

Product Name: Pigment Ink Yellow MSDS No.031-34W01YC First issue: Apr 10, 2008 Revised: Aug 30, 2018 Page 1 of 6

Material Safety Data Sheets Considered a hazardous substance according to OSHA 29 CFR 1910.1200.

1. Product and Company Identification

| Product Name | : Pigment Ink Yellow |
|----------------------------|---|
| Product Code | : SPC-0180Y, 0494Y |
| General Use | : Ink jet printing ink |
| Product Description | : Pigment ink |
| MSDS Number | :031-34W01YC |
| 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 Estab | blished in USA |
| Company Name | : MIMAKI USA. INC. |
| Address | : 150 Satellite Boulevard, suite A, Suwanee, Georgia 30024, U.S.A |
| Telephone No. | : 1-678-730-0170 |
| Emergency Telephone No. | : +81-268-64-2413 |

2. Hazards Identification

| Emergency Overview | : Ink component is a Yellow liquid that cause eye, nose or throat |
|---------------------------|--|
| | irritation, and that effects anesthesia, if inhales. |
| | Ink may flash, when under high temperature. |
| | Avoid contact with eyes or clothing. |
| | In the case of skin contact, wash with soap and water. |
| | Keep out of reach of children. |
| | This product is not classified. |
| Potential Health Effects | |
| Inhalation | : Intentional exposure to ink vapors (mist) will cause respiratory |
| | irritation and anesthesia. |
| Eye Contact | : Ink contact with eye will be irritating. |
| Skin Contact | : Ink contact with skin may cause minimally irritation. |
| Ingestion | : May cause upset stomach. |
| Carcinogens | : None known. |
| Potential Environmental | : Not available. |
| Effects | |



Product Name: Pigment Ink Yellow MSDS No.031-34W01YC First issue: Apr 10, 2008 Revised: Aug 30, 2018 Page 2 of 6

Material Safety Data Sheets

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

3. Composition / Information On Ingredients

| No | Chemical Name | Name Wt% | CAS No. | Chemical |
|-----|-------------------------------|----------|--------------|--------------|
| 110 | enemical tvalle | | 0110 110. | Formula |
| 1 | Proprietary dyes and pigments | 5-10 | Trade Secret | Trade Secret |
| 2 | Proprietary organic materials | 15-20 | Trade Secret | Trade Secret |
| 3 | Glycerols | About 15 | Trade Secret | Trade Secret |
| 4 | Diethylene glycol | About 5 | 111-46-6 | $C_2H_6O_2$ |
| 5 | Ethylene glycol | <5 | 107-21-1 | $C_2H_6O_2$ |
| 6 | Water | balance | 7732-18-5 | H_2O |

4. First Aid Measures

| Inhalation | : Remove subject to ventilated fresh air. Consult physician if |
|----------------------------|--|
| | necessary. |
| Eye Contact | : Immediately flush with room temperature, low pressure, and clean |
| | water for at least 15 minutes. Seek medical attention if eye |
| | irritation continues. |
| Skin Contact | : Wash surface areas with soap and water. Wash soiled clothing before |
| | rewearing. Consult a physician if irritation continues. |
| Ingestion | : Seek medical advice; and attention if stomach continues to be upset. |
| Protection To First-Aiders | : Not available. |

5. Fire Fighting Measures

| Flammable Properties | : Not flammable. |
|----------------------|---|
| Extinguishing Media | : Dry chemical or carbon dioxide. |
| Fire Fighting | : No special fire fighting procedures are required other than |
| Instructions | breathing apparatus. No special explosion hazards are known. |

6. Accidental Release Measures

| Personal Precautions | : No eye or skin protection required during clean-up. Use proper |
|----------------------|--|
| | ventilation. |
| Land Spill | : If a spill occurs, use sponges to wipe-up ink, and then rinse with |



Product Name: Pigment Ink Yellow MSDS No.031-34W01YC First issue: Apr 10, 2008 Revised: Aug 30, 2018 Page 3 of 6

Material Safety Data Sheets

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

| | damp cloth. Place waste in closed container for disposal. |
|-------------------------|---|
| Water Spill | : Do not dispose of waste to the sewer. |
| | |
| 7. Handling And Storage | |
| | |
| Handling | : Keep out of reach of children and do not drink ink. |
| | Do not dismantle cartridge. |
| | Make sure cartridge is dry before insertion into printer housing. |
| Storage | : Do not store the cartridge in high or freezing temperatures. |
| | Keep cartridge out of direct sunlight. |
| | Do not store cartridges with oxidizing agents or explosives. |
| | |

8. Exposure Controls / Personal Protection

Exposure Limit Values

| Chemical Name | ACGIH: TLV | OSHA: PEL |
|-----------------|--------------------|-----------|
| Ethylene glycol | $100 \mathrm{m}^3$ | - |

Exposure Controls

Occupational Exposure Controls

Engineering Controls : Not special measures required.

