

SDS No.: Q54-1488



# Safety Data Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier      Product Name : Ink Pack /Sub Cartridge (Yellow)  
Product Code : IP7-101/111

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

### 1.3 Details of the supplier of the safety data sheet

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

1.4 Emergency telephone: +81-47-391-2349 (JST 9:00-17:00)

## 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

<1999/45/EC >

Classification: Harmful preparation.

## 2.2 Label elements

<1999/45/EC >

Symbols of danger : Xn

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

S-phrase: S24 Avoid contact with skin

### 2.3 Other hazards

Routes of entry	Inhalation, Ingestion, and Skin
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Harm to health	Contact with eyes may result in irritation.
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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 to ecological	No information available.
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### Risk of combustion and explosion

The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures is explosive.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Main Ingredients	Content(%)	CAS No.	ACGIH	Symbols & R-phrases
Ethylene glycol monobutyl ether acetate	75-85	112-07-2	TWA20ppm	Xn;R20/21
Gamma-Butyrolactone	1-10	96-48-0	Not applicable	None
Pigment	1-10	Listed	Not applicable	None
Polymer	1-10	Listed	Not applicable	None
Dispersant	0.1-5	Listed	Not applicable	None

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### 4. FIRST-AID MEASURES

#### 4.1 Description of first aid measures

Inhalation :	Move to fresh air area. Call a physician
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.
Ingestion :	If swallowed, seek medical advice immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

See Section 4.1.

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### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable extinguishing media:

Dry chemicals, carbon dioxide, water sprinkling, and alcohol-resistance foam extinguishing agent

Unsuitable Extinguishing Media

Jet water

#### 5.2 Special hazards arising from the substance or mixture

Specific Hazards	Irritant, corrosive and/or toxic gas may be generated by a fire. Container may explode when heated
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#### 5.3 Advice for firefighters

Specific Fire Fighting	Carry out fire-fighting at the safe and effective distance from the fire, or use a unattended hose-holding unit, or a nozzle with a monitor.
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Protection of Fire Fighters

In fire-extinguishing activity, wear an appropriate air breathing apparatus and full protective clothing for chemicals.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not touch the leakage, and do not walk on it. Prohibit unauthorized entry into the area. Wear appropriate personal protective equipment (Refer to "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION" and avoid inhalation or contact with eyes and skin. If not wearing an appropriate personal protective clothing, do not touch the damaged leakage.

### 6.2 Environmental precautions

Do not release into the environment. Pay attention not to cause the influence on the environment by discharging into rivers.

### 6.3 Methods and material for containment and cleaning up

#### Decontamination/Absorption/Sweeping/Vacuuming/Neutralization

In case of small quantity, absorb the leakage with dry soil, sand, and incombustible-material or collect it into a container that can be covered tightly for later disposal. In case of small quantity, use clean and anti-static tools to collect absorbed materials. In case of large quantity, prevent the spills from spreading with embankment to lead them to a safe place for collection. Collect the material into a disposal container by sucking up or sweeping up.

#### Methods and Equipment for Containment and Cleaning up

All devices to handle spills must be grounded. If not dangerous, stop the leak. Small amount: Prevent the material from wetting by rain. Cover with dry soil, dry sand, or non-combustibles and store under a plastic sheet cover to avoid scattering and wetting. Cleansing the contaminated area thoroughly with water after removal.

#### Prevention Measures for Secondary Accidents.

Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area) Prevent flowing into drain, sewage, basement, and closed area.

### 6.4. Reference to other sections

See Section 8 and 13

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Technical Measures

Provide ventilation system and Use necessary personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION." Handling

#### Local and General Ventilation

Provide local ventilations and a full ventilation system as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."

#### Precautions for Safe Handling

Prohibit the use of heat, sparks, and fire in the surrounding area.

Wash hands thoroughly after handling.

Avoid swallowing.

Avoid the contact with the skin.

#### Prevents Handling of Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

#### 7.2 Conditions for safe storage, including any incompatibilities

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.

#### 7.3 Specific end use(s)

##### Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

##### Storage Conditions

Store away from oxidants.

Have containers keep away from direct sunlight and heat.

Store in a well-ventilated and cool place keeping container tightly closed.

##### Material Used in Packaging/Containers

Use containers prescribed in the "UN Transport Regulations."

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

##### Engineering Controls

Use Local exhaust ventilation.

##### Personal Protective Equipment

###### Respiratory Protection

Respirator to avoid breathing organic solvent vapor.

###### Hand Protection

Wear chemical resistant gloves.

###### Eye Protection

Use safety glasses or goggles.

###### Skin and Body Protection

Wear working clothes.

###### Specific Hygiene Measures

Wash hands thoroughly after handling.

#### 8.2 Exposure controls

##### Level/Exposure Limits

	ACGIH (TWA)
Ethylene glycol monobutyl ether acetate	20ppm

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	
Physical State	Liquid
Color	Yellow
Odor	Solvent odor
pH	No Data.
Flash point	75.0°C (Seta closed cup)
Flammable limit	0.88(93°C) - 8.54(135°C)vol% (Ethylene glycol monobutyl ether acetate)
Specific gravity	0.96-1.00g/cm <sup>3</sup> (25°C )
Vapor density	No information available.
Solubility in water	1.1wt%(20°C) (Ethylene glycolmonobutyl ether acetate) Easily soluble (Gamma -Butyrolactone)

### 9.2 Other information

No information available.

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable

### 10.2 Chemical stability

Reacts with acids and oxidizing agents

### 10.3 Possibility of hazardous reactions

Will not occur

### 10.4 Conditions to avoid

Extremely high temperature

### 10.5 Incompatible materials

Acids and oxidizing agents

### 10.6. Hazardous decomposition products

No information available

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute Toxicity:

Inhalation: No data available

Ingestion: Ethylene glycol monobutyl ether acetate  
LD50:2400mg/kg(rat)

Gamma-Butyrolactone  
LD50: 1580mg/kg(rat)

Eyes: No data available

Skin: Ethylene glycol monobutyl ether acetate  
LD50:1500mg/kg(marmot)

Gamma-Butyrolactone  
LD50>5000mg/kg(rabbit)

Sensitization: No data available

Mutagenicity: No data available

Reproductive Toxicity: No data available

Carcinogenicity: No data available.

Other Information: None

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## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No information available.

### 12.2 Persistence and degradability

No information available.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

PBT

Not applicable.

vPvB

Not applicable.

### 12.6 Other adverse effects

Environmental Hazards

This product is insoluble in water. Treat using the best available techniques to avoid environmental contamination.

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## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

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

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## 14. TRANSPORT INFORMATION

### 14.1 UN number

Not applicable.

### 14.2 UN proper shipping name

Not applicable.

### 14.3 Transport hazard class(es)

Not applicable.

### 14.4 Packing group

Not applicable.

### 14.5 Environmental hazards

Marine Pollutant: Not applicable

### 14.6 Special precautions for user

Not applicable.

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

Follow all regulations in your country.

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## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

All ingredients in this product are listed on the EINECS or are exempt from listing.  
REACH pre-registration of substances constituting this product are completed to the extent obliged by the REACH regulation by either the Only Representative appointed.  
The importer of the Products is hereby regarded as a downstream user.

This data sheet was prepared in accordance with  
Regulation(EC) No1907/2006.  
Follow all regulations in your country.

#### 15.2 Chemical safety assessment

No information available.

