

# MATERIAL SAFETY DATA SHEET

| SECTION 1     | IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE<br>COMPANY/UNDERTAKING  |  |  |
|---------------|--|--|--|
| Product Name: | Canon Ink Cartridge BCI-17Black  |  |  |
| Product Code: | 0961A / F47-2721   |  |  |
| 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

| < Ingredient(s) ><br>Chemical Name /<br>Generic name | CAS # /<br>EC #          | Weight<br>% | EU Symbol/<br>R-Phrase     | USA<br>OSHA PEL   | ACGIH TLV   | EU ILV   | DFG MAK                           |
|--|--------------------------|-------------|----------------------------|---|---|--|-----------------------------------|
| Glycerin   | 56-81-5 /<br>200-289-5   | 2 - 6       | None / None                | (as mist)<br>Total dust<br>TWA = $15 \text{ mg/m}^3$<br>Respirable fraction<br>TWA = $5 \text{ mg/m}^3$ | (as mist)<br>TWA = 10 mg/m <sup>3</sup>   | Not established  | Not established                   |
| Ethylene glycol                                      | 107-21-1 /<br>203-473-3  | 2 - 6       | Xn / R22                   | Not established   | (aerosol)<br>Ceiling =<br>100 mg/m <sup>3</sup>                                   | TWA = 20 ppm,<br>52 mg/m <sup>3</sup><br>STEL = 40 ppm,<br>104 mg/m <sup>3</sup> | 10 ppm, 26mg/m <sup>3</sup>       |
| Isopropyl alcohol                                    | 67-63-0 /<br>200-661-7   | 2 - 6       | F / R11<br>Xi / R36<br>R67 | TWA = 400 ppm,<br>980 mg/m <sup>3</sup>   | TWA = 200 ppm,<br>492mg/m <sup>3</sup><br>STEL = 400ppm,<br>984 mg/m <sup>3</sup> | Not established  | 200 ppm,<br>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 /<br>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:

May cause minimal irritation. (See SECTION 11)

#### Skin:

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:

 $CO_2$ , 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:

### $CO, CO_2$ 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
 Xot Required

 Eye/Face Protection:

 Required
 Xot Required

 Skin Protection:

 Required
 Xot Required

 Mot Required

 Not Required



# SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

| Appearance:                              | Black liquid  |
|--|---|
| Odor:                                    | Slight odor   |
| pH:                                      | 9.5 - 10.5  |
| Boiling Point/Range(°C):                 | Not available   |
| Melting Point/Range(°C):                 | Not available   |
| Decomposition Temperature(°C):           | Not available   |
| Flash Point(°C):                         | 49.0 (Tag Closed Cup. Combustion is not sustainable.)   |
| Flammable (Explosive) Limits:            | Not available   |
| Autoignition Temperature(°C):            | Not available   |
| Flammability:                            | Classified as "Combustible liquid" under OSHA-HCS.<br>Not classified as "flammable" or "combustible" under FHSA.<br>Not classified as "flammable" under 1999/45/EC. |
| Explosive Properties:                    | None  |
| Oxidizing Properties:                    | None  |
| Vapor Pressure :                         | Not available   |
| Vapor Density :                          | Not available   |
| Density / Specific Gravity:              | 1.04 - 1.10   |
| Water Solubility :                       | Miscible  |
| Fat Solubility :                         | Not available   |
| Partition Coefficient (n-Octanol/Water): | Not available   |
| Percent Volatile (%):                    | 65 - 85   |
| Evaporation Rate:                        | Not available   |
| Viscosity (mPa s):                       | 1.5 - 2.1   |
| SECTION 10 STABILITY AND REA             | ACTIVITY  |
| Stability:                               | Stable Unstable   |
| Conditions to Avoid:                     | None  |
| Materials to Avoid:                      | Acids, bases, oxidizing materials and reducing agents   |
| Hazardous Decomposition Products:        | CO, CO <sub>2</sub> , NOx and Ammonia   |
| Hazardous Polymerization:                | ☐ May Occur<br>☑ Will Not Occur   |

