

# Safety Data Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### 1.1. Identification of the substance or preparation

Product Name : UV Ink White  
Product Code : SPC-0371W-5

### 1.2. Use of the substance/preparation

General Use : For ink jet  
Product Description : UV curable ink

### 1.3. Company/undertaking identification

#### MANUFACTURER

Company Name : Mimaki Engineering Co., Ltd  
Address : 2182-3 Otsu, Shigeno, Tomi-shi, Nagano 389-0512 Japan  
Telephone No. : +81-268-64-2413  
Charge post : Inks and Media Division  
Person in charge : Isao Tabayashi  
E-mail address : tabayashi@mimaki.co.jp

#### IMPORTER/DISTRIBUTOR ESTABLISHED IN EU

Company Name : MIMAKI EUROPE B.V.  
Address : Joan Muyskenweg 42-44, 1099CK Amsterdam  
Telephone No. : +31-20-4627-640  
Person in charge : Sakae Sagane

### 1.4. Emergency telephone

EMERGENCY : Mimaki Engineering Co., Ltd +81-268-64-2413  
TELEPHONE : National Vaccine Information Center (NVIC)  
NUMBER : +31-30-274888

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW :



Xi Irritant



N Dangerous for the environment

## Safety Data Sheet

### POTENTIAL HEALTH EFFECTS

- Inhalation : R37 Irritating to respiratory system.  
 Eye : R36 Irritating to eyes.  
 Skin : R38 Irritating to skin.  
 : R43 May cause sensitization by skin contact.

### POTENTIAL ENVIROMENTAL EFFECTS

- Aquatic organism : R51 Toxic to aquatic organism.  
 R53 May cause long-time adverse effects in the aquatic environment.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| No | Chemical Name  | Wt%   | CAS No.     | EINECS No. | Symbol letters | Risk Phrase         | Chemical Formula                                     |
|----|--|-------|-------------|------------|----------------|---------------------|--|
| 1  | Acrylates  | 65-75 | Registered  | Registered | Xi, N          | R36/37/38<br>-51/53 | Trade Secret   |
| 2  | Iso-octyl acrylate                                       | 10-20 | 29590-42-9  | 249-707-8  | Xi, N          | R36/37/38<br>-50/53 | C <sub>11</sub> H <sub>20</sub><br>O <sub>2</sub>    |
| 3  | Titanium dioxide   | 15-20 | 13463-67-7  | 236-675-5  | not classified | not classified      | O <sub>2</sub> Ti                                    |
| 4  | Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide       | <5    | 162881-26-7 | 423-340-5  | Xi             | R43-53              | C <sub>26</sub> H <sub>27</sub><br>O <sub>3</sub> P  |
| 5  | 2-Methyl-1-(4-methylthiophenyl)-2-morpholinopropane-1-on | <2    | 71868-10-5  | 400-600-6  | Xn, N          | R22-51/53           | C <sub>15</sub> H <sub>21</sub><br>NO <sub>2</sub> S |

| No | Chemical Name  | Index No. (91/155 EEC) |
|----|--|------------------------|
| 1  | Acrylates  | 607-133-00-9           |
| 2  | Iso-octyl acrylate                                       | 607-244-00-2           |
| 4  | Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide       | 015-189-00-5           |
| 5  | 2-Methyl-1-(4-methylthiophenyl)-2-morpholinopropane-1-on | 606-041-00-6           |

\*The wording of the symbol(s) and risk phrase(s) is specified in 16.OTHER INFORMATION.

## Safety Data Sheet

### 4. FIRST AID MEASURES

- INHALATION** : Remove the victim from the contamination immediately to fresh air.  
Keep the victim warm and quiet and arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.
- EYE** : 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** : 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.  
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

#### EXTINGUISHING MEDIA

: Dry chemical powder, foam and carbon dioxide, water spray.

#### FIRE FIGHTING INSTRUCTIONS

: Fight fire from maximum distance.

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.