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#### 16. OTHER INFORMATION

Relevant phrases

R20/21 Harmful by inhalation and in contact with  
skin

Version: 2

SDS No.: Q54-1489



# Safety Data Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier      Product Name : Ink Pack /Sub Cartridge(Magenta)  
Product Code : IP7-102/112

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

### 1.3 Details of the supplier of the safety data sheet

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

1.4 Emergency telephone: +81-47-391-2349 (JST 9:00-17:00)

## 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

<1999/45/EC >

Classification: Harmful preparation.

## 2.2 Label elements

<1999/45/EC >

Symbols of danger : Xn  
R-phrase: R20/21 Harmful by inhalation and in contact with skin.  
S-phrase: S24 Avoid contact with skin

## 2.3 Other hazards

Routes of entry	Inhalation, Ingestion, and Skin
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Harm to health	Contact with eyes may result in irritation.
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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 to ecological	No information available.
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### Risk of combustion and explosion

The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures is explosive.



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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Main Ingredients	Content(%)	CAS No.	ACGIH	Symbols & R-phrase
Ethylene glycol monobutyl ether acetate	85-95	112-07-2	TWA20ppm	Xn;R20/21
Pigment	1-10	Listed	Not applicable	None
Polymer	1-10	Listed	Not applicable	None
Dispersant	0.1-5	Listed	Not applicable	None

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### 4. FIRST-AID MEASURES

#### 4.1 Description of first aid measures

Inhalation :	Move to fresh air area. Call a physician
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.
Ingestion :	If swallowed, seek medical advice immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

See Section 4.1.

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### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable extinguishing media:

Dry chemicals, carbon dioxide, water sprinkling, and alcohol-resistance foam extinguishing agent

Unsuitable Extinguishing Media

Jet water

#### 5.2 Special hazards arising from the substance or mixture

Specific Hazards	Irritant, corrosive and/or toxic gas may be generated by a fire. Container may explode when heated
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#### 5.3 Advice for firefighters

Specific Fire Fighting	Carry out fire-fighting at the safe and effective distance from the fire, or use a unattended hose-holding unit, or a nozzle with a monitor.
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Protection of Fire Fighters

In fire-extinguishing activity, wear an appropriate air breathing apparatus and full protective clothing for

chemicals.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not touch the leakage, and do not walk on it. Prohibit unauthorized entry into the area. Wear appropriate personal protective equipment (Refer to "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION" and avoid inhalation or contact with eyes and skin. If not wearing an appropriate personal protective clothing, do not touch the damaged leakage.

### 6.2 Environmental precautions

Do not release into the environment. Pay attention not to cause the influence on the environment by discharging into rivers.

### 6.3 Methods and material for containment and cleaning up

#### Decontamination/Absorption/Sweeping/Vacuuming/Neutralization

In case of small quantity, absorb the leakage with dry soil, sand, and incombustible-material or collect it into a container that can be covered tightly for later disposal. In case of small quantity, use clean and anti-static tools to collect absorbed materials. In case of large quantity, prevent the spills from spreading with embankment to lead them to a safe place for collection. Collect the material into a disposal container by sucking up or sweeping up.

#### Methods and Equipment for Containment and Cleaning up

All devices to handle spills must be grounded. If not dangerous, stop the leak. Small amount: Prevent the material from wetting by rain. Cover with dry soil, dry sand, or non-combustibles and store under a plastic sheet cover to avoid scattering and wetting. Cleansing the contaminated area thoroughly with water after removal.

#### Prevention Measures for Secondary Accidents.

Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area) Prevent flowing into drain, sewage, basement, and closed area.

### 6.4. Reference to other sections

See Section 8 and 13

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Technical Measures

Provide ventilation system and Use necessary personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION." Handling

#### Local and General Ventilation

Provide local ventilations and a full ventilation system as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."

Precautions for Safe Handling

Prohibit the use of heat, sparks, and fire in the surrounding area.

Wash hands thoroughly after handling.

Avoid swallowing.

Avoid the contact with the skin.

Prevents Handling of Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

7.2 Conditions for safe storage, including any incompatibilities

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.

7.3 Specific end use(s)

Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

Storage Conditions

Store away from oxidants.

Have containers keep away from direct sunlight and heat.

Store in a well-ventilated and cool place keeping container tightly closed.

Material Used in Packaging/Containers

Use containers prescribed in the "UN Transport Regulations."

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Engineering Controls

Use Local exhaust ventilation.

Personal Protective Equipment

Respiratory Protection

Respirator to avoid breathing organic solvent vapor.

Hand Protection

Wear chemical resistant gloves.

Eye Protection

Use safety glasses or goggles.

Skin and Body Protection

Wear working clothes.

Specific Hygiene Measures

Wash hands thoroughly after handling.

### 8.2 Exposure controls

Level/Exposure Limits

	ACGIH (TWA)
Ethylene glycol monobutyl ether acetate	20ppm

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance

Physical State	Liquid
Color	Red
Odor	Solvent odor
pH	No Data.
Flash point	73.0°C (Seta closed cup)
Flammable limit	0.88(93°C) - 8.54(135°C)vol% (Ethylene glycol monobutyl ether acetate)
Specific gravity	0.96-1.00g/cm <sup>3</sup> (25°C )
Vapor density	No information available.
Solubility in water	1.1wt%(20° C) (Ethylene glycolmonobutyl ether acetate)

## 9.2 Other information

No information available.

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable

### 10.2 Chemical stability

Reacts with acids and oxidizing agents

### 10.3 Possibility of hazardous reactions

Will not occur

### 10.4 Conditions to avoid

Extremely high temperature

### 10.5 Incompatible materials

Acids and oxidizing agents

### 10.6. Hazardous decomposition products

No information available

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute Toxicity:

Inhalation: No data available

Ingestion: Ethylene glycol monobutyl ether acetate  
LD50:2400mg/kg(rat)

Eyes: No data available

Skin: Ethylene glycol monobutyl ether acetate  
LD50:1500mg/kg(rabbit)

Sensitization: No data available

Mutagenicity: No data available

Reproductive Toxicity: No data available

Carcinogenicity: No data available.

Other Information: None

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## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No information available.

### 12.2 Persistence and degradability

No information available.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

PBT	Not applicable.
vPvB	Not applicable.
12.6 Other adverse effects	
Environmental Hazards	This product is insoluble in water. Treat using the best available techniques to avoid environmental contamination.

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Comply with national and local environmental regulations. Do not dump this product into sewers, on the ground or into any body of water.
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### 14. TRANSPORT INFORMATION

14.1 UN number	Not applicable.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	Marine Pollutant: Not applicable
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable. Follow all regulations in your country.

### 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.	<p>All ingredients in this product are listed on the EINECS or are exempt from listing.  REACH pre-registration of substances constituting this product are completed to the extent obliged by the REACH regulation by either the Only Representative appointed.  The importer of the Products is hereby regarded as a downstream user.</p> <p>This data sheet was prepared in accordance with Regulation(EC) No1907/2006.  Follow all regulations in your country.</p>
15.2 Chemical safety assessment	No information available.

### 16. OTHER INFORMATION

Relevant phrases	R20/21 Harmful by inhalation and in contact with skin
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Version: 2

SDS No.: Q54-1490



# Safety Data Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier      Product Name : Ink Pack /Sub Cartridge(Cyan)  
Product Code : IP7-103/113

1.2 Relevant identified uses of the substance or mixture and uses advised against  
Inkjet Ink

### 1.3 Details of the supplier of the safety data sheet

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

1.4 Emergency telephone: +81-47-391-2349 (JST 9:00-17:00)

## 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

<1999/45/EC >

Classification: Harmful preparation.

