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

**Product Name:** Canon Color BJ Cartridge BC-34e Photo  
**Product Code:** 4612A / F45-2081  
**Manufacturer:** Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, Phon e# 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>&lt; Ingredient(s) &gt;</th>
<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><strong>Glycerin</strong></td>
<td>56-81-5 / 200-289-5</td>
<td>5 - 10</td>
<td>None / None</td>
<td>(as mist) TWA = 15 mg/m³</td>
<td>(as mist) TWA = 10 mg/m³</td>
<td>Not established</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td><strong>Ethylene glycol</strong></td>
<td>107-21-1 / 203-473-3</td>
<td>2 - 6</td>
<td>Xn / R22</td>
<td>Not established</td>
<td>TWA = 20 ppm, Ceiling = 52 mg/m³</td>
<td>10 ppm, 26 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Diethylene glycol</strong></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>
<td></td>
</tr>
<tr>
<td><strong>Copper, [29H,31H-phthalocyaninato(2-) -N29,N30,N31,N32]-, aminosulfonyl sulfo derivs., sodium salts</strong></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 1.0 mg/m³ Inhalable fraction</td>
<td></td>
</tr>
<tr>
<td><strong>Isopropyl alcohol</strong></td>
<td>67-63-0 / 200-661-7</td>
<td>1 - 3</td>
<td>F / R11</td>
<td>X. / R36 / R67</td>
<td>TWA = 200 ppm, 492 mg/m³</td>
<td>TWA = 20 ppm, 980 mg/m³</td>
<td>Not established</td>
<td>200 ppm, 500 mg/m³</td>
</tr>
<tr>
<td><strong>Quinoline derivative</strong></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>
<td></td>
</tr>
<tr>
<td><strong>Tetrasodium 6-amino-4-hydroxy-3-(3-sulfonato-4-(5-sulfonato-2-naphthylazo)-3-naphthylazo)phthalalene-2,7-dicarboxylate</strong></td>
<td>107246-80-0 / 403-660-1</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>
<td></td>
</tr>
<tr>
<td><strong>Ammonia derivative</strong></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>
<td></td>
</tr>
<tr>
<td><strong>Water</strong></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>
<td></td>
</tr>
</tbody>
</table>

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<Carcinogen>

No component of this ink is listed as a human carcinogen or a potential carcinogen in IARC Monographs, NTP, OSHA regulations or Annex I to Directive 67/548/EEC.

SECTION 3 HAZARDS IDENTIFICATION

EU Classification:
Not classified as dangerous.

Emergency Overview:
A set of four colors ink cartridges. (Black, Cyan, Magenta and Yellow)
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 and Yellow: 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 immediately.

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, 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

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### 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, magenta and yellow liquid</td>
</tr>
<tr>
<td>Odor:</td>
<td>Slight odor</td>
</tr>
<tr>
<td>pH:</td>
<td>8.1 - 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. Not classified as &quot;flammable&quot; or &quot;combustible&quot; under FHSA. Not classified as &quot;flammable&quot; under 1999/45/EC.</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>60 - 80</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity (mPa s):</td>
<td>1.6 - 2.5</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, CO₂, NOx and Ammonia</td>
</tr>
<tr>
<td>Hazardous Polymerization:</td>
<td>☑ Will Not Occur</td>
</tr>
<tr>
<td>Conditions to Avoid:</td>
<td>None</td>
</tr>
</tbody>
</table>

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SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation:
Not available

Ingestion:
- Black and Cyan: Estimated LD₅₀ > 2500 mg/kg, 0/6 mortalities at 2000 mg/kg (rat)
- Magenta: [Data of similar composition ink] Estimated LD₅₀ > 2500 mg/kg (rat)
- OECD Guidelines No.423 (1996)
- 96/54/EC Method B1 tris
- Yellow: Not available

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)
- Yellow: Minimal irritant, Maximum Group Mean Score = 4.7, Class 3 (rabbit)
- Magenta: [Data of similar composition ink] Minimal 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)
- Yellow: Mild irritant, Primary Irritation Index = 0.2 (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)
- Yellow: Non sensitizer, Sensitization rate = 0 % (0/10) (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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### 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>Ecotoxicity</td>
<td>Tetralithium 6-amino-4-hydroxy-3-[7-sulfonato-4-(5-sulfonato-2-naphthylazo)-1-naphthylazo] naphthalene-2,7-disulfonate (107246-80-0) :</td>
</tr>
<tr>
<td>Fish, Acute Toxicity Test</td>
<td>96 Hour LC50 560-1000 mg/l, NOEC 560 mg/l (Cyprinus Carpio)</td>
</tr>
<tr>
<td>Daphnia sp. , Acute Immobilization Test :</td>
<td></td>
</tr>
<tr>
<td>24 Hour EC50 560-1000 mg/l, NOEC 560 mg/l (Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td>Daphnia sp. , Acute Reproduction Test : 19-Day NOEC 5.6 mg/l , LOEC 18 mg/l (Daphnia magna)</td>
<td></td>
</tr>
</tbody>
</table>

**NOEC : No Observed Effect Concentration , LOEC : Lowest Observed Effect Concentration**

**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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN #</td>
<td>None</td>
</tr>
<tr>
<td>UN Shipping Name</td>
<td>None</td>
</tr>
<tr>
<td>UN Classification</td>
<td>None</td>
</tr>
<tr>
<td>UN Packing Group</td>
<td>None</td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>Yes</td>
</tr>
<tr>
<td>Chemical name (wt%)</td>
<td></td>
</tr>
</tbody>
</table>

**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
< 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:

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

< 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>
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>
Section 2, 3, 4, 7, 8, 11 and 13
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.
- NTP: National Toxicology Program (USA).
- FHSA: Federal Hazardous Substances Act (USA).

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