# Safety Data Sheet

## 7. HANDLING AND STORAGE

**HANDLING** : 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 place protected from sunlight fluorescent light, preferably at below 25 degree C on impermeable ground.  
 Keep away from sources of ignition.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Exposure limit values

| No | Chemical Name                           | Long term value           |
|----|---|---------------------------|
| 1  | Titanium dioxide<br>(TiO <sub>2</sub> ) | 10(*4(**mg/m <sup>3</sup> |

(\* total inhalable (\*\* respirable)

### 8.2. Exposure controls

#### Occupational exposure controls

**Engineering Controls** : Do not use in areas without adequate ventilation.

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

**Respiratory Protection** : Chemical cartridge respirator with an organic vapor cartridge.

**Hand Protection** : Impermeable gloves.

**Eye Protection** : Chemical safety glasses.

**Skin Protection** : Long sleeve clothing, resistant to solvents.

## Safety Data Sheet

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. General information

|            |                  |                  |
|------------|------------------|------------------|
| Appearance | - Physical state | : liquid         |
|            | - Color          | : White          |
| Odor       |                  | : Characteristic |

#### 9.2. Important health, safety and environmental information

|                               |  |                                     |
|-------------------------------|--|-------------------------------------|
| pH                            |  | : Not available                     |
| Boiling Point / Boiling Range |  | : Not available                     |
| Flash Point                   |  | : 134 degree C (Cleveland open cup) |
| Flammability(solid, gas)      |  | : Not available                     |
| Explosive Properties          |  | : Not available                     |
| Vapour Pressure               |  | : Not available                     |
| Density                       |  | : 1.20                              |
| Solubility                    |  | : Soluble (Organic solvent)         |
| Water solubility              |  | : Insoluble                         |
| Viscosity                     |  | : 20 mPa·s (25 degree C)            |

#### 9.3. Other information

|                               |  |                           |
|-------------------------------|--|---------------------------|
| Melting Point / Melting Range |  | : Not Applicable          |
| Auto-Ignition Temperature     |  | : Not available           |
| Surface Tension               |  | : 31.5 mN/m (25 degree C) |

### 10. STABILITY AND REACTIVITY

|                    |   |
|--------------------|---|
| CONDITONS TO AVOID | : Heat, sunlight (may result in polymerization)                                   |
| STABILITY          | : Stable under the usual handling conditions.                                     |
| MATERIALS TO AVOID | : Oxidizing agents, strong bases, and transition metals (possible polymerization) |

### 11. TOXICOLOGICAL INFORMATION

The product may cause a moderate irritation to the eyes, followed by burning sensation, tearing, and redness. Skin contact may result in delayed irritation and blistering. No significant symptoms of any adverse health hazard are expected to occur by ingestion of the product. Due to the low vapor pressure, inhalation is no primary route of entry.

## Safety Data Sheet

Irritation of the respiratory tract may be caused by inhalation of product vapors or mists in high concentration.

### 12. ECOLOGICAL INFORMATION

REMARK : Toxic for fish  
Water hazard class 2 (German Regulation)  
(Self-assessment): hazardous for water.  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organism.


### 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 regulation.

### 14. TRANSPORT INFORMATIONS

Perform prevention of collapse of cargo surely.  
Follow all regulation in your country.

#### LAND TRANSPORT

|          |                      |  |
|----------|----------------------|--|
| ADR, RID | Class                | : 9 Miscellaneous dangerous substances and articles.                                     |
|          | Danger code (Kemler) | : 90   |
|          | Packing Group(PG)    | :  |
|          | UN Number            | : 3082   |
|          | Hazard label         | : 9  |

# Safety Data Sheet

## SEA TRANSPORT

IMDG Class : 3082  
 Marine Pollutant : No

## AIR TRANSPORT

ICAO/IATA Class : 9  
 Packing Group(PG) :  
 UN Number : 3082

## 15. REGULATORY INFORMATION

This product is classified as follows and labeled accordingly.  
 Please refer to any other EU, national and local measures.

Symbol



Xi Irritant



N Dangerous for the environment

Hazard-determining components labeling

Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Risk Phrase

36/37/38 Irritating to eyes, respiratory system and skin.  
 43 May cause sensitization by skin contact.  
 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Advise

24/25 Avoid contact with skin and eyes.  
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 29/56 Do not empty into drains, dispose of the material and its container at hazardous or special waste collection point.  
 37 Water suitable gloves.

Water hazard class

2 (Self-assessment): hazardous for water.

## Safety Data Sheet

### 16. OTHER INFORMATION

From clause 3

- Symbol letters : Xi Irritant  
N Dangerous for the environment
- Risk phrase : 22 Harmful if swallowed.  
36/37/38 Irritating to eyes, respiratory system and skin.  
43 May cause sensitization by skin contact.  
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
53 May cause long-term adverse effects in the aquatic environment.

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#### Revision history

| Version | Date       | Content                                   |
|---------|------------|---|
| 1.0     | 2007/10/15 | First issue                               |
| 2.0     | 2007/12/18 | No.14, 15 Addition of symbols             |
| 3.0     | 2008/02/13 | No.1 Addition of the emergency telephone. |