## 2.2 Label elements

<1999/45/EC >

Symbols of danger : Xn  
R-phrases: R20/21 Harmful by inhalation and in contact with skin.  
S-phrases: S24 Avoid contact with skin

### 2.3 Other hazards

Routes of entry	Inhalation, Ingestion, and Skin
-----------------	---------------------------------

Harm to health	Contact with eyes may result in irritation.
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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 to ecological	No information available.
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### Risk of combustion and explosion

The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures is explosive.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Main Ingredients	Content(%)	CAS No.	ACGIH	Symbols & R-phrases
Ethylene glycol monobutyl ether acetate	75-85	112-07-2	TWA20ppm	Xn;R20/21
Gamma-Butyrolactone	1-10	96-48-0	Not applicable	None
Pigment	1-10	147-14-8	Not applicable	None
Polymer	1-10	Listed	Not applicable	None
Dispersant	0.1-5	Listed	Not applicable	None

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### 4. FIRST-AID MEASURES

#### 4.1 Description of first aid measures

Inhalation :	Move to fresh air area. Call a physician
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.
Ingestion :	If swallowed, seek medical advice immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

See Section 4.1.

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### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable extinguishing media:

Dry chemicals, carbon dioxide, water sprinkling, and alcohol-resistance foam extinguishing agent

Unsuitable Extinguishing Media

Jet water

#### 5.2 Special hazards arising from the substance or mixture

Specific Hazards	Irritant, corrosive and/or toxic gas may be generated by a fire. Container may explode when heated
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#### 5.3 Advice for firefighters

Specific Fire Fighting	Carry out fire-fighting at the safe and effective distance from the fire, or use a unattended hose-holding unit, or a nozzle with a monitor.
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Protection of Fire Fighters

In fire-extinguishing activity, wear an appropriate air breathing apparatus and full protective clothing for chemicals.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not touch the leakage, and do not walk on it. Prohibit unauthorized entry into the area. Wear appropriate personal protective equipment (Refer to "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION" and avoid inhalation or contact with eyes and skin. If not wearing an appropriate personal protective clothing, do not touch the damaged leakage.

### 6.2 Environmental precautions

Do not release into the environment. Pay attention not to cause the influence on the environment by discharging into rivers.

### 6.3 Methods and material for containment and cleaning up

#### Decontamination/Absorption/Sweeping/Vacuuming/Neutralization

In case of small quantity, absorb the leakage with dry soil, sand, and incombustible-material or collect it into a container that can be covered tightly for later disposal. In case of small quantity, use clean and anti-static tools to collect absorbed materials. In case of large quantity, prevent the spills from spreading with embankment to lead them to a safe place for collection. Collect the material into a disposal container by sucking up or sweeping up.

#### Methods and Equipment for Containment and Cleaning up

All devices to handle spills must be grounded. If not dangerous, stop the leak. Small amount: Prevent the material from wetting by rain. Cover with dry soil, dry sand, or non-combustibles and store under a plastic sheet cover to avoid scattering and wetting. Cleansing the contaminated area thoroughly with water after removal.

#### Prevention Measures for Secondary Accidents.

Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area) Prevent flowing into drain, sewage, basement, and closed area.

### 6.4. Reference to other sections

See Section 8 and 13

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Technical Measures

Provide ventilation system and Use necessary personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION." Handling



#### Local and General Ventilation

Provide local ventilations and a full ventilation system as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."

#### Precautions for Safe Handling

Prohibit the use of heat, sparks, and fire in the surrounding area.

Wash hands thoroughly after handling.

Avoid swallowing.

Avoid the contact with the skin.

#### Prevents Handling of Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

#### 7.2 Conditions for safe storage, including any incompatibilities

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.

#### 7.3 Specific end use(s)

##### Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

##### Storage Conditions

Store away from oxidants.

Have containers keep away from direct sunlight and heat.

Store in a well-ventilated and cool place keeping container tightly closed.

##### Material Used in Packaging/Containers

Use containers prescribed in the "UN Transport Regulations."

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

##### Engineering Controls

Use Local exhaust ventilation.

##### Personal Protective Equipment

###### Respiratory Protection

Respirator to avoid breathing organic solvent vapor.

###### Hand Protection

Wear chemical resistant gloves.

###### Eye Protection

Use safety glasses or goggles.

###### Skin and Body Protection

Wear working clothes.

###### Specific Hygiene Measures

Wash hands thoroughly after handling.

#### 8.2 Exposure controls

##### Level/Exposure Limits

	ACGIH (TWA)
Ethylene glycol monobutyl ether acetate	20ppm

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Appearance	
Physical State	Liquid
Color	Blue
Odor	Solvent odor
pH	No Data.
Flash point	75.0°C (Seta closed cup)
Flammable limit	0.88(93°C) - 8.54(135°C)vol% (Ethylene glycol monobutyl ether acetate)
Specific gravity	0.96-1.00g/cm <sup>3</sup> (25°C )
Vapor density	No information available.
Solubility in water	1.1wt%(20°C) (Ethylene glycolmonobutyl ether acetate) Easily soluble (Gamma -Butyrolactone)

## 9.2 Other information

No information available.

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable

### 10.2 Chemical stability

Reacts with acids and oxidizing agents

### 10.3 Possibility of hazardous reactions

Will not occur

### 10.4 Conditions to avoid

Extremely high temperature

### 10.5 Incompatible materials

Acids and oxidizing agents

### 10.6. Hazardous decomposition products

No information available

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute Toxicity:

Inhalation: No data available

Ingestion: Ethylene glycol monobutyl ether acetate  
LD50:2400mg/kg(rat)

Gamma-Butyrolactone  
LD50: 1580mg/kg(rat)

Eyes: No data available

Skin: Ethylene glycol monobutyl ether acetate  
LD50:1500mg/kg(rabbit)

Gamma-Butyrolactone  
LD50:>5000mg/kg(marmot)

Sensitization: No data available

Mutagenicity: No data available

Reproductive Toxicity: No data available

Carcinogenicity: No data available.

Other Information: None

---

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No information available.

### 12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential	No information available.
12.4 Mobility in soil	No information available.
12.5 Results of PBT and vPvB assessment	
PBT	Not applicable.
vPvB	Not applicable.
12.6 Other adverse effects	
Environmental Hazards	This product is insoluble in water. Treat using the best available techniques to avoid environmental contamination.

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### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Comply with national and local environmental regulations. Do not dump this product into sewers, on the ground or into any body of water.
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### 14. TRANSPORT INFORMATION

14.1 UN number	Not applicable.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	Marine Pollutant: Not applicable
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable. Follow all regulations in your country.

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### 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.	<p>All ingredients in this product are listed on the EINECS or are exempt from listing.  REACH pre-registration of substances constituting this product are completed to the extent obliged by the REACH regulation by either the Only Representative appointed.  The importer of the Products is hereby regarded as a downstream user.</p> <p>This data sheet was prepared in accordance with Regulation(EC) No1907/2006.  Follow all regulations in your country.</p>
15.2 Chemical safety assessment	No information available.

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## 16. OTHER INFORMATION

Relevant phrases

R20/21 Harmful by inhalation and in contact with skin

Version: 2

SDS No.: Q54-1491



# Safety Data Sheet

# 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier      Product Name : Ink Pack /Sub Cartridge(Black)  
Product Code : IP7-104/114

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

### 1.3 Details of the supplier of the safety data sheet

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

1.4 Emergency telephone: +81-47-391-2349 (JST 9:00-17:00)

## 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

<1999/45/EC >

Classification: Harmful preparation.

