

## MATERIAL SAFETY DATA SHEET

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

**Product Name:** Canon BJ Cartridge BC-01  
**Product Code:** 0879A / F45-0014  
**Company Name:** Canon Europa N.V.  
**Address:** Bovenkerkerweg 59-61, 1185 XB, Amstelveen, The Netherlands  
**Use of the Product:** Ink for Ink Jet Printer

### SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

< Ingredient(s) >

Chemical Name / Generic name	CAS # / EC #	Weight %	EU Symbol/ R-Phrase	USA OSHA PEL	ACGIH TLV	EU ILV	DFG MAK
Glycerin	56-81-5 / 200-289-5	2 - 6	None / None	(as mist) Total dust TWA = 15 mg/m <sup>3</sup> Respirable fraction TWA = 5 mg/m <sup>3</sup>	(as mist) TWA = 10 mg/m <sup>3</sup>	Not established	Not established
Thiodiglycol	111-48-8 / 203-874-3	2 - 6	Xi / R36	Not established	Not established	Not established	Not established
Isopropyl alcohol	67-63-0 / 200-661-7	2 - 6	F / R11 Xi / R36 R67	TWA = 400 ppm, 980 mg/m <sup>3</sup>	TWA = 400 ppm, 983 mg/m <sup>3</sup> STEL = 500 ppm, 1230 mg/m <sup>3</sup>	Not established	200 ppm, 500 mg/m <sup>3</sup>
Ammonia derivative	Confidential	5 - 10	None / None	Not established	Not established	Not established	Not established
Water	7732-18-5 / 231-79-12	65 - 85	None / None	Not established	Not established	Not established	Not established

**< 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:**

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:**

No irritation is expected. (See SECTION 11)

**Skin:**

May cause mild irritation and no sensitization. (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:**CO<sub>2</sub>, 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, CO<sub>2</sub>, NO<sub>x</sub> and SO<sub>x</sub>

---

**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**

<b>Appearance:</b>	Black liquid
<b>Odor:</b>	Slight odor
<b>pH:</b>	6.5 - 8.0
<b>Boiling Point/Range(°C):</b>	Not available
<b>Melting Point/Range(°C):</b>	Not available
<b>Decomposition Temperature(°C):</b>	Not available
<b>Flash Point(°C):</b>	48.5 (Tag Closed Cup. Combustion is not sustainable.)
<b>Flammable (Explosive) Limits:</b>	Not available
<b>Autoignition Temperature(°C):</b>	Not available
<b>Flammability:</b>	Classified as "Combustible liquid" under OSHA-HCS. Not classified as "flammable" or "combustible" under FHSA. Not classified as "flammable" under 1999/45/EC.
<b>Explosive Properties:</b>	None
<b>Oxidizing Properties:</b>	None
<b>Vapor Pressure :</b>	Not available
<b>Vapor Density :</b>	Not available
<b>Density / Specific Gravity:</b>	1.04 - 1.10
<b>Water Solubility :</b>	Miscible
<b>Fat Solubility :</b>	Not available
<b>Partition Coefficient (n-Octanol/Water):</b>	Not available
<b>Percent Volatile (%):</b>	65 - 85
<b>Evaporation Rate:</b>	Not available
<b>Viscosity (mPa s):</b>	1.5 - 2.1

**SECTION 10 STABILITY AND REACTIVITY**

<b>Stability:</b>	<input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable
<b>Conditions to Avoid:</b>	None
<b>Materials to Avoid:</b>	Acids, bases, oxidizing materials and reducing agents
<b>Hazardous Decomposition Products:</b>	CO, CO <sub>2</sub> , NO <sub>x</sub> , Ammonia and SO <sub>x</sub>
<b>Hazardous Polymerization:</b>	<input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur
<b>Conditions to Avoid:</b>	None

**SECTION 11 TOXICOLOGICAL INFORMATION**

**Acute Toxicity:**

**Inhalation:**

Not available

**Ingestion:**

LD50 > 5000 mg/kg, 0/10 mortalities at 5000 mg/kg (rat)  
 OECD Guidelines No.401 (1981)  
 84/449/EEC Method B1  
 FHSA 16 CFR Sec.1500.3

**Eye:**

Non irritant (rabbit)  
 FHSA 16 CFR Sec.1500.42

**Skin:**

Acute dermal irritation :  
 Mild irritant, Primary Irritation Index = 0.3 (rabbit)  
 16 CFR Sec.1500.41

Acute dermal toxicity :  
 LD50 > 2000 mg/kg , 0/10 mortalities at 2000 mg/kg (rat)  
 OECD Guidelines No.402 (1981) & 84/449/EEC Method B3 & FHSA 16 CFR Sec.1500.40

**Sensitization:**

Non sensitizer, Sensitization rate = 0 % (0/10) (guinea pig)  
 OECD Guidelines No.406 (1992)  
 96/54/EC Method B6

**Mutagenicity:**

Ames test : Negative (test strains: *S.typhimurium*)  
  
 Chromosome aberration test : Negative  
 (test strains: *Human peripheral blood lymphocytes* &  
*A Chinese hamster fibroblast cell line isolated from the lung* )

**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  No **Chemical name (wt%):**  
**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  
**(EEC)2455/92:** Not regulated  
**Others:** None

## &lt; USA Information &gt;

**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:**

<b>Chemical Name</b>	<b>Weight %</b>
None	

**California Proposition 65:**

<b>Chemical Name</b>	<b>Weight %</b>
None	

## &lt; Canada Information &gt;

**WHMIS Controlled Product:** Not applicable (Manufactured article)

## &lt; Australia Information &gt;

**Statement of Hazardous Nature:** Not classified as hazardous according to criteria of NOHSC.**SECTION 16 OTHER INFORMATION**

## &lt;R phrase list&gt;

R11 : Highly flammable.  
R36 : Irritating to eyes.  
R67 : Vapours may cause drowsiness or dizziness.

## &lt;Revised information from the previous version&gt;

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
- World Health Organization International Agency for Research on Cancer, IARC Monographs on the Evaluation on the Carcinogenic Risk of Chemicals to Humans
- DFG, List of MAK and BAT Values
- EU Directive 76/769/EEC, 67/548/EEC, 1999/45/EC
- EU Regulation (EC)2037/2000, (EEC)2455/92
- Canada Workplace Hazardous Materials Information System
- Australia National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substances [NOHSC:1008]

**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.
- EU ILV: Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC and 2000/39/EC.
- 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).
- WHMIS: Workplace Hazardous Materials Information System.
- NOHSC: National Occupational Health and Safety Commission Act 1985.

---

The information, data and recommendations set forth herein (the "Information") are presented in good faith and are believed to be correct as of the date hereof. The company/manufacture makes no representations as to the completeness or accuracy of the Information and disclaims responsibility for any reliance thereon. The Information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of the Information must be determined by the user to be in accordance with applicable Federal, state and local laws and regulations. In no event will the company/manufacture be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE WITH RESPECT TO THE INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS.