

---

## Material Safety Data Sheet

---

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : Ink Pack (Light Gray)/Sub Cartridge (Light Gray)  
Product Code : IP7-108/IP7-118  
-Application model :IP-7900/IP-7700  
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

---

### 2. HAZARDS IDENTIFICATION

Classification: Harmful 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.

---

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Main Ingredients                        | Content(%) | CAS No.   | ACGIH                    | Symbols & R-phrase |
|---|------------|-----------|--------------------------|--------------------|
| Ethylene glycol monobutyl ether acetate | 80-90      | 112-07-2  | 20ppm                    | Xn;R20/21          |
| Gamma-Butyrolactone                     | 1-10       | 96-48-0   | Not applicable           | Not applicable     |
| Diethylene glycol Diethyl ether         | 0.1-5      | 112-36-7  | Not applicable           | Xi;R36             |
| Carbon Black                            | 0.1-5      | 1333-86-4 | TWA 3.5mg/m <sup>3</sup> | Not applicable     |
| Polymer                                 | 1-10       | Listed    | Not applicable           | Not applicable     |
| Dispersant                              | 0.1-5      | Listed    | Not applicable           | Not applicable     |

---

### 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

---

## 5. FIRE-FIGHTING MEASURES

Hazardous properties: Volatility is high and easy to ignite. May catch fire with ignition.  
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.

---

## 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.

---

## 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.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limit: Ethylene glycol monobutyl ether acetate ACGIH(TWA)20ppm  
Gamma-Butyrolactone ACGIH(TWA) Not established  
Diethylene glycol Diethyl ether: 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 drinking at the work place.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Light Black colored liquid  
Odor : Solvent odor  
Boiling point: >191°C(Ethylene glycol monobutyl ether acetate)

|                            |  |
|----------------------------|--|
| Melting point:             | >-64.6°C (Ethylene glycol monobutyl ether acetate)   |
| Flash point:               | 77.0°C(Tag closed cup)   |
| Auto ignition temperature: | >340°C(Ethylene glycol monobutyl ether acetate)  |
| Flammable limit:           | Lower 0.8vol%(Ethylene glycol monobutyl ether acetate)<br>Upper 8.5vol%(Ethylene glycol monobutyl ether acetate) |
| Specific gravity:          | 0.96-1.00g/cm <sup>3</sup> (25°C)  |
| Vapor pressure:            | <40Pa(20°C)(Ethylene glycol monobutyl ether acetate)   |
| Vapor density:             | >3.0(Gamma-Butyrolactone)(Air=1)   |
| Solubility in water:       |  |
| in Water:                  | 1.1wt%(20°C)(Ethylene glycol monobutyl ether acetate) Easily soluble<br>(Gamma-Butyrolactone)                    |
| Water in:                  | 1.6wt%(20°C)(Ethylene glycol monobutyl ether acetate)  |

---

## 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                    |

---

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

|  |               |                         |
|--|---------------|-------------------------|
| Ethylene glycol monobutyl ether acetate: | Oral Toxicity | LD50(rat) 2,400mg/kg    |
|  | Skin Toxicity | LD50(rabbit) 1,500mg/kg |
| Gamma-Butyrolactone:                     | Oral Toxicity | LD50(rat) 1,580mg/kg    |
|  | Skin Toxicity | LD50(marmot)>5,000mg/kg |
|  | Oral Toxicity | LD50(rat) 4,790mg/kg    |

Carcinogenicity: Ethylene glycol monobutyl ether acetate :No information available.  
Gamma-Butyrolactone: The material of IARC rank {1;2A;2B}: There is not corresponding material.  
Carbon Black is classified as substance which is possibly carcinogenic to humans (IARC Group 2B),Possible cancer hazard.

Mutagenicity: No information available.

Other toxicity information: No information available.

---

## 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.  |

---

## 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.

---

#### 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.

---

#### 15. REGULATORY INFORMATION

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

Classification: Harmful preparation.

Indication of danger: Harmful

Symbol of danger: Xn

R-phrase: R20/21 Harmful by inhalation and in contact with skin.

S-phrase S24 Avoid contact with skin.

Follow all regulation in your country.

---

#### 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

Date of issue: 30-7-2008

Version: 1