## 2.2 Label elements

<1999/45/EC >

Symbols of danger : Xn  
R-phrases: R20/21 Harmful by inhalation and in contact with skin.  
S-phrases: S24 Avoid contact with skin

### 2.3 Other hazards

Routes of entry	Inhalation, Ingestion, and Skin
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Harm to health	Contact with eyes may result in irritation.
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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 to ecological	No information available.
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### Risk of combustion and explosion

The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures is explosive.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Main Ingredients	Content(%)	CAS No.	ACGIH	Symbols & R-phrase
Ethylene glycol monobutyl ether acetate	75-85	112-07-2	TWA20ppm	Xn;R20/21
Gamma-Butyrolactone	1-10	96-48-0	Not applicable	None
Carbon Black	1-10	1333-86-4	TWA 3,5mg/m <sup>3</sup>	None
Polymer	1-10	Listed	Not applicable	None
Dispersant	0.1-5	Listed	Not applicable	None

---

### 4. FIRST-AID MEASURES

#### 4.1 Description of first aid measures

Inhalation :	Move to fresh air area. Call a physician
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.
Ingestion :	If swallowed, seek medical advice immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

See Section 4.1.

---

### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable extinguishing media:

Dry chemicals, carbon dioxide, water sprinkling, and alcohol-resistance foam extinguishing agent

Unsuitable Extinguishing Media

Jet water

#### 5.2 Special hazards arising from the substance or mixture

Specific Hazards	Irritant, corrosive and/or toxic gas may be generated by a fire. Container may explode when heated
------------------	--

#### 5.3 Advice for firefighters

Specific Fire Fighting	Carry out fire-fighting at the safe and effective distance from the fire, or use a unattended hose-holding unit, or a nozzle with a monitor.
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## Protection of Fire Fighters

In fire-extinguishing activity, wear an appropriate air breathing apparatus and full protective clothing for chemicals.

---

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not touch the leakage, and do not walk on it. Prohibit unauthorized entry into the area. Wear appropriate personal protective equipment (Refer to "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION" and avoid inhalation or contact with eyes and skin. If not wearing an appropriate personal protective clothing, do not touch the damaged leakage.

### 6.2 Environmental precautions

Do not release into the environment. Pay attention not to cause the influence on the environment by discharging into rivers.

### 6.3 Methods and material for containment and cleaning up

#### Decontamination/Absorption/Sweeping/Vacuuming/Neutralization

In case of small quantity, absorb the leakage with dry soil, sand, and incombustible-material or collect it into a container that can be covered tightly for later disposal. In case of small quantity, use clean and anti-static tools to collect absorbed materials. In case of large quantity, prevent the spills from spreading with embankment to lead them to a safe place for collection. Collect the material into a disposal container by sucking up or sweeping up.

#### Methods and Equipment for Containment and Cleaning up

All devices to handle spills must be grounded. If not dangerous, stop the leak. Small amount: Prevent the material from wetting by rain. Cover with dry soil, dry sand, or non-combustibles and store under a plastic sheet cover to avoid scattering and wetting. Cleansing the contaminated area thoroughly with water after removal.

#### Prevention Measures for Secondary Accidents.

Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area) Prevent flowing into drain, sewage, basement, and closed area.

### 6.4. Reference to other sections

See Section 8 and 13

---

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Technical Measures

Provide ventilation system and Use necessary personal protective equipment as described in

"8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."Handling

Local and General Ventilation

Provide local ventilations and a full ventilation system as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."

Precautions for Safe Handling

Prohibit the use of heat, sparks, and fire in the surrounding area.

Wash hands thoroughly after handling.

Avoid swallowing.

Avoid the contact with the skin.

Prevents Handling of Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

7.2 Conditions for safe storage, including any incompatibilities

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.

7.3 Specific end use(s)

Imcompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

Storage Conditions

Store away from oxidants.

Have containers keep away from direct sunlight and heat.

Store in a well-ventilated and cool place keeping container tightly closed.

Material Used in Packaging/Containers

Use containers prescribed in the "UN Transport Regulations."

---

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Technical Measures

Provide ventilation system and Use necessary personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."Handling

Local and General Ventilation

Provide local ventilations and a full ventilation system as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."

Precautions for Safe Handling

Prohibit the use of heat, sparks, and fire in the surrounding area.

Wash hands thoroughly after handling.

Avoid swallowing.

Avoid the contact with the skin.

Prevents Handling of Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

7.2 Conditions for safe storage, including any incompatibilities



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.

### 7.3 Specific end use(s)

Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

Storage Conditions

Store away from oxidants.

Have containers keep away from direct sunlight and heat.

Store in a well-ventilated and cool place keeping container tightly closed.

Material Used in Packaging/Containers

Use containers prescribed in the "UN Transport Regulations."

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Engineering Controls

Use Local exhaust ventilation.

Personal Protective Equipment

Respiratory Protection

Respirator to avoid breathing organic solvent vapor.

Hand Protection

Wear chemical resistant gloves.

Eye Protection

Use safety glasses or goggles.

Skin and Body Protection

Wear working clothes.

Specific Hygiene Measures

Wash hands thoroughly after handling.

### 8.2 Exposure controls

Level/Exposure Limits

	ACGIH (TWA)
Ethylene glycol monobutyl ether acetate	20ppm
Carbon black	3.5mg/m <sup>3</sup>

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance

Physical State

Liquid

Color

Black

Odor

Solvent odor

pH

No Data.

Flash point

75.0°C (Seta closed cup)

Flammable limit

0.88(93°C) - 8.54(135°C)vol%

(Ethylene glycol monobutyl ether acetate)

Specific gravity

0.96-1.00g/cm<sup>3</sup> (25°C )

Vapor density

No information available.

Solubility in water

1.1wt%(20°C)

(Ethylene glycolmonobutyl ether acetate)

9.2 Other information	Easily soluble (Gamma -Butyrolactone)
	No information available.

## 10. STABILITY AND REACTIVITY

10.1 Reactivity	Stable
10.2 Chemical stability	Reacts with acids and oxidizing agents
10.3 Possibility of hazardous reactions	Will not occur
10.4 Conditions to avoid	Extremely high temperature
10.5 Incompatible materials	Acids and oxidizing agents
10.6. Hazardous decomposition products	No information available

## 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity:	
Inhalation:	No data available
Ingestion:	Ethylene glycol monobutyl ether acetate LD50:2400mg/kg(rat) Gamma-Butyrolactone LD50: 1580mg/kg(rat)
Eyes:	No data available
Skin:	Ethylene glycol monobutyl ether acetate LD50:1500mg/kg(rabbit) Gamma-Butyrolactone LD50>5000mg/kg(marmot)
Sensitization:	No data available
Mutagenicity:	No data available
Reproductive Toxicity:	No data available
Carcinogenicity:	Carbon black IARC Group 2B
Other Information:	None

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity	No information available.
12.2 Persistence and degradability	No information available.
12.3 Bioaccumulative potential	No information available.
12.4 Mobility in soil	No information available.
12.5 Results of PBT and vPvB assessment	
PBT	Not applicable.
vPvB	Not applicable.
12.6 Other adverse effects	
Environmental Hazards	

This product is insoluble in water. Treat using the best available techniques to avoid environmental contamination.

---

### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

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

---

### 14. TRANSPORT INFORMATION

#### 14.1 UN number

Not applicable.

#### 14.2 UN proper shipping name

Not applicable.

#### 14.3 Transport hazard class(es)

Not applicable.

#### 14.4 Packing group

Not applicable.

#### 14.5 Environmental hazards

Marine Pollutant: Not applicable

#### 14.6 Special precautions for user

Not applicable.

#### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

Follow all regulations in your country.

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### 15. REGULATORY INFORMATION

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

All ingredients in this product are listed on the EINECS or are exempt from listing.  
REACH pre-registration of substances constituting this product are completed to the extent obliged by the REACH regulation by either the Only Representative appointed.  
The importer of the Products is hereby regarded as a downstream user.

