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

**Product Name:** Canon Color BJ Cartridge BC-05  
**Product Code:** 0885A / F45-0891  
**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>
</table>
| **Glycerin**                 | 56-81-5 / 200-289-5 | 5 - 10 | None / None | (as mist) Total dust TWA = 15 mg/m³  
Respirable fraction TWA = 5 mg/m³ | Not established | Not established | Not established |
| **Thiodiglycol**             | 111-48-8 / 203-874-3 | 5 - 10 | Xi / R36 | Not established | Not established | Not established | Not established |
| **Copper and its compounds**| 90295-11-7 / 291-001-7 | 2 - 6 | Xi / R36 | Not established | Not established | Not established | Not established |
| **Isopropyl alcohol**        | 67-63-0 / 200-661-7 | 1 - 3 | F / R11  
Xi / R36  
R67 | TWA = 400 ppm, 980 mg/m³ | TWA = 200 ppm, 492 mg/m³ | STEL = 400 ppm, 984 mg/m³ | Not established |
| **Poly(oxy-1,2-ethanediyl),.alpha.,.alpha.'-[1,4-dimethyl-1,4-bis(2-methylpropyl)2-butyne-1,4-diyl]bis[.omega.-hydroxy-]** | 9014-85-1 / Not applicable | 1 - 3 | Xi / R41 | Not established | Not established | Not established | Not established |
| **C.I. Direct Violet 107**   | 413-180-4 | 1 - 3 | Xi / R41 | Not established | Not established | Not established | Not established |
| **C.I. Direct Yellow 173**   | 414-410-6 | 1 - 3 | Xi / R41 | Not established | Not established | Not established | Not established |
| **Triethanolamine**          | 102-71-6 / 203-049-8 | < 3 | None / None | Not established | TWA = 5 mg/m³ | Not established | Not established |
| **Ammonia derivative**       | Confidential | 5 - 10 | None / None | Not established | Not established | Not established | Not established |
| **Water**                    | 7732-18-5 / 231-79-12 | 60 - 80 | None / None | Not established | Not established | Not established | Not established |

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**Date of Issue:** January 19, 1996  
**Revised:** September 9, 2003
SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview:
A set of three colors ink cartridges. (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:
All colors : May cause minimal irritation. (See SECTION 11)

Skin:
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, NOx and SOx
- 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>Cyan, magenta and yellow liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight odor</td>
</tr>
<tr>
<td>pH</td>
<td>7.0 - 10.7</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>Magenta : 56.1 (Tag. Closed Cup. Combustion is not sustainable.)</td>
</tr>
<tr>
<td></td>
<td>Cyan and Yellow : Estimate None</td>
</tr>
<tr>
<td>Flammable (Explosive) Limits</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition Temperature(°C)</td>
<td>Magenta : 470 (ASTM-E659)</td>
</tr>
<tr>
<td></td>
<td>Cyan and Yellow : Not available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Magenta : 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></td>
<td>Cyan and Yellow : 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>60 - 80</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity (mPa s)</td>
<td>1.6 - 2.6</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, Ammonia and SOₓ</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:
Yellow: Estimated \( \text{LD}_{50} \) > 5000 mg/kg, 0/3 mortalities at 2000 mg/kg (rat)
OECD Guidelines No.423 (1996)
96/54/EC Method B1 tris

Cyan and Magenta: Not available

Eye:
Cyan: Minimal irritant, Maximum Group Mean Score = 8.0 - 10.0, Class 3 (rabbit)
Magenta: Minimal irritant, Maximum Group Mean Score = 2.7, Class 3 (rabbit)
Yellow: Minimal irritant, Maximum Group Mean Score = 4.7, Class 3 (rabbit)
OECD Guidelines No.405 (1987)
92/69/EEC Method B5

Skin:
Cyan: Mild irritant, Primary Irritation Index = 0.3 (rabbit)
Magenta: Non irritant, Primary Irritation Index = 0.0 (rabbit)
Yellow: Mild irritant, Primary Irritation Index = 0.5 (rabbit)
OECD Guidelines No.404 (1992)
92/69/EEC Method B4

Sensitization:
All colors: Non sensitizer, Sensitization rate = 0 % (0/10) (guinea pig)
96/54/EC Method B6

Mutagenicity:
Ames test
Cyan: Negative (test strains: \( S.typhimurium \))
Magenta and Yellow: Negative (test strains: \( S.typhimurium \) & \( E.Coli \))

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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Information on the Label

Signal Word: Not required

Hazard warning: Not required

Safety Advice: Not required

Hazardous Component(s):
None

SARA Title III §313:

Chemical Name: "Copper Compounds" (Contained only in cyan ink) (as Cu)
Weight %: 2 - 6 (< 0.35)

California Proposition 65:

Chemical Name: None
Weight %: Not required

< 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: "Copper Compounds" (Contained only in cyan ink) (as Cu)
Weight %: 2 - 6 (< 0.35)

California Proposition 65:

Chemical Name: None
Weight %: Not required

< 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

"C. I. Direct Violet 107"

A mixture of: sodium 5-[8-[4-[4-[4-[7-(3,5-dicarboxylatophenylazo)-8-hydroxy-3,6-disulfonatophenalen-1-ylamino]-6-hydroxy-1,3,5-triazin-2-yl]-2,5-dimethylpiperazin-1-yl]-6-hydroxy-1,3,5-triazin-2-ylamino]-1-hydroxy-3,6-disulfonatophenalen-2-ylazo)isophthalate; ammonium 5-[8-[4-[4-[4-[7-(3,5-dicarboxylatophenylazo)-8-hydroxy-3,6-disulfonatophenalen-1-ylamino]-6-hydroxy-1,3,5-triazin-2-yl]-2,5-dimethylpiperazin-1-yl]-6-hydroxy-1,3,5-triazin-2-ylamino]-1-hydroxy-3,6-disulfonatophenalen-2-ylazo)isophthalate; 5-[8-[4-[4-[4-[7-(3,5-dicarboxylatophenylazo)-8-hydroxy-3,6-disulfonatophenalen-1-ylamino]-6-hydroxy-1,3,5-triazin-2-yl]-2,5-dimethylpiperazin-1-yl]-6-hydroxy-1,3,5-triazin-2-ylamino]-1-hydroxy-3,6-disulfonatophenalen-2-ylazo)-isophthalic acid"

R11: Highly flammable. R36: Irritating to eyes. R41: Risk of serious damage to eyes. R87: Vapours may cause drowsiness and dizziness.

Revised information from the previous version

Entirely revised.

Date of Issue: January 19, 1996
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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.
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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