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## Material Safety Data Sheet

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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : Ink Cartridge (Yellow)  
Product Code : IP5-201  
-Application model :IP-5610  
Manufacturer's Name : Seiko I Infotech Inc.  
Quality Assurance Department  
Address : 563, Takatsuka-Shinden, Matsudo-shi, Chiba, 270-2222,Japan  
Telephone Number : +81-47-391-2349  
Fax Number : +81-47-391-0952

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### 2. HAZARDS IDENTIFICATION

Classification: Irritant preparation.  
Routes of entry: Inhalation, Ingestion, and Skin.  
Harm to health: Contact with eyes may result in irritation.  
Contact with skin may result in irritation.  
Ingestion may result in gastric disturbance.  
Prolonged or repeated inhalation of vapor may cause headaches, dizziness or nausea.  
Harm of ecological: No information available.  
Risk of combustion and explosion: The vapor is heavier than air. Vapor or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures are explosive.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Main Ingredients	Content(%)	CAS No.	ACGIH	Symbols & R-phrase
Diethylene glycol diethyl ether	70-80	112-36-7	Not applicable	Xi;R-36
Tetraethylene glycol dimethyl ether	5-15	143-24-8	Not applicable	Not applicable
Additive	1-10	Listed	Not applicable	Not applicable
Polymer	1-10	Listed	Not applicable	Not applicable
Dispersant	0.1-5	Listed	Not applicable	Not applicable
Pigment	1-10	Listed	Not applicable	Not applicable

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### 4. FIRST-AID MEASURES

Skin Contact : In case of contact, immediately wash skin with soap and plenty of water. If irritation develops, get medical attention. Remove contaminated clothing and shoes.  
Eye Contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If irritation develops, get medical attention.

Inhalation : Move to fresh air area. Call a physician  
Ingestion : If swallowed, seek medical advice immediately.  
Further medical Treatment : None

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## 5. FIRE-FIGHTING MEASURES

Hazardous properties: Volatility is high and easy to ignite.  
The volatilized gas may catch fire by a distance ignition source.  
Must be kept away from flame or sparks.  
Suitable extinguishing media: Form, CO<sub>2</sub>, Dry Chemical and Water spray.  
Not to be used extinguishing media: Water (Jet)  
Hazardous decomposition product : Burning in insufficient air supply may produce toxic fume of carbon monoxide.  
Protective equipment for Fire fighters: Fire fighters should wear self-contained breathing apparatus to avoid inhalation of smoke and vapors.

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## 6. ACCIDENTAL RELEASE MEASURES

Shut off all sources of ignition or open flame. Keep public away. For small spills, scrape spilled materials with disposal towels or dry sand. For large spills, dike and cover liquid with foam. Take up the spill by equipment made of plastics to avoid sparks and place in closed container. Prevent spills from entering sewers, watercourses or Low area to avoid pollution.

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## 7. HANDLING AND STORAGE

Handling: Do not handle or store near an open flame, sources of heat or sources of ignition. Use only in the well-ventilated areas and wear proper protective equipment to avoid skin contact, eye contact and vapor inhalation.

Storage: Store containers in a cool and dark place. Keep containers closed.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limit:  
Diethylene glycol diethyl ether ACGIH(TWA) Not established  
Tetraethylene glycol dimethyl ether ACGIH(TWA) Not established  
Additive ACGIH(TWA) Not established  
Engineering controls: Use local exhaust ventilation.  
Respiratory protection : Respirator to avoid breathing organic solvent vapor.  
Hand protection : Wear chemical resistant gloves.  
Eye protection : Use safety glasses or goggles.  
Skin protection : Wear working clothes..  
Other protection: No smoking, No eating and No drinking at the work place.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Yellow colored liquid

Odor :	Solvent odor
Boiling point:	>188.9°C(760mmHg) (Diethylene glycol diethyl ether)
Melting point:	>-44.0°C (Diethylene glycol diethyl ether)
Flash point:	71.0°C (Tag closed cup)
Auto ignition temperature;	>140°C (Tetraethylene glycol dimethyl ether)
Flammable limit:	Lower 0.6vol% (Diethylene glycol diethyl ether)
	Upper 13.0vol% (Diethylene glycol diethyl ether)
Specific gravity:	0.95-1.00g/cm <sup>3</sup> (25°C)
Vapor pressure:	<50.66Pa(20°C)(Diethylene glycol diethyl ether)
Vapor density:	No information available.
Solubility in water:	Easily soluble.

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#### 10. STABILITY AND REACTIVITY

Stability :	Stable
Materials to Avoid :	Acids and oxidizing agents
Conditions to Avoid :	Extremely high temperature
Hazardous reactions:	Not occur
Decomposition Products :	No data

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#### 11. TOXICOLOGICAL INFORMATION

Acute Toxicity	
Diethylene glycol diethyl ether	Oral Toxicity LD50(rat) 4,790mg/kg
Tetraethylene glycol dimethyl ether	Oral Toxicity LD50(rat) 5,140mg/kg
Additive	Oral Toxicity LD50(rat) >5,000µL/kg
Carcinogenicity:	Diethylene glycol diethyl ether, Tetraethylene glycol dimethyl ether, Additive: No information available.
Mutagenicity:	No information available.
Other toxicity information:	No information available.

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#### 12. ECOLOGICAL INFORMATION

Environmental fate and distribution :	This product is insoluble in water .Treat using the best available techniques to avoid environmental contamination.
Toxicity:	No information available.
Effect on effluent treatment:	No data.

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#### 13. DISPOSAL CONSIDERATIONS

Comply with all federal, state and local regulations.  
Do not dump this product into sewers, on the ground or into any body of water.

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#### 14. TRANSPORT INFORMATION

UN CLASS: Not applicable

UN NUMBER: Not applicable

PACKING GROUP: Not applicable

PROPER SHIPPING NAME: Ink

Classification: This product is not classified as hazardous for transport.

Follow all regulations in your country.

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#### 15. REGULATORY INFORMATION

All ingredients in this product are listed on the EINECS. or exempt from listing.

Classification :Irritant preparation.

Indication of danger: Irritant

Symbol of danger: Xi

R-phrase: R-36 Irritating to eyes.

S-phrase: S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S-36 Wear suitable protective clothing.

Follow all regulation in your country.

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#### 16. OTHER INFORMATION

This data sheet was prepared in accordance with directive 2001/58/EEC

The above information relates only to the safety of the product designated, based on our current state of knowledge. No responsibility is accepted for any errors or omissions.

##### History

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