This data sheet was prepared in accordance with Regulation(EC) No1907/2006.  
Follow all regulations in your country.

#### 15.2 Chemical safety assessment No information available.

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### 16. OTHER INFORMATION

#### Relevant phrases

R20/21 Harmful by inhalation and in contact with skin

Version: 2

SDS No.: Q54-1492



# Safety Data Sheet

# 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier	Product Name : Ink Pack /Sub Cartridge (Light Cyan) Product Code : IP7-105/115
1.2 Relevant identified uses of the substance or mixture and uses advised against	Inkjet Ink
1.3 Details of the supplier of the safety data sheet	
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
1.4 Emergency telephone:	+81-47-391-2349 (JST 9:00-17:00)

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
<1999/45/EC >	
Classification:	Harmful preparation.
2.2 Label elements	
<1999/45/EC >	
Symbols of danger :	Xn
R-phrase:	R20/21 Harmful by inhalation and in contact with skin.
S-phrase:	S24 Avoid contact with skin
2.3 Other hazards	
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 to ecological	No information available.
Risk of combustion and explosion	The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixture is 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	TWA20ppm	Xn;R20/21
Gamma-Butyrolactone	1-10	96-48-0	Not applicable	None
Polymer	1-10	Listed	Not applicable	None
Pigment	0.1-5	147-14-8	Not applicable	None
Dispersant	0.1-5	Listed	Not applicable	None

---

### 4. FIRST-AID MEASURES

#### 4.1 Description of first aid measures

Inhalation :	Move to fresh air area. Call a physician
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.
Ingestion :	If swallowed, seek medical advice immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

See Section 4.1.

---

### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable extinguishing media:

Dry chemicals, carbon dioxide, water sprinkling, and alcohol-resistance foam extinguishing agent

Unsuitable Extinguishing Media

Jet water

#### 5.2 Special hazards arising from the substance or mixture

Specific Hazards	Irritant, corrosive and/or toxic gas may be generated by a fire. Container may explode when heated
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#### 5.3 Advice for firefighters

Specific Fire Fighting	Carry out fire-fighting at the safe and effective distance from the fire, or use a unattended hose-holding unit, or a nozzle with a monitor.
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Protection of Fire Fighters

In fire-extinguishing activity, wear an appropriate air breathing apparatus and full protective clothing for chemicals.

---

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not touch the leakage, and do not walk on it. Prohibit unauthorized entry into the area. Wear appropriate personal protective equipment (Refer to "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION" and avoid inhalation or contact with eyes and skin. If not wearing an appropriate personal protective clothing, do not touch the damaged leakage.

### 6.2 Environmental precautions

Do not release into the environment. Pay attention not to cause the influence on the environment by discharging into rivers.

### 6.3 Methods and material for containment and cleaning up

#### Decontamination/Absorption/Sweeping/Vacuuming/Neutralization

In case of small quantity, absorb the leakage with dry soil, sand, and incombustible-material or collect it into a container that can be covered tightly for later disposal. In case of small quantity, use clean and anti-static tools to collect absorbed materials. In case of large quantity, prevent the spills from spreading with embankment to lead them to a safe place for collection. Collect the material into a disposal container by sucking up or sweeping up.

#### Methods and Equipment for Containment and Cleaning up

All devices to handle spills must be grounded. If not dangerous, stop the leak. Small amount: Prevent the material from wetting by rain. Cover with dry soil, dry sand, or non-combustibles and store under a plastic sheet cover to avoid scattering and wetting. Cleansing the contaminated area thoroughly with water after removal.

#### Prevention Measures for Secondary Accidents.

Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area) Prevent flowing into drain, sewage, basement, and closed area.

### 6.4. Reference to other sections

See Section 8 and 13

---

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Technical Measures

Provide ventilation system and Use necessary personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION." Handling

#### Local and General Ventilation

Provide local ventilations and a full ventilation system as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."

#### Precautions for Safe Handling

Prohibit the use of heat, sparks, and fire in the surrounding area.

Wash hands thoroughly after handling.

Avoid swallowing.

Avoid the contact with the skin.

#### Prevents Handling of Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

#### 7.2 Conditions for safe storage, including any incompatibilities

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.

#### 7.3 Specific end use(s)

##### Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

##### Storage Conditions

Store away from oxidants.

Have containers keep away from direct sunlight and heat.

Store in a well-ventilated and cool place keeping container tightly closed.

##### Material Used in Packaging/Containers

Use containers prescribed in the "UN Transport Regulations."

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Engineering Controls

Use Local exhaust ventilation.

#### Personal Protective Equipment

##### Respiratory Protection

Respirator to avoid breathing organic solvent vapor.

##### Hand Protection

Wear chemical resistant gloves.

##### Eye Protection

Use safety glasses or goggles.

##### Skin and Body Protection

Wear working clothes.

##### Specific Hygiene Measures

Wash hands thoroughly after handling.

### 8.2 Exposure controls

#### Level/Exposure Limits

	ACGIH (TWA)
Ethylene glycol monobutyl ether acetate	20ppm

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	
Physical State	Liquid
Color	Blue
Odor	Solvent odor
pH	No Data.
Flash point	75.0°C (Seta closed cup)
Flammable limit	0.88(93°C) - 8.54(135°C)vol% (Ethylene glycol monobutyl ether acetate)
Specific gravity	0.96-1.00g/cm <sup>3</sup> (25°C )
Vapor density	No information available.
Solubility in water	1.1wt%(20°C) (Ethylene glycolmonobutyl ether acetate) Easily soluble (Gamma -Butyrolactone)

## 9.2 Other information

No information available.

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable

### 10.2 Chemical stability

Reacts with acids and oxidizing agents

### 10.3 Possibility of hazardous reactions

Will not occur

### 10.4 Conditions to avoid

Extremely high temperature

### 10.5 Incompatible materials

Acids and oxidizing agents

### 10.6. Hazardous decomposition products

No information available

---

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute Toxicity:

Inhalation: No data available

Ingestion: Ethylene glycol monobutyl ether acetate  
LD50:2400mg/kg(rat)

Gamma-Butyrolactone  
LD50: 1580mg/kg(rat)

Eyes: No data available

Skin: Ethylene glycol monobutyl ether acetate  
LD50:1500mg/kg(rabbit)

Gamma-Butyrolactone  
LD50:>5000mg/kg(marmot)

Sensitization: No data available

Mutagenicity: No data available

Reproductive Toxicity: No data available

Carcinogenicity: No data available.

Other Information: None

---

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No information available.

### 12.2 Persistence and degradability

No information available.



12.3 Bioaccumulative potential	No information available.
12.4 Mobility in soil	No information available.
12.5 Results of PBT and vPvB assessment	
PBT	Not applicable.
vPvB	Not applicable.
12.6 Other adverse effects	
Environmental Hazards	This product is insoluble in water. Treat using the best available techniques to avoid environmental contamination.

---

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Comply with national and local environmental regulations. Do not dump this product into sewers, on the ground or into any body of water.
------------------------------	--

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### 14. TRANSPORT INFORMATION

14.1 UN number	Not applicable.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	Marine Pollutant: Not applicable
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable. Follow all regulations in your country.

---

### 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.	<p>All ingredients in this product are listed on the EINECS or are exempt from listing.  REACH pre-registration of substances constituting this product are completed to the extent obliged by the REACH regulation by either the Only Representative appointed.  The importer of the Products is hereby regarded as a downstream user.</p> <p>This data sheet was prepared in accordance with Regulation(EC) No1907/2006.  Follow all regulations in your country.</p>
15.2 Chemical safety assessment	No information available.

