

Safety Data Sheets

1. Identification

Product Name	: Pigment Ink 3 For Textile Black
Order No.	: TP3-K-22
Ink Ver.	: 2
General Use	: Inkjet printing ink
Product Description	: Pigment ink
SDS Number	: 037-W146038
Manufacture	
Company Name	: Mimaki Engineering Co., Ltd.
Address	: 2182-3 Shigeno-otsu, 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.	: +1-678-730-0170
Emergency Telephone No.	: +81-268-64-2281

2. Hazards Identification

[GHS Classification]

Physical Hazards

Flammable Liquids : Not classified

Health Hazards

Carcinogenicity : Category 2

Toxic to Reproduction : Category 2

Specific Target Organ Toxicity : Category 1

(Repeated Exposure)

The above list does not include category being non-classifiable or not-applicable.

[GHS Label Elements]

Symbol



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Signal Word
Danger

Hazard Statements

- H351 Suspected of causing cancer
- H361 Suspected of damaging fertility or the unborn child
- H372 Causes damage to organs through prolonged or repeated exposure

Precautionary Statements

- [Prevention]
 - P201 Obtain SDS (Safety Data Sheet) and printer's operation manual before use.
 - P202 Do not handle until all safety precautions have been read and understood.
 - P260 Do not breathe gas/mist.
 - P264 Wash hands thoroughly after handling.
 - P270 Do not eat, drink or smoke when using this product.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
- [Response]
 - P308+P313 IF exposed or concerned: Get medical advice/attention.
 - P314 Get medical advice/attention if you feel unwell.
- [Storage]
 - P405 Store locked up.
- [Disposal]
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulation (to be specified).

Other Information

- [Hazards not otherwise classified (HNOC)]
 - Not Applicable
- [Other hazards]
 - Not Applicable
- [Unknown Acute Toxicity]
 - 24% of the mixture consists of ingredient(s) of unknown toxicity

HMIS Rating (scale 0 – 4)

Health = 1

Flammability = 0

Reactivity = 0

Protective Equipment = X

1	Health
0	Flammability
0	Reactivity
X	Protective Equipment

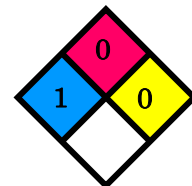
NFPA Rating (scale 0 – 4)

Health = 1

Flammability = 0

Instability = 0

Special = -



CANADIAN WHMIS SYMBOLS



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3. Composition / Information on Ingredients

No	Chemical Name	Wt%	CAS No.
1	Water	60-70	7732-18-5
2	Solvent	5-15	Trade Secret
3	Glycerin	5-15	56-81-5
4	Diethylene glycol	5-10	111-46-6
5	Polymer	1-5	Trade Secret
6	Carbon black	1-5	1333-86-4
7	Others	1-5	Trade Secret

4. First Aid Measures

Inhalation	: Remove to fresh air.
Eye Contact	: Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	: Wash skin with soap and water.
Ingestion	: Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms : Not Available

Indication of any immediate medical attention and special treatment needed

Note to physicians : Treat symptomatically.

5. Fire Fighting Measures

Flammable Properties	: Flash point ; Not flammable Explosion data ; No data available
Extinguishing Media	: CO2, dry chemical, dry sand, alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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Unsuitable Extinguishing : Caution: Use of water spray when fighting fire may be inefficient.

Media

Fire Fighting : As in any fire, wear self-contained breathing apparatus

Instructions : pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Personal Precautions : Use personal protection recommended in Section 8. Avoid contact with eyes and skin.

Environmental precautions : Do not allow into any sewer, on the ground or into any body of water. See Section 12 for additional Ecological Information.

Methods for containment : Prevent further leakage or spillage if safe to do so.

Methods for cleaning up : Take up with sand or other non-combustible absorbent material and place into containers for later disposal. Use personal protective equipment as required.

7. Handling and Storage

Handling : Handle in accordance with good industrial hygiene and safety practice.

Storage : No special requirements for writing instruments.

Incompatible materials : None known based on information supplied.

8. Exposure Controls / Personal Protection

Exposure Limit Values

No	Chemical Name	ACGIH	OSHA PEL	NIOSH IDLH
1	Carbon black	TWA: 3 mg/m ³ inhalable fraction	TWA: 3.5 mg/m ³ (vacated) TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³ TWA: 3.5 mg/m ³ TWA: 0.1 mg/m ³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH

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2	Glycerin (56-81-5)	N.E.	TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction (vacated) TWA: 10 mg/m ³ mist, total particulate (vacated) TWA: 5 mg/m ³ mist, respirable fraction	N.E.
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NIOSH IDLH Immediately Dangerous to Life or Health

Other Information : Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure Controls

Occupational Exposure Controls

Engineering Controls : Showers
 Eyewash stations
 Ventilation systems.

Personal Protection

Respiratory Protection : Consult with a health and safety professional for specific respirators appropriate for your use.



Hand Protection : Gloves made of plastic or rubber.



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Eye Protection : Wear safety glasses with side shields (or goggles).



