storage	: Keep away from heat and sources of ignition. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

8. Exposure Controls / Personal Protection

Exposure Limit Values	: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
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Exposure Controls

Occupational Exposure Controls

Engineering Controls	: Showers Eyewash stations Ventilation systems
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Personal Protection

Respiratory Protection	: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
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Hand Protection	: Wear protective gloves.
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Eye Protection	: Wear coverall, chemical goggles and face shield when handling.
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Skin Protection



: To prevent any contact, wear impervious clothing such as gloves, apron, boots, or whole body suits made from neoprene, as appropriate.

General Hygiene Considerations

: When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse.

9. Physical and Chemical Properties

Appearance	- Physical State	: liquid
	- Color	: Yellow
Odor		: Slight glycol ether
pH		:
Boiling Point / Boiling Range		: > 212°F / >100°C
Melting Point / Melting Range		: Not Available
Decomposition Temperature		: Not Available
Flash Point		: > 194°F / >90°C
Auto ignition temperature		: Not Available
Explosive Properties		: Not Available
Oxidizing Properties		: Not Available
Upper / Lower Flammability or Explosive Limits		: upper 15.6% Vol Lower 2.7% Vol
Vapor Pressure		: 0.48 mm/Hg @ 20 °C
Weight per Gallon (lbs)		: 8.57
Relative Density		: Not Available
Solubility		: Partially insoluble
Partition Coefficient (n-octanol / Water)		: Not Available
Viscosity		: Not Available
Vapor Density		: Not Available
Evaporation Rate		: Not Available
VOC Content of Material		: 711 g/L
VOC Content of Coating less Water and Exempt Solvents		: 711 g/L

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10. Stability and Reactivity

Conditions to Avoid	: Extremes of temperature and direct sunlight. Heat, flames and sparks.
Stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: None under normal processing.
Materials to Avoid	: Strong oxidizing agents, strong acids, and strong bases. Strong oxidizing agents.
Hazardous Reactions / Decomposition Products	: Carbon oxides. Nitrogen oxides (NO _x).

11. Toxicological Information

Information on likely routes of exposure

Product Information

Acute Toxicity

Inhalation	: May be harmful if inhaled.
Eyes	: Risk of serious damage to eyes.
Skin	: Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May be harmful in contact with skin.
Ingestion	: May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 (lethal concentration)
Diethylene glycol diethyl ether (CAS No. 112-36-7)	= 4970 mg/kg (Rat)	= 6700 µL/kg (Rabbit)	—
Butyrolactone (CAS No. 96-48-0)	= 1540 mg/kg (Rat)	—	> 5100 mg/m ³ (Rat) 4 h

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) : 2266 mg/kg

ATE: Acute toxicity estimate

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Information on toxicological effects

: No information available.

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

Irritation : Irritating to skin.

Corrosivity : Risk of serious damage to eyes.

Sensitization : May cause sensitization by skin contact.

Mutagenic Effects : No information available.

Reproductive Toxicity : No information available.

Carcinogenicity : None known.

Chemical Name	ACGIH	IARC	NTP	OSHA
Butyrolactone (CAS No. 96-48-0)	—	Group 3	—	—

STOT - single exposure : May cause sensitization by skin contact.

STOT - repeated : No information available.

exposure

Chronic toxicity : No information available.

Target Organ Effects : None known.

Aspiration hazard : No information available.

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 : Contains no substances known to be hazardous to the environment or that are not degradable in wastewater treatment plants

Mobility : No information available.

Persistence and : No information available.

Degradability

Bioaccumulation :

Chemical Name	Octonol Water Partition Coefficient (log pow)
Butyrolactone (CAS No. 96-48-0)	-0.566

Other Adverse Effects : Octonol Water Partition Coefficient (log pow)

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13. Disposal Considerations

Waste Disposal Methods : Comply with all USA, national and local regulations.

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

Contaminated packaging : Do not re-use empty containers.

14. Transport Information

Check a thing without a leak in a container.

Perform prevention of collapse of cargo surely.

DOT : Not regulated

TDG : Not regulated

MEX : Not regulated

ICAO : Not regulated

IATA : Not regulated

IMDG : Not regulated

ADR/RID : Not regulated

ADN : Not regulated

15. Regulatory Information

International Inventories

TSCA	Yes
DSL/NDSL	Yes
PICCS	Yes
EINECS/ELINCS	Yes
ENCS	Yes
IECSC	Yes
KECL	No
AICS	Yes

*Yes - All component(s) of this product are included or are exempt from listing on the inventory.

*No - Indicates the component(s) of this product are either not listed or have not been determined to be listed on the inventory.

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U.S. Federal Regulations

TSCA Sections 4, 5 and 12(b)

Chemical Name	TSCA - Section 4	TSCA - Section 5	TSCA 12(b)
Diethylene glycol diethyl ether (CAS No. 112-36-7)	—	X	Section 5, 1 % de minimus concentration

SARA Section 311/312 (40 CFR 370) : Acute Health Hazard Yes
 Chronic Health Hazard Yes
 Fire Hazard Yes
 Sudden Release of Pressure Hazard no
 Reactive Hazard no

SARA 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	SARA 313 – Threshold Values %	Weight-%
Diethylene glycol diethyl ether (CAS No. 112-36-7)	1.0	40-60%

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)

CERCLA : This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental 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

U.S. State Regulations

California Proposition 65

: **WARNING**



This product can expose you to chemicals including Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



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U.S. State Right-to-Know Regulations

Chemical Name	MA	NJ	PA	IL	RI
Diethylene glycol diethyl ether (CAS No. 112-36-7)		X	X	X	

MA : Massachusetts

NJ : New Jersey

PA : Pennsylvania

IL : Illinois

RI : Rhode Island

International Regulations

Canada - NDSL : This product does not contain any NDSL chemicals.

Mexico - Grade : No information available

Mexico - Carcinogen : No information available

Status and Exposure

Limits

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

16. Other Information

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 information.