---

16. OTHER INFORMATION

Relevant phrases	R20/21	Harmful by inhalation and in contact with skin
Version:	2	

SDS No.: Q54-1493



# Safety Data Sheet

# 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier	Product Name : Ink Pack /Sub Cartridge (Light Magenta) Product Code : IP7-106/116
1.2 Relevant identified uses of the substance or mixture and uses advised against	Inkjet Ink
1.3 Details of the supplier of the safety data sheet	
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
1.4 Emergency telephone:	+81-47-391-2349 (JST 9:00-17:00)

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
<1999/45/EC >	
Classification:	Harmful preparation.
2.2 Label elements	
<1999/45/EC >	
Symbols of danger :	Xn
R-phrase:	R20/21 Harmful by inhalation and in contact with skin.
S-phrase:	S24 Avoid contact with skin
2.3 Other hazards	
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 to ecological	No information available.
Risk of combustion and explosion	The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixture is explosive.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Main Ingredients	Content(%)	CAS No.	ACGIH	Symbols & R-phrases
Ethylene glycol monobutyl ether acetate	85-95	112-07-2	TWA20ppm	Xn;R20/21
Polymer	1-10	Listed	Not applicable	None
Pigment	0.1-5	Listed	Not applicable	None
Dispersant	0.1-5	Listed	Not applicable	None

---

### 4. FIRST-AID MEASURES

#### 4.1 Description of first aid measures

Inhalation :	Move to fresh air area. Call a physician
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.
Ingestion :	If swallowed, seek medical advice immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

See Section 4.1.

---

### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable extinguishing media:

Dry chemicals, carbon dioxide, water sprinkling, and alcohol-resistance foam extinguishing agent

Unsuitable Extinguishing Media

Jet water

#### 5.2 Special hazards arising from the substance or mixture

Specific Hazards	Irritant, corrosive and/or toxic gas may be generated by a fire. Container may explode when heated
------------------	--

#### 5.3 Advice for firefighters

Specific Fire Fighting	Carry out fire-fighting at the safe and effective distance from the fire, or use a unattended hose-holding unit, or a nozzle with a monitor.
------------------------	--

Protection of Fire Fighters

In fire-extinguishing activity, wear an appropriate air breathing apparatus and full protective clothing for

chemicals.

---

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not touch the leakage, and do not walk on it. Prohibit unauthorized entry into the area. Wear appropriate personal protective equipment (Refer to "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION" and avoid inhalation or contact with eyes and skin. If not wearing an appropriate personal protective clothing, do not touch the damaged leakage.

### 6.2 Environmental precautions

Do not release into the environment. Pay attention not to cause the influence on the environment by discharging into rivers.

### 6.3 Methods and material for containment and cleaning up

#### Decontamination/Absorption/Sweeping/Vacuuming/Neutralization

In case of small quantity, absorb the leakage with dry soil, sand, and incombustible-material or collect it into a container that can be covered tightly for later disposal. In case of small quantity, use clean and anti-static tools to collect absorbed materials. In case of large quantity, prevent the spills from spreading with embankment to lead them to a safe place for collection. Collect the material into a disposal container by sucking up or sweeping up.

#### Methods and Equipment for Containment and Cleaning up

All devices to handle spills must be grounded. If not dangerous, stop the leak. Small amount: Prevent the material from wetting by rain. Cover with dry soil, dry sand, or non-combustibles and store under a plastic sheet cover to avoid scattering and wetting. Cleansing the contaminated area thoroughly with water after removal.

#### Prevention Measures for Secondary Accidents.

Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area) Prevent flowing into drain, sewage, basement, and closed area.

### 6.4. Reference to other sections

See Section 8 and 13

---

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Technical Measures

Provide ventilation system and Use necessary personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION." Handling

#### Local and General Ventilation

Provide local ventilations and a full ventilation system as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."

Precautions for Safe Handling

Prohibit the use of heat, sparks, and fire in the surrounding area.

Wash hands thoroughly after handling.

Avoid swallowing.

Avoid the contact with the skin.

Prevents Handling of Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

7.2 Conditions for safe storage, including any incompatibilities

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.

7.3 Specific end use(s)

Incompatible Substances or Mixtures

Refer to "10. STABILITY AND REACTIVITY"

Storage Conditions

Store away from oxidants.

Have containers keep away from direct sunlight and heat.

Store in a well-ventilated and cool place keeping container tightly closed.

Material Used in Packaging/Containers

Use containers prescribed in the "UN Transport Regulations."

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Engineering Controls

Use Local exhaust ventilation.

Personal Protective Equipment

Respiratory Protection

Respirator to avoid breathing organic solvent vapor.

Hand Protection

Wear chemical resistant gloves.

Eye Protection

Use safety glasses or goggles.

Skin and Body Protection

Wear working clothes.

Specific Hygiene Measures

Wash hands thoroughly after handling.

### 8.2 Exposure controls

Level/Exposure Limits

	ACGIH (TWA)
Ethylene glycol monobutyl ether acetate	20ppm

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance

Physical State	Liquid
Color	Red
Odor	Solvent odor
pH	No Data.
Flash point	78.0°C (Seta closed cup )
Flammable limit	0.88(93°C) - 8.54(135°C)vol% (Ethylene glycol monobutyl ether acetate)
Specific gravity	0.95-1.00g/cm <sup>3</sup> (25°C )
Vapor density	No information available.
Solubility in water	1.1wt%(20°C) (Ethylene glycolmonobutyl ether acetate)

## 9.2 Other information

No information available.

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable

### 10.2 Chemical stability

Reacts with acids and oxidizing agents

### 10.3 Possibility of hazardous reactions

Will not occur

### 10.4 Conditions to avoid

Extremely high temperature

### 10.5 Incompatible materials

Acids and oxidizing agents

### 10.6. Hazardous decomposition products

No information available

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute Toxicity:

Inhalation: No data available

Ingestion: Ethylene glycol monobutyl ether acetate  
LD50:2400mg/kg(rat)

Eyes: No data available

Skin: Ethylene glycol monobutyl ether acetate  
LD50:1500mg/kg(rabbit)

Sensitization: No data available

Mutagenicity: No data available

Reproductive Toxicity: No data available

Carcinogenicity: No data available.

Other Information: None

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## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No information available.

### 12.2 Persistence and degradability

No information available.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

PBT	Not applicable.
vPvB	Not applicable.
12.6 Other adverse effects	
Environmental Hazards	This product is insoluble in water. Treat using the best available techniques to avoid environmental contamination.

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### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Comply with national and local environmental regulations. Do not dump this product into sewers, on the ground or into any body of water.
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### 14. TRANSPORT INFORMATION

14.1 UN number	Not applicable.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	Marine Pollutant: Not applicable
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable. Follow all regulations in your country.

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### 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.	All ingredients in this product are listed on the EINECS or are exempt from listing. REACH pre-registration of substances constituting this product are completed to the extent obliged by the REACH regulation by either the Only Representative appointed. The importer of the Products is hereby regarded as a downstream user.  This data sheet was prepared in accordance with Regulation(EC) No1907/2006. Follow all regulations in your country.
15.2 Chemical safety assessment	No information available.

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### 16. OTHER INFORMATION

Relevant phrases	R20/21 Harmful by inhalation and in contact with skin
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Version: 2



SDS No.: Q54-1494



# Safety Data Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier      Product Name : Ink Pack /Sub Cartridge (Gray)  
Product Code : IP7-107/117

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

### 1.3 Details of the supplier of the safety data sheet

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

1.4 Emergency telephone: +81-47-391-2349 (JST 9:00-17:00)

## 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

<1999/45/EC >

Classification: Harmful preparation.

