# MATERIAL SAFETY DATA SHEET

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

**Product Name:** Canon Ink Cartridge BJI-201 Y  
**Product Code:** 0949A / F47-0511, F47-0561, F47-1471  
**Manufacturer:** Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, Phone # 03-3758-2111  
**Supplier:** Canon USA, Inc., One Canon Park, Melville, NY 11747, USA  
**Phone #:** 1-800-OK-CANON, 24 Hr Emergency CHEMTREC # 1-800-434-9300

**Date of Issue:** December 7, 2001  
**Revised:** September 13, 2002

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**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>
</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 | | | | |
| **Thiodiglycol**  | 111-48-8/205-874-3             | 5 - 10      | Xi / R36  | Not established | Not established | Not established | Not established |
| **Poly(oxy-1,2-ethanediyl), [alpha, alpha'-[1,4-dimethyl-1,4-bis(2-methylpropyl)-2-butyne-1,4-diyl]bis[oxy a-hydroxy-]** | 9014-85-1 / Not applicable | 1 - 3 | Xi / R41 | Not established | Not established | Not established | Not established |
| **Ammonia derivative** | Confidential | 5 - 10 | None / None | Not established | Not established | Not established | Not established |
| **Water**         | 7732-18-5/231-791-2            | 65 - 85     | None / None | Not established | Not established | Not established | Not established |

**Chemical Name / Generic name:**
- Glycerin
- Thiodiglycol
- Poly(oxy-1,2-ethanediyl), [alpha, alpha'-[1,4-dimethyl-1,4-bis(2-methylpropyl)-2-butyne-1,4-diyl]bis[oxy a-hydroxy-]
- Ammonia derivative
- Water

**CAS # / EC #:**
- Glycerin: 56-81-5/200-289-5
- Thiodiglycol: 111-48-8/205-874-3
- Poly(oxy-1,2-ethanediyl), [alpha, alpha'-[1,4-dimethyl-1,4-bis(2-methylpropyl)-2-butyne-1,4-diyl]bis[oxy a-hydroxy-]: 9014-85-1 / Not applicable
- Ammonia derivative: Confidential

**Weight %:**
- Glycerin: 5 - 10
- Thiodiglycol: 5 - 10
- Poly(oxy-1,2-ethanediyl), [alpha, alpha'-[1,4-dimethyl-1,4-bis(2-methylpropyl)-2-butyne-1,4-diyl]bis[oxy a-hydroxy-]: 1 - 3
- Ammonia derivative: 5 - 10
- Water: 65 - 85

**EU Symbol / R-Phrase:**
- Glycerin: None / None
- Thiodiglycol: Xi / R36
- Poly(oxy-1,2-ethanediyl), [alpha, alpha'-[1,4-dimethyl-1,4-bis(2-methylpropyl)-2-butyne-1,4-diyl]bis[oxy a-hydroxy-]: Xi / R41
- Ammonia derivative: None / None
- Water: None / None

**USA OSHA PEL:**
- Glycerin: Not established
- Thiodiglycol: Not established
- Poly(oxy-1,2-ethanediyl), [alpha, alpha'-[1,4-dimethyl-1,4-bis(2-methylpropyl)-2-butyne-1,4-diyl]bis[oxy a-hydroxy-]: Not established
- Ammonia derivative: Not established
- Water: Not established

**ACGIH TLV:**
- Glycerin: Not established
- Thiodiglycol: Not established
- Poly(oxy-1,2-ethanediyl), [alpha, alpha'-[1,4-dimethyl-1,4-bis(2-methylpropyl)-2-butyne-1,4-diyl]bis[oxy a-hydroxy-]: Not established
- Ammonia derivative: Not established
- Water: Not established

**EU ILV:**
- Glycerin: Not established
- Thiodiglycol: Not established
- Poly(oxy-1,2-ethanediyl), [alpha, alpha'-[1,4-dimethyl-1,4-bis(2-methylpropyl)-2-butyne-1,4-diyl]bis[oxy a-hydroxy-]: Not established
- Ammonia derivative: Not established
- Water: Not established

**DFG MAK:**
- Glycerin: Not established
- Thiodiglycol: Not established
- Poly(oxy-1,2-ethanediyl), [alpha, alpha'-[1,4-dimethyl-1,4-bis(2-methylpropyl)-2-butyne-1,4-diyl]bis[oxy a-hydroxy-]: Not established
- Ammonia derivative: Not established
- Water: Not established
SECTION 3 HAZARDS IDENTIFICATION

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

Potential Health Effects and Symptoms:

- **Inhalation:** No adverse effects are expected under intended use. Glycerin mist may cause physical irritation and difficulty breathing.

- **Ingestion:** Ingestion of glycerin may cause headache, nausea, dizziness, vomiting, drowsiness, abdominal pain and dullness.

- **Eye:** May cause minimal irritation based on the animal test data of this ink. (See SECTION 11)

- **Skin:** May cause mild irritation and no sensitization based on the animal test data of this ink. (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 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, 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:
- Avoid contact with skin, eyes and clothing. When contact, wash out immediately.
- Use with adequate ventilation.

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. (Also refer to 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>Yellow liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight odor</td>
</tr>
<tr>
<td>pH</td>
<td>7.0 - 9.5</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 : None</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>1.6 - 2.2</td>
</tr>
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</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>☐ Unstable</td>
<td></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>☒ Will Not Occur</td>
<td></td>
</tr>
<tr>
<td>Conditions to Avoid:</td>
<td>None</td>
</tr>
</tbody>
</table>
SECTION 11    TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation:
Not available

Ingestion:
Not available

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

Skin:
Mild irritant, Primary Irritation Index = 0.2 (rabbit)
OECD Guidelines No.404 (1992)
92/69/EEC Method B5

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

Mutagenicity:
Ames test : Negative (test strains: S.typhimurium)

Reproductive Toxicity:
Not available

Carcinogenicity:
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.

Others:
Not available
**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>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 may 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>
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<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>No</td>
</tr>
<tr>
<td>Special Precautions</td>
<td>None</td>
</tr>
</tbody>
</table>

**SECTION 15 REGULATORY INFORMATION**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Information on the Label</td>
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<tr>
<td>Symbol &amp; Indication</td>
<td>Not required</td>
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<tr>
<td>R-Phrase</td>
<td>Not required</td>
</tr>
<tr>
<td>S-Phrase</td>
<td>Not required</td>
</tr>
<tr>
<td>Dangerous Component(s)</td>
<td>None</td>
</tr>
<tr>
<td>Special Precautions under 1999/45/EC Annex V</td>
<td>Not required</td>
</tr>
<tr>
<td>Specific Provisions in Relation to Protection of Man or the Environment</td>
<td></td>
</tr>
<tr>
<td>76/769/EEC</td>
<td>Not regulated</td>
</tr>
<tr>
<td>(EC)2037/2000</td>
<td>Not regulated</td>
</tr>
<tr>
<td>(EEC)2455/92</td>
<td>Not regulated</td>
</tr>
<tr>
<td>Others</td>
<td>None</td>
</tr>
</tbody>
</table>
Information on the Label under FHSA:

**Signal Word:** Not required

**Hazard warning:**
Not required

**Safety Advice:**
Not required

**Hazardous Component(s):**
Not required

**SARA Title III §313:**

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

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### SECTION 16 OTHER INFORMATION

**<R phrase list>**

R36 : Irritating to eyes.
R41 : Risk of serious damage to eyes.

**<Revised information from the previous version>**

Entirely revised.

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