**SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

Product Name: Canon BJ Cartridge BC-23  Product Code: 0897A / F45-1421  Manufacturer: Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, Ph # 03-3758-2111  Supplier: Canon USA, Inc., One Canon Park, Melville, NY 11747, USA  Phone #: 1-800-OK-CANON 24 Hr. Emergency CHEMTREC # 1-800-424-9300  

**SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Chemical Name / Generic name</th>
<th>CAS # / EC #</th>
<th>Weight %</th>
<th>EU Symbol / R-Phrase</th>
<th>USA OSHA PEL (as mist)</th>
<th>ACGIH TLV (as mist)</th>
<th>EU ILV</th>
<th>DFG MAK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin</td>
<td>56-81-5 / 200-289-5</td>
<td>5 - 10</td>
<td>None / None</td>
<td>TWA = 15 mg/m³</td>
<td>Not established</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TWA = 5 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diethylene glycol</td>
<td>111-46-6 / 203-872-2</td>
<td>2 - 6</td>
<td>Xn / R22</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10 ppm, 44 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triol</td>
<td>Confidential</td>
<td>5 - 10</td>
<td>None / None</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5 / 231-79-12</td>
<td>65 - 85</td>
<td>None / None</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date of Issue: July 29, 1998  Revised: October 14, 2003
MATERIAL SAFETY DATA SHEET

SECTION 3 HAZARDS IDENTIFICATION
EU Classification:
Not classified as dangerous.

Emergency Overview:
Ink cartridge containing black liquid ink with slight odor.

Potential Health Effects and Symptoms:

Inhalation:
No adverse effects are expected under intended use.
Over exposure to vapor or mist may cause respiratory tract irritation, cough, dizziness, drowsiness, headache and nausea.

Ingestion:
May cause abdominal pain, diarrhea, dizziness, drowsiness, dullness, headache, nausea and vomiting.

Eye:
May cause minimal irritation. (See SECTION 11)

Skin:
Neither irritation nor sensitization is expected. (See SECTION 11)

Chronic Effects:
Not identified

Medical Conditions Generally known to be Aggravated by Exposure:
Not identified

SECTION 4 FIRST AID MEASURES
First Aid Measures:

Inhalation:
If symptoms are experienced, move victim to fresh air and obtain medical advice.

Ingestion:
Rinse mouth. Give one or two glasses of water.
If irritation or discomfort occurs, obtain medical advice immediately.

Eye:
Immediately flush with lukewarm, gently flowing water for 5 minutes or until the chemical is removed.
If irritation persists, obtain medical advice immediately.

Skin:
Wash with water and soap or mild detergent.
If irritation persists, obtain medical advice.

Note to Physicians:
None

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SECTION 5  FIRE FIGHTING MEASURES

Fire Fighting Measures:
- **Extinguishing Media:**
  - CO₂, water, foam or dry chemicals
- **Unsuitable Extinguishing Media:**
  - None
- **Special Fire Fighting Procedures:**
  - None
- **Unusual Fire and Explosion Hazards:**
  - None

Fire and Explosive Properties (See also Section 9):
- **Hazardous Combustion Products:**
  - CO and CO₂
- **Other Properties:**
  - None

SECTION 6  ACCIDENTAL RELEASE MEASURES

Personal Precautions:
- Avoid contact with skin, eyes and clothing.

Environmental Precautions:
- Do not release to sewer, surface water or ground water.

Method for Cleaning Up:
- Wipe off with wet cloth or paper.

SECTION 7  HANDLING AND STORAGE

Handling:
- Use with adequate ventilation.
- Avoid contact with skin, eyes and clothing.
- In case of contact, wash out the contaminated area immediately.

Storage:
- Keep in a cool and dry place.
- Protect from sunlight.
- Keep out of the reach of children.

Specific Uses:
- Ink for Ink Jet Printer.
  - For more information, please refer to the instruction of this product.

SECTION 8  EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:
- Not established for this ink. (See also SECTION 2)

Engineering Controls:
- Use adequate ventilation.

Personal Protection Equipment(s):
- **Respiratory Protection:**
  - ☒ Required
  - ☐ Not Required
- **Eye/Face Protection:**
  - ☐ Required
  - ☒ Not Required
- **Skin Protection:**
  - ☐ Required
  - ☒ Not Required
### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Black liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight odor</td>
</tr>
<tr>
<td>pH</td>
<td>7.0 - 9.0</td>
</tr>
<tr>
<td>Boiling Point/Range(°C):</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point/Range(°C):</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature(°C):</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point(°C):</td>
<td>None (Cleveland open cup)</td>
</tr>
<tr>
<td>Flammable (Explosive) Limits:</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition Temperature(°C):</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability:</td>
<td>Neither flammable nor combustible.</td>
</tr>
<tr>
<td>Explosive Properties:</td>
<td>None</td>
</tr>
<tr>
<td>Oxidizing Properties:</td>
<td>None</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Density / Specific Gravity:</td>
<td>1.04 - 1.10</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Miscible</td>
</tr>
<tr>
<td>Fat Solubility</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition Coefficient (n-Octanol/Water):</td>
<td>Not available</td>
</tr>
<tr>
<td>Percent Volatile (%)</td>
<td>65 - 85</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity (mPa s):</td>
<td>1.8 - 2.4</td>
</tr>
</tbody>
</table>

