



Product Name : Pigment Ink
For Textile Yellow
MSDS No. 031-33W03YC
First issue : Oct 18, 2007
Revised: Jun 13, 2008
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Material Safety Data Sheets

1. Product and Company Identification

Product Name : Pigment Ink For Textile Yellow
Product Code : SPC-0435Y
General Use : Ink jet printing ink
Product Description : Pigment ink
MSDS Number : 031-33W03YC
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

Not classified as hazardous according to regulatory criteria.

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3. Composition / Information On Ingredients

No	Chemical Name	Wt%	CAS No.	Chemical Formula
1	2,2'-oxybisethanol diethylene glycol	7.0~10.0%	111-46-6	C ₄ H ₁₀ O ₃ / (CH ₂ CH ₂ OH) ₂ O
2	Poly(oxy-1,2-ethanediyl), .alpha.-(2-(tert-dodecylthio)ethyl	1.0~2.5%	9004-83-5	-
3	Ammonia, aqueous solution	0.5~0.6%	1336-21-6	NH ₄ OH

4. First Aid Measures

Inhalation	: Move to fresh air. Give artificial respiration if breathing has stopped. Consult a physician.
Eye Contact	: Immediately flush eye(s) with plenty of water. Get prompt medical attention.
Skin Contact	: Wash with water and soap as a precaution. If skin irritation persists, call a physician. Wash contaminated clothing before reuse.
Ingestion	: Drink 1 or 2 glasses of water. Consult a physician. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep airway clear.
Note To Physician	: Treatment may vary with condition of victim and specifics of incident.

5. Fire Fighting Measures

Flammable Properties	Flash point: Noncombustible Lower explosion limit: Not applicable Upper explosion limit: Not applicable
Thermal decomposition	Combustion generates toxic fumes of the following: nitrogen oxides (NO _x), Carbon oxides, sulfur oxides.
Extinguishing Media	: Use the following extinguishing media when fighting fires involving this material: polar solvent (alcohol) foam

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	Water spray
	Dry chemical
	Carbon dioxide (CO ₂)
Fire Fighting Instructions	: Wear full fire-fighting turn-out gear (full bunker gear) and respiratory protection (self-contained breathing apparatus). Evacuate area and fight fire from a safe distance. Containers can rupture and release highly toxic vapors or decomposition products if exposed to heat. Dried product can burn. Material can splatter above 100C/212F.
Further information	: Remain upwind. Avoid breathing smoke. Use water spray to cool unopened containers.

6. Accidental Release Measures

METHODS FOR CLEANING UP	: Contain spilled liquid with sand or earth. DO NOT use combustible materials, such as sawdust. Eliminate all ignition sources, use explosion-proof equipment. Vacuum or sweep material and place in a disposal container. The material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.
HANDLING	: Avoid contact with skin, eyes and clothing. Do not breathe (dust, vapor, mist, gas). Wash thoroughly after handling. Use only clean, dry utensils in handling. Keep container tightly closed. Store in a cool, dry, well ventilated place. Destroy contaminated shoes in proper manner.
STORAGE	: Solidifies at about 5 - 25 °C (41 - 77 °F) and may break container. Keep from freezing - product stability may be affected.
SPECIFIC USES	: Formaldehyde will be generated under acidic conditions. Maintain adequate ventilation under these conditions to prevent exposure to formaldehyde above ceiling of 0.3 ppm.
FURTHER	: Monomer vapors can be evolved when material is heated during

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INFORMATION processing operations. See SECTION 8, for types of ventilation required.

Improper disposal or re-use of this container may be dangerous and illegal. Refer to applicable local, state and federal regulations.

Dispose empty container in a sanitary landfill or by incineration as allowed by state and local authorities.

7. Handling And Storage

HANDLING : Avoid contact with skin, eyes and clothing.
Do not breathe (dust, vapor, mist, gas).
Wash thoroughly after handling.
Use only clean, dry utensils in handling.
Keep container tightly closed. Store in a cool, dry, well ventilated place.
Destroy contaminated shoes in proper manner.

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8. Exposure Controls / Personal Protection

No	Chemical Name		TWA	STEL	Ceiling	Skin	REL
1	2,2'-oxybisethanol diethylene glycol	OSHA PEL	N.E	N.E.	N.E.	N.E.	N.E.
		ACGIH TLV	N.E	N.E.	N.E.	N.E.	N.E.
2	Ammonia, aqueous solution	OSHA PEL	N.E.	N.E.	N.E.	N.E.	N.E.
		ACGIH TLV	35ppm (As Ammonia)	35ppm (As Ammonia)	N.E.	N.E.	N.E.
			ECTLV	20ppm (As Ammonia)	50ppm (As Ammonia)	N.E.	N.E.
				14mg/m ³ (As Ammonia)	36mg/m ³ (As Ammonia)	N.E.	N.E.
		JPJSOH OEL	17mg/m ³	N.E.	N.E.	N.E.	N.E.

Exposure Controls

Occupational Exposure Controls

Engineering

Use only in area provided with appropriate exhaust ventilation.

Controls

Personal Protection

Respiratory

Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, 89/686/EEC), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

Protection



Hand Protection



Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not

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provide adequate protection): Neoprene gloves Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.

Eye Protection



Wear coverall, chemical goggles and face shield when handling.

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

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9. Physical And Chemical Properties

Appearance	- Physical state	: liquid
	- Colour	: Yellow
Odour		: ammonia
pH		: 7.5 - 9.5
Boiling Point / Boiling Range		: 100 °C (212.00 °F) Water
Melting Point / Merging Range		: Not available
Decomposition Temperature		: Not available
Flash Point		: Noncombustible
Auto-Ignition Temperature		: Not available
Flammability(solid, gas)		: Not available
Vapour Pressure		: 17.0 mmHg at 20 °C (68 °F) Water
Specific Gravity		: 0.95 - 1.05
Solubility		: Not available
Water solubility		: Dilutable
Viscosity		: 2.500 - 4.000 mPa.s
Vapour density		: <1.0 Water
Evaporation Rate		: <1.00 Water
VOC		: 10.0g/l

10. Stability And Reactivity

Conditions To Avoid	: Thermal decomposition may yield acrylic monomers.
Stability	: Product will not undergo polymerization.
Materials To Avoid	: Avoid contact with acids, alkalies and strong oxidizing agents.
Hazardous Reactions/	: This material is considered stable.
Decomposition Products	However, avoid temperatures above 177C/350F, the onset of polymer decomposition. Thermal decomposition is dependent on time and temperature.

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11. Toxicological Information

Acute Toxicity	Component: 2'-oxybisethanol diethylene glycol
	Oral LD ₅₀ Dermal LD ₅₀ Inhalant LC ₅₀
	>10,000 mg/kg(rat) >10,000 mg/kg(rabbit)
	Component: Ammonia, aqueous solution
	Oral LD ₅₀ Dermal LD ₅₀ Inhalant LC ₅₀
	>350 mg/kg(rat)
Eye Irritation	: Not available
Skin Irritation	: rabbit slight irritation
Sensitization	: Patch test on human volunteers did not demonstrate sensitization properties.
Mutagenicity	: Not available
Carcinogenicity	: Not available

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	There is no data available for this product.
	2'-oxybisethanol diethylene glycol: Acute and prolonged toxicity to fish Toxicity to fish LC50 >100 mg/l Toxicity to aquatic invertebrates EC50 Daphnia magna 100 mg/l
	Ammonia, aqueous solution Acute and prolonged toxicity to fish Toxicity to fish LC50 Oncorhynchus mykiss (rainbow trout) 24 h 0.097 mg/l TLm Fathead minnow (Pimephales promelas) 96 h 8.2 mg/l



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

13. Disposal Considerations

: Comply with all EU, national and local regulations.

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

14. Transport Information

Check a thing without a leak in a container.

Perform prevention of collapse of cargo surely.

UN Class/UN Number: Not applicable

DOT, IMO/IMDG,IATA/ICAO : Not applicable

15. Regulatory Information

TSCA Status : All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.



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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
1.00	Oct 18, 2007	First issue
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