

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 Yellow

Product Code : SPC-0371Y-2

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

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POTENTIAL HEALTH EFFECTS

Inhalation : R37 Irritating to respiratory system.
 Eye : R36 Irritating to eyes.
 Skin : R38 Irritating to skin.

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 | 50-60 | Registered | Registered | Xi, N | R36/37/38 -51/53 | Trade Secret |
| 2 | Iso-octyl acrylate | 10-20 | 29590-42-9 | 249-707-8 | Xi, N | R36/37/38 -50/53 | C11H20 O2 |
| 3 | 2-Benzyl-2-dimethylamino-4-morpholinobutyrophenone | <5 | 119313-12-1 | 404-360-3 | N | R50/53 | C23H30 N2O2 |
| 4 | 2-Hydroxy-2-methylpropiophenone | <3 | 7473-98-5 | 231-272-0 | Xn, N | R22, 50/53 | C10H12 O2 |
| 5 | Pigment Yellow | <5 | Registered | Registered | not classified | not classified | Trade Secret |

| No | Chemical Name | Index No. (91/155 EEC) |
|----|--|------------------------|
| 1 | Acrylates | 607-133-00-9 |
| 2 | Iso-octyl acrylate | 607-244-00-2 |
| 3 | 2-Benzyl-2-dimethylamino-4-morpholinobutyrophenone | 606-047-00-9 |

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

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.

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| | |
|-----------|---|
| 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.

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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 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. |

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information

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

9.2. Important health, safety and environmental information

| | |
|-------------------------------|-----------------|
| pH | : Not available |
| Boiling Point / Boiling Range | : Not available |

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|--------------------------|-------------------------------------|
| Flash Point | : 133 degree C (Cleveland open cup) |
| Flammability(solid, gas) | : Not available |
| Explosive Properties | : Not available |
| Vapour Pressure | : Not available |
| Density | : 1.06 |
| 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.

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

12. ECOLOGICAL INFORMATION

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|--------|---|
| 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 |
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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 regulations.

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  |

SEA TRANSPORT

| | | |
|------|------------------|--------|
| IMDG | Class | : 3082 |
| | Marine Pollutant | : No |

AIR TRANSPORT

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

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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

Risk Phrase

36/37/38 Irritating to eyes, respiratory system and skin.
 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.
 28 After contact with skin, wash immediately with plenty of water and soap.
 29/56 Do not empty into drains, dispose of the material and its container at hazardous or special waste collection point.
 37 Wear suitable gloves.

Waterhazard class

2 (Self-assessment): hazardous for water.

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.
 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.

Safety Data Sheet

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.

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. No.3 Addition of the ingredient. |