
Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : Black Ink Cartridge
Product Code : IP5-314
-Application model : IP-5620/5520
Manufacturer's Name: Seiko I Infotech Inc.
Quality Assurance Department
Address : 563, Takatsuka-Shinden, Matsudo-shi, Chiba, 270-2222, Japan
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2. HAZARD IDENTIFICATION

GHS CATEGORY

PHYSICAL HAZARDS

FLAMMABLE LIQUIDS

Category4

HEALTH HAZARDS

SERIOUS EYE DAMAGE/EYE IRRITATION

Category2

Hazards without a description above are hazards for which classification is not applicable or not possible.

LABEL ELEMENTS

Symbols



Signal Word

Warning

Hazard statements

Combustible liquid

Causes serious eye irritation

Precautionary statements

Keep out of reach of children.

Do not get in eyes, on skin, or on clothing.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical advice/attention.

Wear protective gloves / protective clothing / eye protection / face protection.

Use personal protective equipment as required.

IF SWALLOWED:

Get immediate medical advice/attention.

If medical advice is needed, have product container or label at hand.

Immediately call a doctor/physician.

Other hazards which do not result in classification

Potential health effects:

Inhalation:

Can cause moderate respiratory irritation.

Skin contact:

Can cause minor skin irritation, and dermatitis.

Eye contact:

Contact with eye(s) may cause moderate eye injury.

Ingestion:

Can cause abdominal discomfort, nausea, vomiting and diarrhea.

Sensitization properties:

Not available




Chronic:

Repeated skin contact may cause minor irritation or dermatitis.

These GHS categories of this product have been translated from DPD to GHS(CLP).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical nature: mixture(colored dispersion)

<u>components</u>	<u>CAS-No</u>	<u>Conc.%</u>	<u>Hazard Symbol</u>	<u>Hazard Statement *</u>
Carbon black (2)	1333-86-4	5-10	—	—
Dispersant	trade secret	1-5	—	—
Synthetic resin	trade secret	1-10	—	—
glycol ether acetate	trade secret	10-20	—	—
Alkylene(C#2) glycol ether	trade secret	30-40	—	—
Tetraethylene glycol ether	trade secret	15-25	—	—
γ-butyrolactone (1)	96-48-0 (EC No. 202-509-5)	5-10 (<10)	  (Xn,Xi)	H302,H318,H336 (R22,R41,R67)
Propylene carbonate(1)	108-32-7 (EC No. 203-572-1)	10-15	 (Xi)	H319 (R36)

- (1) Substances presenting a health hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.
- (2) OSHA hazardous according to 29 CFR 1910.1200
- (3) Subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

*Hazard Statement of ingredients --- See Section 16

4. FIRST AID MEASURES

- Inhalation: Remove victim from exposure area to fresh air immediately.
Get medical attention immediately.
Perform artificial respiration if necessary.
Qualified medical personnel should consider administering oxygen.
- Skin contact: Remove contaminated clothing and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15~20 minutes). If burns occur, proceed with the following: Cover affected area securely with sterile, dry, loose-fitting dressing. Get medical attention immediately.
- Eye contact: Wash eye(s) immediately with large amounts of water, occasionally lifting upper and lower lids, until no evidence of chemical remains (at least 15~20 minutes). Get medical attention immediately.
- Ingestion: Get medical attention immediately. Do not give anything by mouth as long as doctor does not allow.
- Protection to first-aiders : No information
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5. FIRE FIGHTING MEASURES

- Flammable properties : Smoke, carbon monoxide and nitrogen oxide in the case of incomplete combustion.
- Extinguishing media : Carbon dioxide, dry chemical, foam.
- Fire fighting instructions : Wear special chemical protective clothing and positive pressure self-contained breathing apparatus. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products.
Decontaminate or discard any clothing that may contain chemical residues.
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6. ACCIDENTIAL RELEASE MEASURES

Land spill/Water spill:

Do not touch spilled material. Stop leak if you can do it without risk.

Take up with sand or other absorbent material and place into containers for later disposal.

Move containers from spill area.

Prevent entry into sewers and waterways.

7. HANDLING AND STORAGE

Handling: Use only in well-ventilated areas. Avoid contact with skin and eyes. Keep away from heat and open flame.

Storage: Keep containers tightly closed. Store in a cool, dry place. Keep away from strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit values:

Hazardous Components (Specific Chemical Identity; Common Name(s)):	OSHA PEL	ACGIH TLV(2007)	EU limit value※
Glycol ether acetate	Not established	Not established	Not established
Alkylene(C≠2) glycol ether	Not established	Not established	Not established
Tetraethylene glycol ether	Not established	Not established	Not established
γ-butyrolactone	Not established	Not established	Not established
Propylene carbonate	Not established	Not established	Not established
Carbon black	3.5mg/m ³	3.5mg/m ³	Not established

※ Directive 2000/39/EC, 2006/15/EC, 2009/161/EU, 98/24/EC, 2004/37/EC, 2009/148/EC and Consolidated Indicative Occupational Exposure Limits Values (IOELVs) . (set out according to 98/24/EC, 95/320/EC and 2004/37/EC)
German MAK and TRGS900,905 and 907.

