

MSDS No.031-34U04WC First issue: 2008/7/23

Material Safety Data Sheets

Page 1 of 8

1. Product and Company Identification

Product Name : UVink F-200 White

Product Code : SPC-0516W

General Use : Inkjet Ink

Product Description : UV Inkjet Ink

Manufacture

MSDS Number

Company Name : Mimaki Engineering Co., Ltd

: 031-34U04WC

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: Specific Physical Form: Liquid

Odor, Color, Grade: Acrylate Order, White Color

General Physical Form: Liquid

Immediate health, physical, and environmental hazards:

Closed containers exposed to heat from fire may build pressure and

explode.

Hazardous polymerization may occur.

May cause allergic skin reaction.

Potential Health Effects

Inhalation: Respiratory Tract Irritation: Signs/symptoms may include cough,

sneezing, nasal discharge, headache, hoarseness, and nose and throat

pain.

Eye Contact: Severe Eye Irritation: Signs/symptoms may include redness, swelling,

pain, tearing, and blurred or hazy vision.



MSDS No.031-34U04WC First issue: 2008/7/23

Material Safety Data Sheets

Page 2 of 8

Skin Contact: Severe Skin Irritation: Signs/symptoms may include localized redness,

swelling, itching, and dryness.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may

include redness, swelling, blistering, and itching.

Ingestion: Gastrointestinal Irritation: Signs/symptoms may include abdominal

pain, stomach upset, nausea, vomiting and diarrhea.

HMIS Rating (scale 0-4) NFPA Rating (scale 0-4)

Not available Health: 2 , Flammability: 1

Instability: 2 , Special: None



3. Composition / Information On Ingredients

No	Chemical Name	Wt%	CAS No.	Chemical Formula
1	2-Propenoic acid, (tetrahydro-2-furanyl)methyl ester	15-25	2399-48-6	C8H12O3
2	Titanium dioxide	10 - 20	13463-67-7	TiO2
3	2-Propenoic acid, isooctyl ester	10-20	29590-42-9	C11H20O2
4	2-Propenoic acid, (1R,2R,4R)-1,7,7- trimethylbicyclo[2.2.1]hept-2-yl ester, rel-	10-20	5888-33-5	C13H20O2
5	Aliphatic urethane acrylate	1-10	Trade Secret	Trade Secret
6	POLYALKYLENE IMINE TS# 800967-5312	1-10	Trade Secret	Trade Secret
7	Amine modifaied acrylate oligomer	1-10	Trade Secret	Trade Secret
8	2-Propenoic acid, 1,6-hexanediyl ester	1-10	13048-33-4	13048-33-4
9	Phenylbis(2,4,6-trimethylbenzoyl)phosphi ne oxide	1-10	162881-26-7	[(CH ₃) ₃ C ₆ H ₂ CO] ₂ P(O)C ₆ H ₅
10	Methanone, diphenyl-	1-10	119-61-9	C13H10O
11	Silicon dioxide	< 5	7631-86-9	${ m SiO_2}$
12	Aluminum hydroxide	< 5	21645-51-2	Al(OH)₃

4. First Aid Measures

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Inhalation : Remove person to fresh air. If signs/symptoms develop, get medical



MSDS No.031-34U04WC First issue: 2008/7/23

Material Safety Data Sheets

Page 3 of 8

attention.

Eye Contact : Flush eyes with large amounts of water.

If signs/symptoms persist, get medical attention.

Skin Contact : Remove contaminated clothing and shoes. Immediately flush skin

with large amounts of water. Get medical attention.

Wash contaminated clothing and clean shoes before reuse.

Ingestion : Do not induce vomiting unless instructed to do so by medical

personnel. Give victim two glasses of water. Never give anything by

mouth to an unconscious person. Get medical attention.

5. Fire Fighting Measures

Flammable Properties Autoignition temperature : No Data Available

Flash Point :> 200 degree Fahrenheit

[Test Method: Closed Cup]

 $\label{eq:continuous} Flammable \ Limits-LEL \qquad : No \ Data \ Available$

Flammable Limits – UEL : No Data Available

Extinguishing Media : Use fire extinguishers with class B extinguishing agents (e.g., dry

chemical, carbon dioxide).

Protection of Fire Fighters

Special Fire Fighting : Water may not effectively extinguish fire; however, it should be used

Procedures to keep fire-exposed containers and surfaces cool and prevent

explosive rupture. Wear full protective equipment (Bunker Gear) and

a self-contained breathing apparatus (SCBA).

Unusual Fire and : Closed containers exposed to heat from fire may build pressure and

Explosion Hazards explode.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and

thermal decomposition information.

6. Accidental Release Measures

Observe precautions from other sections.

Evacuate unprotected and untrained personnel from hazard area.

The spill should be cleaned up by qualified personnel.

Ventilate the area with fresh air.

For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust



Product Name: UVink F-200 White MSDS No.031-34U04WC

First issue: 2008/7/23

Material Safety Data Sheets

Page 4 of 8

vapors, in accordance with good industrial hygiene practice.

Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill.

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air.

Read and follow safety precautions on the solvent label and MSDS.

Collect the resulting residue containing solution.

Place in a closed container approved for transportation by appropriate authorities.

Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state and federal regulations.

7. Handling And Storage

Handling : Do not eat, drink or smoke when using this product.

Wash exposed areas thoroughly with soap and water.

Avoid breathing of vapors, mists or spray.

Avoid skin contact.

Avoid eye contact with vapors, mists, or spray.

Avoid contact with oxidizing agents.

Storage : Store away from heat. Store out of direct sunlight.

Store away from oxidizing agents.

8. Exposure Controls / Personal Protection

Exposure Limit Values

Chamical Name		TWA	Additional
Chemical Name			Information
2-Propenoic acid,	A TLI A	1 mg/m3	Consitinon
1,6-hexanediyl ester	AIHA		Sensitizer
Methanone, diphenyl-	AIHA	0.5 mg/m3	



MSDS No.031-34U04WC First issue: 2008/7/23

Material Safety Data Sheets

Page 5 of 8

2-Propenoic acid, isooctyl ester	AIHA	5 ppm	
SILICA	CMRG	3 mg/m3	
SILICA		as respirable dust	
	ACGIH	10 mg/m3	Table A4
	CMRG	5 mg/m3	
		as respirable dust	
TITANIUM DIOXIDE	OSHA	10 mg/m3	
		Vacated, as dust	
	OSHA	15 mg/m3	
		as total dust	Table Z-1

VAC Vacated PEL:Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

Source of exposure limit data:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL) Exposure Controls

Occupational Exposure Controls

Engineering Controls

: Provide local exhaust ventilation at transfer points. Provide appropriate local exhaust when product is heated.

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

Personal Protection

Respiratory

Protection



Eye/FaceProtection

Safety Glasses Avoid breathing of vapors, mists or spray. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges.

: Avoid eye contact with vapors, mists, or spray. The following eye protection(s) are recommended: Safety Glasses with side shields, Indirect Vented Goggles. (Goggles recommended when a splash

potential exists.)

Skin Protection : Wear appropriate gloves, such as Nomex, when handling this



MSDS No.031-34U04WC First issue: 2008/7/23

Material Safety Data Sheets

Page 6 of 8





material to prevent thermal burns. Avoid skin contact. Avoid skin contact with hot material.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Gloves made from the following

material(s) are recommended: Nitrile Rubber.

Prevention of : Do not ear, drink or smoke when using this product. Wash exposed

Swallowing areas thoroughly with soap and water.

9. Physical And Chemical Properties

Appearance - Physical state : Liquid

- Colour : White

Odour : Acrylate odor
pH : Not Applicable
Boiling Point / Boiling Range :>200 degree F
Melting Point / Merting Range : Not Applicable

Flash Point :>200 degree F [Test Method: Closed Cup]

Auto-Ignition Temperature : No data available
Flammable Limits : No data available
Vapor Density :>1 [Ref Std: AIR=1]

Vapor Pressure : <10 mmHg [20 degree C]

Density : 1.16g/ml
Water solubility : Negligible

Viscosity $7\sim11\text{mPa}\cdot\text{s}$ (45 deg C) Specific Gravity 1.16 [Ref Std: WATER=1]

10. Stability And Reactivity

Stability : Stable

Materials and Conditions To Avoid : Strong oxidizing agents; Heat

Hazardous Polymerization : Hazardous polymerization may occur.

(Upon depletion of inhibitor or exposure to heat)

Hazardous Decomposition or By-Products

Substance Condition



Product Name: UVink F-200 White MSDS No.031-34U04WC

First issue: 2008/7/23

Material Safety Data Sheets

Page 7 of 8

Carbon monoxide During Combustion
Carbon dioxide During Combustion

11. Toxicologocal Information

Acute Toxicity : Not available

Eye Irritation : The stimulation of intense eyes.

Skin Irritation : Intense skin stimulation

Inhalation : The stimulation of the respiratory system.

Ingestion : A gastrointestinal tract organization may be stimulated.

Sensitization : Not available

Mutagenicity : Not available

Carcinogenicity : May cause cancer; Titanium dioxide (13463-67-7) (IARC: 2B)

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 : Not available
Persistence And Degradability : Not available
Bioaccumulative Potential : Not available
Other Adverse Effects : Not available

13. Disposal Considerations

Waste Disposal : Incinerate in an industrial or commercial facility in the presence of a

Method combustible material. As a disposal alternative, dispose of waste

product in a facility permitted to accept chemical waste.

Since regulations vary, consult applicable regulations or authorities

before disposal.

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

of water.

EPA Hazardous Waste Number (RCRA): Not regulated



MSDS No.031-34U04WC First issue: 2008/7/23

Material Safety Data Sheets

Page 8 of 8

14. Transport Information

Check a thing without a leak in a container.

Perform prevention of collapse of cargo surely.

UN, IMO, ICAO: Not regulated

15. Regulatory Information

US Federal Regulations

Section 311/312 : Fire Hazard-No Pressure Hazard-No Reactivity Hazard-No

(40 CFR 370) Immediate Hazard - Yes Delayed Hazard - No

TSCA Status The components of this product are in compliance with the chemical

notification requirements of TSCA.

Please refer to any other USA, national and local measures.

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 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	2008/7/23	First issue