## 2.2 Label elements

<1999/45/EC >

Symbols of danger : Xn

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

S-phrase: S24 Avoid contact with skin

### 2.3 Other hazards

Routes of entry	Inhalation, Ingestion, and Skin
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Harm to health	Contact with eyes may result in irritation.
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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 to ecological	No information available.
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### Risk of combustion and explosion

The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures is explosive.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Main Ingredients	Content(%)	CAS No.	ACGIH	Symbols & R-phrase
Ethylene glycol monobutyl ether acetate	80-90	112-07-2	TWA20ppm	Xn;R20/21
Gamma-Butyrolactone	1-10	96-48-0	Not applicable	None
Polymer	1-10	Listed	Not applicable	None
Carbon Black	0.1-5	1333-86-4	TWA 3,5mg/m <sup>3</sup>	None
Diethylene glycol Diethyl ether	0.1-5	112-36-7	Not applicable	None
Dispersant	0.1-5	Listed	Not applicable	None

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### 4. FIRST-AID MEASURES

#### 4.1 Description of first aid measures

Inhalation :	Move to fresh air area. Call a physician
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.
Ingestion :	If swallowed, seek medical advice immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

See Section 4.1.

---

### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

##### Suitable extinguishing media:

Dry chemicals, carbon dioxide, water sprinkling, and alcohol-resistance foam extinguishing agent

##### Unsuitable Extinguishing Media

Jet water

#### 5.2 Special hazards arising from the substance or mixture

Specific Hazards	Irritant, corrosive and/or toxic gas may be generated by a fire. Container may explode when heated
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#### 5.3 Advice for firefighters

Specific Fire Fighting	Carry out fire-fighting at the safe and effective distance from the fire, or use a unattended hose-holding unit, or a nozzle
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with a monitor.

#### Protection of Fire Fighters

In fire-extinguishing activity, wear an appropriate air breathing apparatus and full protective clothing for chemicals.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not touch the leakage, and do not walk on it. Prohibit unauthorized entry into the area. Wear appropriate personal protective equipment (Refer to "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION" and avoid inhalation or contact with eyes and skin. If not wearing an appropriate personal protective clothing, do not touch the damaged leakage.

### 6.2 Environmental precautions

Do not release into the environment. Pay attention not to cause the influence on the environment by discharging into rivers.

### 6.3 Methods and material for containment and cleaning up

#### Decontamination/Absorption/Sweeping/Vacuuming/Neutralization

In case of small quantity, absorb the leakage with dry soil, sand, and incombustible-material or collect it into a container that can be covered tightly for later disposal. In case of small quantity, use clean and anti-static tools to collect absorbed materials. In case of large quantity, prevent the spills from spreading with embankment to lead them to a safe place for collection. Collect the material into a disposal container by sucking up or sweeping up.

#### Methods and Equipment for Containment and Cleaning up

All devices to handle spills must be grounded. If not dangerous, stop the leak. Small amount: Prevent the material from wetting by rain. Cover with dry soil, dry sand, or non-combustibles and store under a plastic sheet cover to avoid scattering and wetting. Cleansing the contaminated area thoroughly with water after removal.

#### Prevention Measures for Secondary Accidents.

Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area) Prevent flowing into drain, sewage, basement, and closed area.

### 6.4. Reference to other sections

See Section 8 and 13

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Technical Measures

Provide ventilation system and Use necessary

	personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."Handling
Local and General Ventilation	Provide local ventilations and a full ventilation system as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."
Precautions for Safe Handling	Prohibit the use of heat, sparks, and fire in the surrounding area. Wash hands thoroughly after handling. Avoid swallowing. Avoid the contact with the skin.
Prevents Handling of Incompatible Substances or Mixtures	Refer to "10. STABILITY AND REACTIVITY"
7.2 Conditions for safe storage, including any incompatibilities	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.
7.3 Specific end use(s)	
Imcompatible Substances or Mixtures	Refer to "10. STABILITY AND REACTIVITY"
Storage Conditions	Store away from oxidants. Have containers keep away from direct sunlight and heat. Store in a well-ventilated and cool place keeping container tightly closed.
Material Used in Packaging/Containers	Use containers prescribed in the "UN Transport Regulations."

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Engineering Controls	Use Local exhaust ventilation.
Personal Protective Equipment	
Respiratory Protection	Respirator to avoid breathing organic solvent vapor.
Hand Protection	Ware chemical resistant gloves.
Eye Protection	Use safety glasses or goggles.
Skin and Body Protection	Wear working clothes.
Specific Hygiene Measures	Wash hands thoroughly after handling.

## 8.2 Exposure controls

### Level/Exposure Limits

	ACGIH (TWA)
Ethylene glycol monobutyl ether acetate	20ppm
Carbon black	3.5mg/m <sup>3</sup>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical State	Liquid
Color	Black
Odor	Solvent odor
pH	No Data.
Flash point	77.0°C (Tag closed cup)
Flammable limit	0.88(93°C) - 8.54(135°C)vol% (Ethylene glycol monobutyl ether acetate)
Specific gravity	0.96-1.00g/cm <sup>3</sup> (25°C )
Vapor density	No information available.
Solubility in water	1.1wt%(20°C) (Ethylene glycol monobutyl ether acetate) Easily soluble (Gamma -Butyrolactone)

### 9.2 Other information

No information available.

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable

### 10.2 Chemical stability

Reacts with acids and oxidizing agents

### 10.3 Possibility of hazardous reactions

Will not occur

### 10.4 Conditions to avoid

Extremely high temperature

### 10.5 Incompatible materials

Acids and oxidizing agents

### 10.6. Hazardous decomposition products

No information available

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute Toxicity:

Inhalation:	No data available
Ingestion:	Ethylene glycol monobutyl ether acetate LD50:2400mg/kg(rat) Gamma-Butyrolactone LD50: 1580mg/kg(rat)
Eyes:	No data available
Skin:	Ethylene glycol monobutyl ether acetate LD50:1500mg/kg(rabbit) Gamma-Butyrolactone LD50>5000mg/kg(marmot t)
Sensitization:	No data available
Mutagenicity:	No data available
Reproductive Toxicity:	No data available

Carcinogenicity:	Carbon black IARC Group 2B
Other Information:	None

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## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No information available.

### 12.2 Persistence and degradability

No information available.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

PBT

Not applicable.

vPvB

Not applicable.

### 12.6 Other adverse effects

Environmental Hazards

This product is insoluble in water. Treat using the best available techniques to avoid environmental contamination.

---

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

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

---

## 14. TRANSPORT INFORMATION

### 14.1 UN number

Not applicable.

### 14.2 UN proper shipping name

Not applicable.

### 14.3 Transport hazard class(es)

Not applicable.

### 14.4 Packing group

Not applicable.

### 14.5 Environmental hazards

Marine Pollutant: Not applicable

### 14.6 Special precautions for user

Not applicable.

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

Follow all regulations in your country.

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## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

All ingredients in this product are listed on the EINECS or are exempt from listing.  
REACH pre-registration of substances constituting this product are completed to the extent obliged by the REACH regulation by either the Only Representative appointed.

The importer of the Products is hereby regarded as a downstream user.

This data sheet was prepared in accordance with Regulation(EC) No1907/2006.  
Follow all regulations in your country.

#### 15.2 Chemical safety assessment

No information available.

