

Material Safety Data Sheets

1. Product and Company Identification

Product Name : UV PrimerGM-1
Product Code : SPC-0541
General Use : For ink jet
Product Description : The undercoating liquid
MSDS Number :031-33O019B
Manufacture
Company Name : Mimaki Engineering Co., Ltd
Address : 2182-3 Otsu, Shigeno, 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. : +81-268-64-2413

2. Hazards Identification

Emergency Overview : Combustible liquid.
Irritating to eyes, skin and respiratory tract. May cause allergic skin reaction.
Stagnant vapor may cause organic solvent poisoning.
Do not inhale. Inhalation may cause any of the following symptoms: dizziness, headache, the stimulation of eyes, skin and respiratory tract.

Potential Health Effects

Inhalation : Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation.

Eye Contact : Causes severe eye irritation. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage.

Skin Contact : Causes moderate skin irritation. Causes skin sensitizer.

Ingestion : Low-harmful

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Carcinogens : No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens.

Potential Environmental Effects : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

HMIS Rating (scale 0 – 4)

NFPA Rating (scale 0 – 4)

Health = 2*

Health = 3

Flammability= 3

Flammability = 2

Reactivity = 1

Reactivity = 1

*additional chronic hazards present

3. Composition / Information On Ingredients

No	Chemical Name	Wt%	CAS No.	Chemical Formula
1	Ethanol	80-90	64-17-5	CH ₃ CH ₂ OH
2	Water	10-20	7732-18-5	H ₂ O
3	Others	1-5	Trade Secret	Trade Secret

OSHA Hazardous Components : None of the chemicals in this product are considered highly hazardous by OSHA.
 (29 CFR 1910. 1200)

4. First Aid Measures

Inhalation : Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do not use mouth-to-mouth resuscitation.

Eye Contact : Gently rinse the affected eyes with clean water for at least 15 minutes.

Remove contact lenses if easily possible.

And refer for medical attention.

Skin Contact : Remove all contaminated clothing, shoes and socks from the affected areas as quickly as possible.

Wash the affected area under running water using a mild soap.

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If irritation persists, arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

Ingestion : Never give anything by mouth to someone who is unconscious or convulsing. If the victim is responsive, give him one or two glasses of water. And refer for medical attention.

5. Fire Fighting Measures

Flammable Properties : The harmful gas such as carbon monoxide or the low molecule monomer occurs by combustion.

Flash Point; 13degree C (Cleveland open cup)

Extinguishing Media : Dry chemical powder, form and carbon dioxide, water spray.

Fire Fighting : Fight fire from maximum distance.

Instructions : Shut off fuel to fire if possible to do so without hazard.

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

6. Accidental Release Measures

Shut off all sources of ignition; No smoking or flames in area.

Wear proper protective equipment.

Absorb spill with inert material (e.g., dry sand or earth), then place in closed containers using non-sparking tools.

Prevent spills from entering sewers, watercourses or low areas.

Do not wash away into shower or waterway.

7. Handling And Storage

Handling : Keep container closed when not in use.

Use only in the well-ventilated areas.

Make available in the work area emergency shower and eyes wash.

Avoid contact with skin or eyes.

Only use tools and equipment resistant to organic solvents.

Do not flush to sewer or waterways.

Storage : Store product in tightly closed original containers in dry and cool

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place protected from sunlight fluorescent light, preferably at below 25 degree C on impermeable ground.

Steam and moisture are prevented being mixed.

Keep away from heat, sparks, and flame.

Keep away from sources of ignition.

Do not store near perchlorates, peroxides, chromic acid or nitric acid.

8. Exposure Controls / Personal Protection

Exposure Limit Values

No	Chemical Name	ACGIH	OSHA-PEL
1	Ethanol	1000ppm TWA	1000ppm TWA 1900mg/m ³ TWA

Exposure Controls

Occupational Exposure Controls

Engineering Controls : Do not use in areas without adequate ventilation.
 Use exhaust ventilation to keep airborne concentration below exposure limits.

Personal Protection : Follow the general guidelines of good industrial hygiene.
 Avoid any direct contact with the product.
 Never breathe product vapor.

Respiratory Protection



: Wear gas masks for organic gases.
 Wear ventilation masks when working in closed area.
 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.

Hand Protection



: Wear gloves that resist organic solvents and chemicals.

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.

