

Product Name: SU100 Yellow SDS No. 037-S160595 First issue: 2012/06/14

Revised: 2019/11/21

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 NE, suite A, Suwanee, Georgia 30024,

U.S.A.

Telephone No. : +1-678-730-0170

Emergency Telephone No. : +1 866 928 0789 (within United States only, Toll free)

+1 215 207 0061

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







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Signal Word Danger

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)

NFPA Rating (scale 0-4)

Health = 2*

Flammability= 2

Reactivity = 0

Protective Equipment = B

Health 2 Flammability Reactivity Protective Equipment

Flammability = 2Instability = 0Special = -

Health = 2





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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.

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 (CO2). Dry chemical. Alcohol resistant



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foam.

Unsuitable Extinguishing : None known.

Media

Specific hazards arising

from the chemical

Explosion Data

Hazardous Combustion

Products

: Nitrogen oxides (NOx). Carbon oxides.

: Sensitivity to Mechanical Impact none

Sensitivity to Static Discharge Yes

Fire Fighting : Wear full fire-fighting turn-out gear (full bunker gear) and

Instructions respiratory protection (self-contained breathing apparatus).

6. Accidental Release Measures

Personal precautions, protective equipment and

emergency procedures

Environmental precautions

Methods and materials for containment and

cleaning up

: 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.

: Flammable. Will be easily ignited by heat, sparks or flames.

: Prevent entry into waterways, sewers, basements or confined areas.

Do not flush into surface water or sanitary sewer system.

: Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers. After cleaning, flush away

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.

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.



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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.

Exposure Controls

Occupational Exposure Controls

Engineering Controls : Showers

Eyewash stations
Ventilation systems

Personal Protection

Respiratory : If exposure limits are exceeded or irritation is experienced,

Protection 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.

Hand Protection : Wear protective gloves.

Gloves

Vapor Respirator

Eye Protection : Wear coverall, chemical goggles and face shield when handling.



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



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Safety Data Sheets

- Physical State : liquid Appearance

> - Color : Yellow

Odor : Slight glycol ether

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 $:>212^{\circ}F/>100^{\circ}C$ Boiling Point / Boiling Range Melting Point / Melting Range : Not Available Decomposition Temperature : Not Available Flash Point $194^{\circ} F / 90^{\circ} C$: Not Available Auto ignition temperature

Explosive Properties : Not Available Oxidizing Properties : Not Available

Upper / Lower Flammability or : upper 15.6% Vol Lower 2.7% Vol

Explosive Limits

Vapor Pressure : 0.48 mm/Hg @ 20 ℃

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 : Not Available **Evaporation Rate**

VOC Content of Material :711 g/L VOC Content of Coating less Water and : 711 g/L

Exempt Solvents

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 : None under normal processing.

reactions

Materials to Avoid : Strong oxidizing agents, strong acids, and strong bases. Strong

oxidizing agents.

Hazardous Reactions / : Carbon oxides. Nitrogen oxides (NOx).

Decomposition Products



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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)	
			(lethal concentration)	
Diethylene glycol diethyl	= 4970 mg/kg	= 6700 µL/kg	_	
ether (CAS No. 112-36-7)	(Rat)	(Rabbit)	_	
Butyrolactone	= 1540 mg/kg		> 5100 mg/m ³	
(CAS No. 96-48-0)	(Rat)	_	(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

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	_	_



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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	-0.500
(CAS No. 96-48-0)	-0.566

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

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.



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Safety Data Sheets

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.

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 : Acute Health Hazard Yes
(40 CFR 370) Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard no
Reactive Hazard no

SARA Section 313 : Section 313 of Title III of the Superfund Amendments and (40 CFR 372) Reauthorization Act of 1986 (SARA). This product contains a

chemical or chemicals which are subject to the reporting

^{*}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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requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	eal Name SARA 313 – Threshold Values %	
Diethylene glycol diethyl ether	1.0	40.000/
(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.

U.S. State Right-to-Know Regulations

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

MA: Massachusetts

NJ: New Jersey PA: Pennsylvania

IL: Illinois

RI: Rhode Island

<u>International Regulations</u>

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.



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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.

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