

# Safety Data Sheet

## 1. IDENTIFICATION

Product Identifier	PHT50 White
Product code	PHT50-W-50
Recommended use and restriction use	Inkjet printing ink
Manufacturer	MIMAKI ENGINEERING CO., LTD. 2182-3 Shigeno-otsu, Tomi-shi, Nagano 389-0512 JAPAN +81-268-64-2413
Importer / Distributor Information	MIMAKI SINGAPORE PTE. LTD. 31 Kaki Bukit Road 3 Singapore 417818 TechLink #02-03 +65-6508-2789
Emergency telephone number	+65 3165 2217 (within Singapore only) +65 3158 1074

## 2. HAZARDS IDENTIFICATION

### GHS CLASSIFICATION

#### Physical Hazards

Flammable liquids	Not classified
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### GHS LABEL ELEMENTS

Pictograms	None
Signal Word	None
Hazard Statements	None
Precautionary Statements	
Prevention	None
Response	None
Storage	None
Disposal	None

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### Substances or mixtures                      Mixtures

Chemical name	Contents	Chemical Formula	CAS RN
Water	60-70%	H2O	7732-18-5
Diethylene Glycol	10-20%	C4H10O3	111-46-6
Glycerol	1-10%	C3H8O3	56-81-5
Polyurethane resin	1-10%	Unknown	Confidential
Titanium dioxide	1-10%	Unknown	13463-67-7

## 4. FIRST-AID MEASURES

In case of inhalation	Move victim into fresh air. If breathing is difficult, give oxygen and consult a physician immediately.
In case of skin contact	Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. If skin irritation or rash occurs: Get medical advice/attention.

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In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.

In case of ingestion

Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

### 5. FIRE-FIGHTING MEASURES

Suitable fire-extinguishing media

Use extinguishing media suitable for surrounding area.

Not suitable extinguishing media

There is no restriction on the type of extinguisher which may be used.

Specific hazards arising from the chemical

Development of hazardous combustion gases or vapor possible in the event of fire.

Special protective actions for fire fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Fight fire from a safe distance, with adequate cover.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment, do not breathe gas/mist/vapour/spray.

Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Cut off the source of the leak as much as possible.

Keep leaks in a ventilated place.

Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.

Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container.

### 7. HANDLING AND STORAGE

Handling

Technical measures

Use local exhaust ventilation in case of production of fume or mist.

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Safe handling advice

Handling is performed in a well ventilated place.

Avoid contact with eyes.

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## Storage

Suitable storage conditions

Keep away from heat/sparks/open flames/ hot surfaces.

Keep containers tightly closed.

Keep containers in a dry, cool and well-ventilated place.

Keep away from heat/sparks/open flames/hot surfaces.

Store away from incompatible materials and foodstuff containers.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH (TLV)	Singapore
Glycerol (56-81-5)	Not established	10 mg/m <sup>3</sup> PEL (mist)
Diethylene Glycol (111-46-6)	Not established	Not established
Titanium dioxide (13463-67-7)	10mg/m <sup>3</sup> TWA	10 mg/m <sup>3</sup> PEL

### Engineering measures

Ensure adequate ventilation, especially in confined areas.

Ensure that eyewash stations and safety showers are close to the workstation location.

Set up emergency exit and necessary risk-elimination area.

Handle in accordance with good industrial hygiene and safety practice.

### Individual protection measures

#### Respiratory protection

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

#### Hand protection

Wear appropriate chemical resistant gloves.

#### Eye protection

Wear coverall, chemical goggles and face shield when handling.

#### Skin and body protection

To prevent any contact, wear impervious clothing such as gloves, apron, boots, or whole body suits made from neoprene, as appropriate.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Physical State

Liquid

Color

White

Odor

No information available

Odor threshold

No information available

pH

7-9

Melting point

No information available

Boiling point

No information available

Flash point

Not flammable

Evaporation rate

No information available

Flammability(Solid, Gas)

Not flammable

Flammability or explosive limits

No information available

Vapor pressure

No information available

Vapor density

No information available

Relative density

No information available

Solubility(ies)

No information available

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Partition coefficient: n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	3-5mPa·s

### 10. STABILITY AND REACTIVITY

Chemical stability	Stable under proper operation and storage conditions.
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	Alkali, sodium, calcium, and other active metal, halogen, metal oxide, nonmetal oxide, acyl halide and metal phosphide. Oxidants, alkali metals, alkaline earth metals and aluminum.
Hazardous decomposition products	Contact with incompatible substances can cause decomposition or other chemical reactions. In contact with active metals (alkali metals, Na, Ca etc.) causes a reaction and release hydrogen. In contact with oxidants causes severe reactions, and may cause a fire or explosion. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### 11. TOXICOLOGICAL INFORMATION

Acute toxicity (Oral)	Glycerol (56-81-5) LD <sub>50</sub> Rat 12,600 mg/kg
Acute toxicity (Dermal)	Glycerol (56-81-5) LD <sub>50</sub> Rabbit >10,000 mg/kg
Acute toxicity (Inhalation : Gases)	Based on available data, the classification criteria are not met
Acute toxicity (Inhalation : Vapours)	Based on available data, the classification criteria are not met
Acute toxicity (Inhalation : dust/mist)	Based on available data, the classification criteria are not met
Skin corrosion/ Irritation	Based on available data, the classification criteria are not met
Serious eye damage/ irritation	Based on available data, the classification criteria are not met
Respiratory Sensitization	Based on available data, the classification criteria are not met
Skin Sensitization	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Carcinogenicity	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
Reproductive toxicity, effects on or via lactation	Based on available data, the classification criteria are not met
Specific target organ Toxicity – Single Exposure	Based on available data, the classification criteria are not met
Specific target organ toxicity – Repeated Exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met

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### 12. ECOLOGICAL INFORMATION

Hazardous to the Aquatic Environment – Acute Toxicity	Glycerol (56-81-5) LC <sub>50</sub> Fish 885mg/L(96h)
Hazardous to the Aquatic Environment – Chronic Toxicity	No information available.
Hazardous to the Ozone layer	No information available.

### 13. DISPOSAL CONSIDERATIONS

Residual Waste	Dispose of waste in accordance with local, state and federal regulations. Recommend the use of incineration disposal.
Contaminated Container and Packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire.

### 14. TRANSPORT INFORMATION

International regulations	
IMDG	Not regulated as dangerous goods for transport.
IATA	Not regulated as dangerous goods for transport.
ADR	Not regulated as dangerous goods for transport.

### 15. REGULATORY INFORMATION

No main regulation

Component Analysis – Inventory

Glycerol (56-81-5)

TSCA – United States	ENCS – Japan	IECSC – China	DSL – Canada	PICCS – Philippines	AIICS – Australia	EINECS/ELINCS – European Union	NZIoC – New Zealand
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Titanium dioxide (13463-67-7)

TSCA – United States	ENCS – Japan	IECSC – China	DSL – Canada	PICCS – Philippines	AIICS – Australia	EINECS/ELINCS – European Union	NZIoC – New Zealand
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

### 16. OTHER INFORMATION

Literature References	1) SDS of raw material 2) IPCS: The International Chemical Safety Cards (ICSC)
Other data	The information suggested in this Safety Data Sheet does not comprehend everything and should be adopted only as a guide. The accuracy of the information and recommendations suggested herein are credible. However the company makes no warranty regarding such information and recommendations and disclaims all liability for reliance thereon.