Safety Glasses

Skin Protection : Suitable protective clothing. Apron.



Protective Apron

Environmental Exposure Controls
: Not available

9. Physical and Chemical Properties

Appearance	- Physical State	: liquid
	- Color	: Black
Odor		: Characteristic odor
pH		: 7-9
Boiling Point / Boiling Range		: Not Available
Melting Point / Melting Range		: Not Available
Decomposition Temperature		: Not Available
Flash Point		: Not flammable
Auto ignition temperature		: Not Available
Upper / Lower Flammability or Explosive Limits		: Not Available
Vapor Pressure		: Not Available
Specific Gravity		: Not Available
Solubility		: Not Available
Water Solubility		: dispersible
Viscosity		: <10 mPa·s (25 °C)
VOC		: Not Available

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10. Stability and Reactivity

Conditions to Avoid	: None known based on information supplied.
Reactivity	: No reactivity under the normal usage
Stability	: Stable under recommended storage conditions.
Materials to Avoid	: None known based on information supplied.
Possibility of Hazardous	: None under normal processing.
Reactions	
Decomposition Products	: None known based on information supplied.

11. Toxicological Information

Acute Toxicity : 24% of the mixture consists of ingredient(s) of unknown toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Glycerin (56-81-5)	-	> 10 g/kg (Rabbit)	> 570 mg/m ³ (Rat) 1 h
Diethylene glycol (111-46-6)	12565 mg/kg (Rat)	11890 mg/kg (Rabbit)	

Eye Irritation : Not Available
 Skin Irritation : Not Available
 Sensitization : Not Available
 Specific Target Organ : Category 1 as a product.

Toxicity
 (Repeated Exposure)

Chronic Toxicity : May cause adverse liver effects.
 Carcinogenicity : Category 2 as a product. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Carbon black	A3	Group 2B	-	X

Reproductive and Developmental Toxicity
 : Category 2 as a product.

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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

: Toxic to aquatic life with long lasting effects. Toxic to aquatic life.
36% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Fish	Crustaces
Glycerin (56-81-5)	75200: 96 h Pimephales promelas mg/L LC50 flow-through	84000: 48 h Daphnia magna mg/L EC50
Diethylene glycol (111-46-6)	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	-

Persistence and

: Not Available

Degradability

Bioaccumulative

: Not Available

Potential

Other Adverse Effects

: Not Available

13. Disposal Considerations

: Disposal should be in accordance with applicable regional, national and local laws and regulations.

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

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14. Transport Information

Check a thing without a leak in a container.

Perform prevention of collapse of cargo surely.

Us Department of Transportation (DOT)

UN Number : Not regulated
Proper Shipping : Not regulated
Name
Hazardous Class : Not regulated
Packing Group (PG) : Not regulated
Special Provisions : none
Marine pollutant : Not Applicable

TDG

UN Number : Not regulated
Proper Shipping : Not regulated
Name
Hazardous Class : Not regulated
Packing Group (PG) : Not regulated
Special Provisions : none
Marine pollutant : Not regulated

MEX

UN Number : Not regulated
Proper Shipping : Not regulated
Name
Hazardous Class : Not regulated
Special Provisions : none
Packing Group (PG) : Not regulated

IATA

UN Number : Not regulated
Proper Shipping : Not regulated
Name
Hazardous Class : Not regulated
Packing Group (PG) : Not regulated
Special Provisions : none

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Sea Transport (IMDG)

UN Number : Not regulated
 Proper Shipping Name : Not regulated
 Hazardous Class : Not regulated
 Packing Group (PG) : Not regulated
 Special Provisions : none
 Marine Pollutant : Not regulated
 Environmental hazard : Not Applicable

15. Regulatory Information

U.S. Federal Regulations

CERCLA : This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

SARA Title III

Section 311/312 : Acute health hazard No
 (40 CFR 370) Chronic Health Hazard No
 Fire hazard No
 Sudden release of pressure hazard No
 Reactive Hazard No

Section 313 : Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	weight-%	SARA 313 - Threshold Values %
Triethylene glycol monobutyl ether (143-22-6)	143-22-6	<5	1.0

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CWA (Clean Water Act) : This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

U.S. State Regulations

California Proposition
65

: **WARNING:**



This product can expose you to chemicals including Carbon black, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Chemical Name	California Proposition 65
Carbon black (1333-86-4)	Carcinogen

U.S.State Right-to-Know Regulations : This product contains substances regulated by state right-to-know regulations.

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Carbon black (1333-86-4)	X	X	X
Glycerin (56-81-5)	X	X	X
Triethylene glycol monobutyl ether (143-22-6)	X	-	X

U.S.EPA Label Information

EPA Pesticide : Not Applicable

Registration Number

Canada : This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR

WHMIS Hazard Class : D2A - Very toxic materials

Others : Please refer to any other federal, state and local regulations.

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16. Other Information

References

- 1) LOLI Database (ChemADVISOR, Inc.)
- 2) Japan National Institute of Technology and Evaluation
- 3) EU CLP(1272/2008)Annex VI Table 3.1

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