Personal Protection

- Respiratory: Not required under suitable use as setting the cartridge on the
printer; however, self-contained breathing apparatus or organic
canister mask is sufficient when used for work.
- Hand Protection : Not required under suitable use as setting the cartridge on the printer; however, wearing gloves is sufficient.



Eye Protection : Not required under suitable use as setting the cartridge on the printer; however, wearing safety goggles is sufficient.



Product Name: Pigment Ink Yellow MSDS No.031-34W01YC First issue: Apr 10, 2008 Revised: Aug 30, 2018 Page 4 of 6

Material Safety Data Sheets

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.



Skin Protection : Not required under

: Not required under suitable use as setting the cartridge on the printer; however, wearing gloves is sufficient.



Environmental Exposure Controls

: Not established.

9. Physical And Chemical Properties

| Appearance - Physical state | : liquid |
|-------------------------------|----------------------------------|
| - Colour | : Yellow |
| Odour | : None |
| pH | : 8.0-10.0 (20 degree C) |
| Boiling Point / Boiling Range | : Not available. |
| Melting Point / Merting Range | : Not available. |
| Flash Point | : Not detected until 95 degree C |
| | (closed cup, ASTM D3278) |
| Flammability(solid, gas) | : Not available. |
| Relative density | : 1.00-1.10 (20 degree C) |
| Solubility | : Not available. |
| Water solubility | : Complete |
| Viscosity | : 3.5-4.5 (20 degree C) |
| VOC | : 60 g/l |

10. Stability And Reactivity

| Conditions To Avoid | : High and freezing temperatures. |
|------------------------|-----------------------------------|
| Stability | : Stable under temperature. |
| Materials To Avoid | : Oxidizers and explosives |
| Hazardous Reactions/ | : None |
| Decomposition Products | |



Material Safety Data Sheets

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11. Toxicologocal Information

| Acute Toxicity | Oral LD ₅₀ | Dermal LD ₅₀ | Inhalant LC ₅₀ |
|-----------------|-----------------------|-------------------------|--------------------------------|
| | No data available | No data available | No data available. |
| Eye Irritation | : Overexposure of eye | e surface to ink may be | mildly irritating. |
| Skin Irritation | : Overexposure of sl | kin to ink contact mag | y cause irritation and in some |
| | people swelling an | d redness. | |
| Sensitization | : Not available | | |
| Mutagenicity | : None known. | | |
| Carcinogenicity | : Not contain any sub | ostances listed in IARC | Monograph (1,2A and 2B) |

12. Ecological Information

| Ecotoxicity | : No data available on the adverse effects of this ink on the |
|-----------------------|---|
| | environment. |
| Persistence And | : No data available on the adverse effects of this ink on the |
| Degradability | environment. |
| Bioaccumulative | : No data available on the adverse effects of this ink on the |
| Potential | environment. |
| Other Adverse Effects | : No data available. |

13. Disposal Considerations

Disposal should be in accordance with federal, state, and local requirements. Do not dump this product into sewers, on the ground or into any body of water.

14. Transport Information

UN Class/UN Number : Not applocable. DOT, IMO, or IATA : Not hazardous classification

15. Regulatory Information

TSCA Section 4(a) Final : Not regulated. Test Rules Regulated



Product Name: Pigment Ink Yellow MSDS No.031-34W01YC First issue: Apr 10, 2008 Revised: Aug 30, 2018 Page 6 of 6

Material Safety Data Sheets

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

TSCA Section 8(a) Preliminary Assessment Information Rule(PAIR) TSCA Section12(b) One-Time Export

: Not regulated.

: Not regulated.

Notification Regulated

California Proposition 65





This product can expose you to chemicals including Ethylene glycol, 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.

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 | Apr 10, 2008 | First issue. |
| 2.0 | Aug 30, 2018 | Proposition65 Information Described |