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# MATERIAL SAFETY DATA SHEET

MSDS #: IC1179-0101 Product Code: 0954A / F47-0731

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

**Product Name:** Canon Ink Cartridge BCI-21 Black

**Product Code:** 0954A / F47-0731

Manufacturer: Canon Inc.,30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, Phone # 03-3758-2111

Supplier: Canon USA, Inc., One Canon Plaza, Lake Success, NY, 11042, USA

**Phone #:** 1-800-OK-CANON 24 Hr. Emergency CHEMTREC # 1-800-424-9300

# 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	5 - 10	None / None	(as mist) Total dust TWA = 15 mg/m³ Respirable fraction TWA = 5 mg/m³	(as mist) TWA = 10 mg/m <sup>3</sup>	Not established	Not established
Ethylene glycol	107-21-1 / 203-473-3	2 - 6	Xn / R22	Not established	(aerosol) Ceiling = 100 mg/m³	TWA = 20 ppm, 52 mg/m <sup>3</sup> STEL = 40 ppm, 104 mg/m <sup>3</sup>	10 ppm, 26 mg/m <sup>3</sup>
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	60 - 80	None / None	Not established	Not established	Not established	Not established

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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:**

Ink cartridge containing black 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.

Over exposure to ethylene glycol and/or isopropyl alcohol may cause headache, nausea, dizziness, vomiting, drowsiness, cough and sore throat.

#### **Ingestion:**

Ingestion of glycerin, ethylene glycol and/or isopropyl alcohol may cause headache, nausea, dizziness, vomiting, drowsiness, abdominal pain, dullness and sore throat.

## Eye:

May cause minimal irritation based on the animal test data of this ink.

(See SECTION 11)

#### Skin:

May be no 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:					
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> 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.					
When contact, wash out immediately.					
<b>Storage:</b> Keep in a cool and dry place. Keep away from heat and flame.					
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   Not Required					
Skin Protection: Required					
➤ Not Required					

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SECTION 9 PHYSICAL AND CH	HEMICAL PROPERTIES			
Appearance:	Black liquid			
Odor:	Slight odor			
pH:	9.5 - 10.5			
<b>Boiling Point/Range(°C):</b>	Not available			
Melting Point/Range(°C):	Not available			
Decomposition Temperature ( ${}^{\circ}C$ ):	Not available			
Flash Point(°C):	49.0 (Tag.closed cup. Do not sustain combustion.)			
Flammable (Explosive) Limits:	Not available			
Autoignition Temperature ( ${}^{\circ}C$ ):	Not available			
Flammability:	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			
Oxidizing Properties:	None			
Vapor Pressure :	Not available			
Vapor Density:	Not available			
Density / Specific Gravity:	1.04			
Water Solubility:	Miscible			
Fat Solubility:	Not available			
<b>Partition Coefficient (n-Octanol/Water)</b>	: Not available			
Percent Volatile (%):	60 - 80			
<b>Evaporation Rate:</b>	Not available			
Viscosity (mPa s):	1.5 - 2.1			
SECTION 10 STABILITY AND REACTIVITY				
Stability:				
Conditions to Avoid:	None			
Materials to Avoid:	Acids, bases, oxidizing materials and reducing agents			
<b>Hazardous Decomposition Products:</b>	CO, CO <sub>2</sub> , NOx and Ammonia			
Hazardous Polymerization:	☐ May Occur  ☑ Will Not Occur			
Conditions to Avoid:	None			

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# 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						
<b>Mobility:</b>	Not available						
Persistence / Degradability:	Not available						
Bioaccumulation:							
<b>Ecotoxicity:</b>	Not available						
Other Adverse Effects: Not available							
SECTION 13	DISPOSAL CONSIDERATION						
Method of Disposal:  Disposal may be subject to federal, state and local laws.							
SECTION 14	TRANSPORT INFORMATION						
UN #:	None						
<b>UN Shipping Nam</b>	None None						
<b>UN Classification:</b>	None						
<b>UN Packing Grou</b>	p: None						
Marine Pollutant:	☐ Yes Chemical name (wt%):  ☒ No						
<b>Special Precaution</b>	None None						
SECTION 15 REGULATORY INFORMATION  < EU Information > Information on the Label: Symbol & Indication: Not required  R-Phrase: Not required							
S-Phrase: Not required	1						
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)2037/200	0: Not regulated						
(EEC)2455/92	: Not regulated						
Others:	None						

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## < 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 Weight %

"Ethylene glycol" (107-21-1) 2 - 6

California Proposition 65:

Chemical Name Weight %

None

< 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 and dizziness.

<Revised information from the previous version>

Entirely revised.

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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
- 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.

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