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

**Product Name:** Canon Color BJ Cartridge BC-32e Photo  
**Product Code:** 4610A / F45-2061  
**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</th>
<th>ACGIH TLV</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>(as mist) Total dust TWA = 15 mg/m³ Respirable fraction TWA = 5 mg/m³</td>
<td>(as mist) TWA = 10 mg/m³</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1 / 203-473-3</td>
<td>2 - 6</td>
<td>Xn / R22</td>
<td>Not established</td>
<td>(aerosol) Ceiling = 100 mg/m³</td>
<td>TWA = 20 ppm, 52 mg/m³ STEL = 40 ppm, 104 mg/m³</td>
<td>10 ppm, 26 mg/m³</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>10 ppm, 44 mg/m³</td>
</tr>
<tr>
<td>Copper, [29H,31H-phthalocyaninato(2-) -N29,N30,N31,N32] -aminsulfonanyl sulfos derivs., sodium salts</td>
<td>90295-11-7 / 291-001-7</td>
<td>1 - 3</td>
<td>Xi / R36</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>Copper and its compounds Inhalable fraction 1.0 mg/m³</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0 / 200-661-7</td>
<td>1 - 3</td>
<td>F / R11</td>
<td>TWA = 400 ppm, 980 mg/m³</td>
<td>TWA = 200 ppm, 492 mg/m³ STEL = 400 ppm, 984 mg/m³</td>
<td>Not established</td>
<td>200 ppm, 500 mg/m³</td>
</tr>
<tr>
<td>Quinoline derivative</td>
<td>Confidential</td>
<td>1 - 3</td>
<td>Xi / R36</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Totalaluminum</td>
<td>107246-80-0 / 403-060-1</td>
<td>1 - 3</td>
<td>N / R51/53</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Ammonia derivative</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>Not established</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5 / 231-79-12</td>
<td>60 - 80</td>
<td>None / None</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
</tbody>
</table>
### SECTION 3 HAZARDS IDENTIFICATION

**EU Classification:**
Not classified as dangerous.

**Emergency Overview:**
A set of three colors ink cartridges. (Black, Cyan and Magenta)
All the ink is liquid mixture 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:**
- Black, Cyan : May cause mild irritation and no sensitization.
- Magenta : 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
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, CO₂ and NOx

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 away from heat and flame.
- 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, cyan and magenta liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight odor</td>
</tr>
<tr>
<td>pH</td>
<td>9.0 - 10.3</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>Estimate: .55 - 57 (Tag Closed Cup. Combustion is not sustainable.)</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>Classified as &quot;Combustible liquid&quot; under OSHA-HCS.</td>
</tr>
<tr>
<td></td>
<td>Not classified as &quot;flammable&quot; or &quot;combustible&quot; under FHSA.</td>
</tr>
<tr>
<td></td>
<td>Not classified as &quot;flammable&quot; under 1999/45/EC.</td>
</tr>
<tr>
<td>Viscosity (mPa s)</td>
<td>1.6 - 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></td>
<td>☐ Unstable</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, CO₂, NOx and Ammonia</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:**
- **Black and Cyan:** Estimated LD<sub>50</sub> > 2500 mg/kg, 0/6 mortalities at 2000 mg/kg (rat)
- **Magenta:** [Data of similar composition ink] Estimated LD<sub>50</sub> > 2500 mg/kg (rat)
  - OECD Guidelines No.423 (1996)
  - 96/54/EC Method B1 tris

**Eye:**
- **Black:** Minimal irritant, Maximum Group Mean Score = 3.3, Class 3 (rabbit)
- **Cyan:** Minimal irritant, Maximum Group Mean Score = 5.3, Class 3 (rabbit)
- **Magenta:** [Data of similar composition ink] Non irritant (rabbit)
  - OECD Guidelines No.405 (1987)
  - 92/69/EEC Method B5

**Skin:**
- **Black:** Mild irritant, Primary Irritation Index = 0.7 (rabbit)
- **Cyan:** Mild irritant, Primary Irritation Index = 1.8 (rabbit)
- **Magenta:** [Data of similar composition ink] Non irritant (rabbit)
  - OECD Guidelines No.404 (1992)
  - 92/69/EEC Method B4

**Sensitization:**
- **Black and Cyan:** Non sensitizer, Sensitization rate = 0 % (0/9) (guinea pig)
- **Magenta:** [Data of similar composition ink] Non sensitizer (guinea pig)
  - 96/54/EC Method B6

**Mutagenicity:**
- Ames test:
  - All colors: Negative (test strains: S.typhimurium & E.Coli)

**Reproductive Toxicity:**
- Not available

**Carcinogenicity:**
- Not available

**Others:**
- Not available

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**Date of Issue:** June 20, 2000

**Revised:** July 22, 2003
### SECTION 12  ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility:</td>
<td>Not available</td>
</tr>
<tr>
<td>Persistence / Degradability:</td>
<td>Not available</td>
</tr>
<tr>
<td>Bioaccumulation:</td>
<td>Not available</td>
</tr>
<tr>
<td>Other Adverse Effects:</td>
<td>Not available</td>
</tr>
</tbody>
</table>

### 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:            | Not required                              |
| 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                                      |

Date of Issue: June 20, 2000  
Revised: July 22, 2003
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:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Ethylene glycol&quot; (107-21-1)</td>
<td>2 - 6</td>
</tr>
<tr>
<td>&quot;Copper Compounds&quot; (Contained only in cyan ink)</td>
<td>1 - 3</td>
</tr>
<tr>
<td>(as Cu)</td>
<td>(&lt; 0.35)</td>
</tr>
</tbody>
</table>

California Proposition 65:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

< USA Information >

WHMIS Controlled Product: Not applicable (Manufactured article)

< Canada Information >

< Australia Information >

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

SECTION 16 OTHER INFORMATION

<R phrase list>
R11: Highly flammable.
R22: Harmful if swallowed.
R36: Irritating to eyes.
R67: Vapours may cause drowsiness or dizziness.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

<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 Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft.
TWA: Time Weighted Average.
IARC: International Agency for Research on Cancer.
NTP: National Toxicology Program (USA).
OSHA HCS: Occupational Safety and Health Act, Hazard Communication Standard (USA).
FHSA: Federal Hazardous Substances Act (USA).

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