### SECTION 10 STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability:</td>
<td>✧ Stable</td>
</tr>
<tr>
<td>Conditions to Avoid:</td>
<td>None</td>
</tr>
<tr>
<td>Materials to Avoid:</td>
<td>Acids, bases, oxidizing materials and reducing agents</td>
</tr>
<tr>
<td>Hazardous Decomposition Products:</td>
<td>CO and CO₂</td>
</tr>
<tr>
<td>Hazardous Polymerization:</td>
<td>☐ May Occur</td>
</tr>
<tr>
<td></td>
<td>✧ Will Not Occur</td>
</tr>
<tr>
<td>Conditions to Avoid:</td>
<td>None</td>
</tr>
</tbody>
</table>
SECTION 11  TOXICOLOGICAL INFORMATION

Acute Toxicity:
   Inhalation:
      Not available

   Ingestion:
      \[ \text{LD}_{50} > 2000 \text{ mg/kg}, 0/10 mortalities at 2000 \text{ mg/kg (rat)} \]
      OECD Guidelines No.401 (1987)
      92/69/EEC Method B1

   Eye:
      Minimal irritant, Maximum Group Mean Score = 5.3, Class 3 (rabbit)
      OECD Guidelines No.405 (1987)
      92/69/EEC Method B5

   Skin:
      Non-irritant, Primary Irritation Index = 0.0 (rabbit)
      OECD Guidelines No.404 (1992)
      92/69/EEC Method B4

Sensitization:
   Non-sensitizer, Sensitization rate = 0 % (0/10) (guinea pig)
   92/69/EEC Method B6

Mutagenicity:
   Ames test : Negative (test strains: \textit{S.typhimurium} & \textit{E.Coli})

Reproductive Toxicity:
   Not available

Carcinogenicity:
   Not available

Others:
   Not available
SECTION 12  ECOLOGICAL INFORMATION

Mobility:              Not available
Persistence
/ Degradability:       Not available
Bioaccumulation:       Not available
Ecotoxicity:           Not available
Other Adverse Effects: Not available

SECTION 13  DISPOSAL CONSIDERATION

Method of Disposal:
Disposal should be subject to federal, state and local laws.

SECTION 14  TRANSPORT INFORMATION

UN #:                      None
UN Shipping Name:         None
UN Classification:        None
UN Packing Group:         None
Marine Pollutant:         ☑ Yes  Chemical name (wt%):
                          ☒ No
Special Precautions:      None

SECTION 15  REGULATORY INFORMATION

< EU Information >

Information on the Label:
Symbol & Indication:      Not required
R-Phrase:                 Not required
S-Phrase:                 Not required
Dangerous Component(s):   None
Special Precautions under 1999/45/EC Annex V:  Not required

Specific Provisions in Relation to Protection of Man or the Environment:
76/769/EEC:              Not regulated
(EC)2037/2000:           Not regulated
(EC)304/2003:            Not regulated
Others:                  None

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< USA Information >

Information on the Label under FHSA:

Signal Word: Not required

Hazard warning: Not required

Safety Advice: Not required

Hazardous Component(s): None

SARA Title III §313:

Chemical Name Weight %
None

California Proposition 65:

Chemical Name Weight %
None

< Canada Information >

WHMIS Controlled Product: Not applicable (Manufactured article)

< Australia Information >

Statement of Hazardous Nature: Not classified as hazardous according to criteria of NOHSC.

SECTION 16 OTHER INFORMATION

<R phrase list>
R22: Harmful if swallowed.

<Revised information from the previous version>
Entirely revised.
Literature Reference:
- U.S. Department of Labor, 29CFR Part 1910
- U.S. Environmental Protection Agency, 40CFR Part 372
- U.S. Consumer Product Safety Commission, 16CFR Part 1500
- ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
- U.S. Department of Health and Human Services National Toxicology Program, Annual Report on Carcinogens
- DFG, List of MAK and BAT Values
- Canada Workplace Hazardous Materials Information System

Abbreviations:
- EU: European Union.
- OSHA PEL: PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration (USA).
- ACGIH TLV: TLV(Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.
- DFG MAK: MAK(Maximale Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.
- TWA: Time Weighted Average.
- STEL: Short Term Exposure Limit.
- NTP: National Toxicology Program (USA).
- FHSA: Federal Hazardous Substances Act (USA).

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