Exposure controls
occupational exposure controls

Engineering controls : Provide general and/or local exhaust ventilation.

Personal protection

Respiratory Protection :For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self contained air supply.

Hand protection :Employee must wear appropriate protective impervious gloves to prevent contact with this substance.

Eye protection :Employees must wear safety glasses to avoid contact with this substance. Also, emergency wash equipment must be available. The employer should provide an eye wash fountain and quick drench shower within the immediate work area for emergency use.

Skin protection :Employee must wear appropriate protective impervious clothing and equipment to prevent repeated or prolonged skin contact with this substance.

Environmental exposure controls
Not available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: black liquid
Odor	: slight
pH	: No data
Specific Gravity(H ₂ O=1) (g/cm ³)	: 1.02-1.04
Melting Point	: No data
Boiling point (°C)	: No data
Flash point (°C)	: 71(SCC)
Solubility in water	: Insoluble
Solubility in organic solvents	: Insoluble
Decomposition temperature	: No data

10. STABILITY AND REACTIVITY

Conditions to avoid	: Not available
Stability	: Stable under normal conditions.
Materials to avoid	: Avoid strong oxidizing agents and strong acid.
Hazardous reactions/decomposition products	: Not available

11. TOXICOLOGICAL INFORMATION

Acute toxicity	: Not available
Eye irritation	: Causes serious eye damage
Skin irritation	: Not available
Sensitization	: Not available
Repeated dose toxicity:	Not available
Chronic toxicity	: Not available
Mutagenicity	: Not available
Carcinogenicity	: IARC evaluated carbon black as a Group2B (Possibly carcinogenic to humans)and printing ink as a Group3(Not classifiable as to carcinogenicity to humans).
Reproductive and Developmental toxicity:	Not available

toxicity data

Components	Acute toxicity (oral) LD50	Acute toxicity (dermal)	Acute toxicity LC 50
γ-butyrolactone	1,540mg/kg(rat) 1,720mg/kg(rat)	>5,000mg/kg(mormot) <5,000mg/kg(mormot)	>5.1mg/L(4h)(mist)
Propylene carbonate	5,140mg/kg(rat)	no data	no data

12. ECOLOGICAL INFORMATION

Ecotoxicity : No data
Mobility : No data (This product is not water soluble.)
Persistence and biodegradability : No data
Bioaccumulative potential : No data
Remarks : Keep out of waterways.

13. DISPOSAL CONSIDERATIONS

Incineration recommended.

Waste disposal must be made in compliance with applicable local, state and country regulations.

14. TRANSPORT INFORMATION

UN. CLASS Not applicable
UN. No. Not applicable
Packing Group Not applicable

DOT Combustible
IATA Not applicable
IMDG Not applicable
RID Not applicable
ADR Not applicable

Transportation Practice :Any transportation practice must be done in compliance with law and regulation.

15. REGULATORY INFORMATION

Regulatory information with regard to this product in your country or region should be examined by your own responsibility.

<United States>

OSHA STATUS: See Section 8

TSCA STATUS: All ingredients are listed on the TSCA Inventory.

SARA TITLE 3

SARA 313 Supplier Notification

This product doesn't contain the following toxic chemical subject to the reporting requirements of section 313 of title 3 of superfund amendment and reauthorization act of 1986 and 40 CFR Part 372.

CALIFORNIA PROP.65:

None of the chemicals in this product are listed on the state of California to cause cancer, birth defects or other reproductive harm.

<EU>

Classification and labeling

This product is classified as dangerous preparation according to European Directives 67/548/EEC and 1999/45/EC for the classification, packaging and labelling of dangerous substances and preparations.

Hazard symbol: Xi
Risk phrases: R36

R36 Irritating to eyes.

Safety phrases: S2, S13, S25, S26, S39, S46

S 2 Keep out of the reach of children.

S13 Keep away from food, drink and animal feedingstuffs.

S25 Avoid contact with eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S39 Wear eye/face protection.

S46 If swallowed, seek medical advice immediately and show container or label.

16. OTHER INFORMATION

The information on this sheet is not a specification, it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product, nor where instructions or recommendations are not followed.

Hazard Statement of ingredients

H302 Harmful if swallowed.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.
H319 Causes serious eye irritation.

HMIS (the Hazardous Material Identification System) Rating

Health 2
Flammability 2
Reactivity 0
0=minimal, 1=slight, 2=moderate, 3=serious, 4=severe
Personal Protection H

NFPA (National Fire Protection Association) Rating

Health 2
Flammability 2
Reactivity 0
0=minimal, 1=slight, 2=moderate, 3=serious, 4=severe

History

Date of issue: 5 September, 2011

Version : 1