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### 16. OTHER INFORMATION

Relevant phrases

R20/21 Harmful by inhalation and in contact with skin

Version: 2

SDS No.: Q54-1495



# Safety Data Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier      Product Name : Ink Pack /Sub Cartridge(Light Gray)  
Product Code : IP7-108/118

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

### 1.3 Details of the supplier of the safety data sheet

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

1.4 Emergency telephone: +81-47-391-2349 (JST 9:00-17:00)

## 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

<1999/45/EC >

Classification: Harmful preparation.

## 2.2 Label elements

<1999/45/EC >

Symbols of danger : Xn

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

S-phrase: S24 Avoid contact with skin

### 2.3 Other hazards

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 to ecological	No information available.
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### Risk of combustion and explosion

The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures is explosive.



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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Main Ingredients	Content(%)	CAS No.	ACGIH	Symbols & R-phrase
Ethylene glycol monobutyl ether acetate	80-90	112-07-2	TWA20ppm	Xn;R20/21
Gamma-Butyrolactone	1-10	96-48-0	Not applicable	None
Polymer	1-10	Listed	Not applicable	None
Carbon Black	0.1-5	1333-86-4	TWA 3,5mg/m <sup>3</sup>	None
Diethylene glycol Diethyl ether	0.1-5	112-36-7	Not applicable	None
Dispersant	0.1-5	Listed	Not applicable	None

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### 4. FIRST-AID MEASURES

#### 4.1 Description of first aid measures

Inhalation :	Move to fresh air area. Call a physician
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.
Ingestion :	If swallowed, seek medical advice immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

See Section 4.1.

---

### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

##### Suitable extinguishing media:

Dry chemicals, carbon dioxide, water sprinkling, and alcohol-resistance foam extinguishing agent

##### Unsuitable Extinguishing Media

Jet water

#### 5.2 Special hazards arising from the substance or mixture

Specific Hazards	Irritant, corrosive and/or toxic gas may be generated by a fire. Container may explode when heated
------------------	--

#### 5.3 Advice for firefighters

Specific Fire Fighting	Carry out fire-fighting at the safe and effective distance from the fire, or use a unattended hose-holding unit, or a nozzle
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with a monitor.

#### Protection of Fire Fighters

In fire-extinguishing activity, wear an appropriate air breathing apparatus and full protective clothing for chemicals.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not touch the leakage, and do not walk on it. Prohibit unauthorized entry into the area. Wear appropriate personal protective equipment (Refer to "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION" and avoid inhalation or contact with eyes and skin. If not wearing an appropriate personal protective clothing, do not touch the damaged leakage.

### 6.2 Environmental precautions

Do not release into the environment. Pay attention not to cause the influence on the environment by discharging into rivers.

### 6.3 Methods and material for containment and cleaning up

#### Decontamination/Absorption/Sweeping/Vacuuming/Neutralization

In case of small quantity, absorb the leakage with dry soil, sand, and incombustible-material or collect it into a container that can be covered tightly for later disposal. In case of small quantity, use clean and anti-static tools to collect absorbed materials. In case of large quantity, prevent the spills from spreading with embankment to lead them to a safe place for collection. Collect the material into a disposal container by sucking up or sweeping up.

#### Methods and Equipment for Containment and Cleaning up

All devices to handle spills must be grounded. If not dangerous, stop the leak. Small amount: Prevent the material from wetting by rain. Cover with dry soil, dry sand, or non-combustibles and store under a plastic sheet cover to avoid scattering and wetting. Cleansing the contaminated area thoroughly with water after removal.

#### Prevention Measures for Secondary Accidents.

Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area) Prevent flowing into drain, sewage, basement, and closed area.

### 6.4. Reference to other sections

See Section 8 and 13

---

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Technical Measures

Provide ventilation system and Use necessary

	personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."Handling
Local and General Ventilation	Provide local ventilations and a full ventilation system as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."
Precautions for Safe Handling	Prohibit the use of heat, sparks, and fire in the surrounding area. Wash hands thoroughly after handling. Avoid swallowing. Avoid the contact with the skin.
Prevents Handling of Incompatible Substances or Mixtures	Refer to "10. STABILITY AND REACTIVITY"
7.2 Conditions for safe storage, including any incompatibilities	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.
7.3 Specific end use(s)	
Imcompatible Substances or Mixtures	Refer to "10. STABILITY AND REACTIVITY"
Storage Conditions	Store away from oxidants. Have containers keep away from direct sunlight and heat. Store in a well-ventilated and cool place keeping container tightly closed.
Material Used in Packaging/Containers	Use containers prescribed in the "UN Transport Regulations."

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Engineering Controls	Use Local exhaust ventilation.
Personal Protective Equipment	
Respiratory Protection	Respirator to avoid breathing organic solvent vapor.
Hand Protection	Ware chemical resistant gloves.
Eye Protection	Use safety glasses or goggles.
Skin and Body Protection	Wear working clothes.
Specific Hygiene Measures	Wash hands thoroughly after handling.

## 8.2 Exposure controls

### Level/Exposure Limits

	ACGIH (TWA)
Ethylene glycol monobutyl ether acetate	20ppm
Carbon black	3.5mg/m <sup>3</sup>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical State	Liquid
Color	Black
Odor	Solvent odor
pH	No Data.
Flash point	77.0°C (Tag closed cup)
Flammable limit	0.88(93°C) - 8.54(135°C)vol% (Ethylene glycol monobutyl ether acetate)
Specific gravity	0.96-1.00g/cm <sup>3</sup> (25°C )
Vapor density	No information available.
Solubility in water	1.1wt%(20°C) (Ethylene glycol monobutyl ether acetate) Easily soluble (Gamma -Butyrolactone)

### 9.2 Other information

No information available.

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable

### 10.2 Chemical stability

Reacts with acids and oxidizing agents

### 10.3 Possibility of hazardous reactions

Will not occur

### 10.4 Conditions to avoid

Extremely high temperature

### 10.5 Incompatible materials

Acids and oxidizing agents

### 10.6. Hazardous decomposition products

No information available

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute Toxicity:

Inhalation:	No data available
Ingestion:	Ethylene glycol monobutyl ether acetate LD50:2400mg/kg(rat) Gamma-Butyrolactone LD50: 1580mg/kg(rat)
Eyes:	No data available
Skin:	Ethylene glycol monobutyl ether acetate LD50:1500mg/kg(rabbit) Gamma-Butyrolactone LD50>5000mg/kg(marmot)
Sensitization:	No data available
Mutagenicity:	No data available
Reproductive Toxicity:	No data available

Carcinogenicity:	Carbon black IARC Group 2B
Other Information:	None

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## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No information available.

### 12.2 Persistence and degradability

No information available.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

PBT

Not applicable.

vPvB

Not applicable.

### 12.6 Other adverse effects

Environmental Hazards

This product is insoluble in water. Treat using the best available techniques to avoid environmental contamination.

---

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

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

---

## 14. TRANSPORT INFORMATION

### 14.1 UN number

Not applicable.

### 14.2 UN proper shipping name

Not applicable.

### 14.3 Transport hazard class(es)

Not applicable.

### 14.4 Packing group

Not applicable.

### 14.5 Environmental hazards

Marine Pollutant: Not applicable

### 14.6 Special precautions for user

Not applicable.

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

Follow all regulations in your country.

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## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

All ingredients in this product are listed on the EINECS or are exempt from listing.  
REACH pre-registration of substances constituting this product are completed to the extent obliged by the REACH regulation by either the Only Representative appointed.

The importer of the Products is hereby regarded as a downstream user.

This data sheet was prepared in accordance with Regulation(EC) No1907/2006.  
Follow all regulations in your country.

#### 15.2 Chemical safety assessment

No information available.

---

### 16. OTHER INFORMATION

Relevant phrases

R20/21 Harmful by inhalation and in contact with skin

Version: 2