None

**Conditions to Avoid:** 



| SECTION 11 TOXICOLOGICAL INFORMATION                               |  |  |  |
|--|--|--|--|
| Acute Toxicity:  |  |  |  |
| Inhalation:  |  |  |  |
| Not available  |  |  |  |
| Ingestion:   |  |  |  |
| Not available  |  |  |  |
| Eye:   |  |  |  |
| Minimal irritant, Maximum Group Mean Score = 2.7, Class 3 (rabbit) |  |  |  |
| OECD Guidelines No.405 (1987)                                      |  |  |  |
| 92/69/EEC Method B5  |  |  |  |
| Skin:  |  |  |  |
| Non irritant, Primary Irritation Index = $0.0$ (rabbit)            |  |  |  |
| OECD Guidelines No.404 (1992)                                      |  |  |  |
| 92/69/EEC Method B4  |  |  |  |
| 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)                 |  |  |  |
| Reproductive Toxicity:   |  |  |  |
| Not available  |  |  |  |
| Carcinogenicity:   |  |  |  |
| Not available  |  |  |  |
| Others:  |  |  |  |
| Not available  |  |  |  |



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| SECTION 12                              | ECOLOGICAL INFORMATION                                       |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Mobility:                               | Not available  |  |  |  |  |  |
| Persistence /                           |  |  |  |  |  |  |
| Degradability:                          | Not available  |  |  |  |  |  |
| <b>Bioaccumulation:</b>                 | Not available  |  |  |  |  |  |
| Ecotoxicity:                            | Not available  |  |  |  |  |  |
| Other Adverse Eff                       | Not available  |  |  |  |  |  |
| SECTION 13                              | DISPOSAL CONSIDERATION                                       |  |  |  |  |  |
| Method of Disposa<br>Disposal shoul     | <b>l:</b> d be subject to federal, state and local laws.     |  |  |  |  |  |
| SECTION 14                              | TRANSPORT INFORMATION  |  |  |  |  |  |
| UN #:                                   | None   |  |  |  |  |  |
| UN Shipping Nam                         | e: None  |  |  |  |  |  |
| UN Classification:                      | None   |  |  |  |  |  |
| UN Packing Group                        | None None  |  |  |  |  |  |
| Marine Pollutant:                       | <ul> <li>☐ Yes Chemical name (wt%):</li> <li>☑ No</li> </ul> |  |  |  |  |  |
| Special Precaution                      | ns: None   |  |  |  |  |  |
| SECTION 15                              | REGULATORY INFORMATION                                       |  |  |  |  |  |
| < EU Information ><br>Information on th |  |  |  |  |  |  |
| Symbol & Indi                           |  |  |  |  |  |  |
| <b>R-Phrase:</b>                        | <b>^</b>   |  |  |  |  |  |
| Not require                             | d  |  |  |  |  |  |
| S-Phrase:<br>Not require                | d  |  |  |  |  |  |
| Dangerous Con<br>None                   | mponent(s):  |  |  |  |  |  |
| Special Precau<br>Not require           | tions under 1999/45/EC Annex V:<br>d                         |  |  |  |  |  |
| Specific Provision                      | is in Relation to Protection of Man or the Environment:      |  |  |  |  |  |
| 76/769/EEC:                             | Not regulated  |  |  |  |  |  |
| (EC)2037/200                            |  |  |  |  |  |  |
| (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:<br>Chemical Name  |   | Weight % |  |
| "Ethylene glycol " (107-21-1)  |   | 2 - 6    |  |
| California Proposition 65:<br>Chemical Name  |   | Weight % |  |
| None   |   |          |  |
| < Canada Information ><br>WHMIS Controlled Product:  | Not applicable (Manufactured article)                       |          |  |
|  | Not applicable (Manufactured article)                       |          |  |
| < Australia Information ><br>Statement of Hazardous Nature:  | Not classified as hazardous according to criteria of NOHSC. |          |  |
| SECTION 16 OTHER INFOR   | MATION  |          |  |
| <r list="" phrase=""><br/>R11 : Highly flammable.<br/>R22 : Harmful if swallowed.<br/>R36 : Irritating to eyes.<br/>R67 : Vapours may cause drov</r> | wsiness and dizziness.                                      |          |  |

<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
- 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, (EC)304/2003
- 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.

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