Environmental Exposure Controls

: Not available

9. Physical And Chemical Properties

Appearance	- Physical state	: liquid
	- Colour	: Clear
Odour		: Characteristic
pH		: 3~5
Boiling Point / Boiling Range		: 78 degree C (101.325kPa) /Ethanol
Melting Point / Melting Range		: Not applicable
Flash Point		: 13 degree C (Cleveland open cup) /Ethanol
Auto-Ignition Temperature		: 439 degree C /Ethanol
Explosive Properties		: the lower limit 3.3vlo%, the upper limit 19.0vol% /Ethanol
Vapour Pressure		: 5.878kPa (20 degree C) /Ethanol
Vapor Density		: 1.59 (air=1) / Ethanol
Solubility		: Soluble (Alcohol, Ether)
Water solubility		: Soluble
Viscosity		: 1.2mPa·s (20 degree C) /Ethanol
Partition Coefficient(n-octanol / water)		: logPow-0.3 /Ethanol

10. Stability And Reactivity

Conditions To Avoid	: Incompatible materials, ignition sources, excess heat, oxidizers, sunlight. Hydrolyzed with water, but no hazard. High temperature and humidity.
Stability	: Stable under the usual handling conditions.

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Materials To Avoid : Oxidizing agents, strong bases, and transition metals.
Water, acids or alkalis.

Decomposition Products :Methanol(Flammable and Poisonous liquid); decomposed product

11. Toxicological Information

Acute Toxicity : Ethanol
Oral LD50 Rat; 7060mg/kg
Inhalation LC50 Rat; 20000ppm/10h

Eye Irritation : Ethanol
RABBIT 100mg/24h MODERATE

Skin Irritation : Ethanol
RABBIT 400mg MILD
RABBIT 500mg/24h SEVERE

Sensitization : Ethanol
Not listed

Chronic Toxicity : Ethanol
Removing the skin is caused. It influences and it is in the flushing road and the central nervous system the possibilities of causing stimulation, headache, the tiredness feeling, and the lack of concentration.

Mutagenicity : Ethanol
Micronucleus mouse; 1240mg/kg 48h

Carcinogenicity : Ethanol
Oral TDL0 mouse; 320mg/kg/50week Toxicity unevaluation

Reproductive And Developmental Toxicity : Ethanol
Inhalation TCL0 Rat; 20000ppm/7h Pregnancy 1~22day
Abnormality of development
Oral TDL0 Rat; 44g/kg Pregnancy 7~17day Abnormality of development

Others : None

12. Ecological Information

Handling is noted because it might influence the environment when

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leaking and abandoning it.

Especially, note that the product doesn't flow directly to ground, the river, and the drain ditch.

Ecotoxicity	: Ethanol Trout baby; LC50 11.2g/l· 24h A kind of carp; LC50 18~13.4g/l 96h Creek chub; LC50 7g/l· 24h Guppy; LC50 11g/l· 7day
Persistence And	: Ethanol
Degradability	BOD 0.93~1.67mg/mg
Bioaccumulative	: Not available.
Potential	
Other Adverse Effects	: Not available.

13. Disposal Considerations

Scrap materials may be disposed by licensed contractor or burn in an approved incinerator.

Comply with all EU, national and local regulations.

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

Follow national and local regulations.

14. Transport Information

Check a thing without a leak in a container.

Perform prevention of collapse of cargo surely.

Follow all regulation in your country.

Us Department of Transportation (DOT)

Hazardous Materials	: Ethanol
Hazardous Materials	: Ethanol, mixture
Description and Proper Shipping Name	
Hazardous Class or Division	: 3 Combustible liquid
Identification Number	: UN1170
Packing Group (PG)	:

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Label(s) Required : 3
Sea Transport (IMDG)
Class : 3
Packing Group (PG) :
UN Number : 1170
Proper Shipping Name : Ethanol, mixture
Marine Pollutant : No
Air Transport (ICAO/IATA)
Class : 3
Packing Group(PG) :
UN Number : 1170
Proper Shipping Name : Ethanol, mixture

15. Regulatory Information

OSHA Status : None of the chemicals in this product are considered highly hazardous by OSHA.
TSCA Status : All components on TSCA INVENTORY.
Cercle Reportable : Not Applicable
Quantity
(40 CFR 117, 302)
SARA Title
Section 302 : Not Applicable
(40 CFR 355)
Section 311/312 : Not Applicable
(40 CFR 370)
Section 313 : Not Applicable
(40 CFR 372)
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 dose not relate to use in



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MSDS No.031-33O019B

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combination with any other material or process.

Mimaki Engineering Corporation assumes no legal responsibility for use or reliance upon this information.

Revision history

Version	Date	Content
1.0	2008/02/08	First issue
2.0	2008/02/21	UN Number
3.0	2008/05/26	Primer name
4.0	2008/07/15	Exposure Controls / Personal Protection