



MATERIAL SAFETY DATA SHEET

PRODUCT NAME: BCI-21BK

DESCRIPTION: Ink Tank

USED WITH MACHINE(S): MPC20, MPC50, MPC70, MPC80, MultiPASS
C75, FAXB180c, B210c, B230, BJC4000,
BJC4100, BJC4200, BJC4300, BJC4550,
BJC4650, BJC5500, BJC2100, S100

MANUFACTURER: Canon Inc.
30-2, Shimomaruko 3-Chome, Ohta-Ku
Tokyo 146, Japan
Phone: 03-3758-2111

DISTRIBUTOR: Canon UK Limited
Woodhatch
Reigate
Surrey
Phone: 01737 220000

DATE PREPARED: 16/02/96

DATE REVISED: 18/12/02

UK MSDS REF: **MSDS3016**



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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

Company Name: Canon Inc.

Address: 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan

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	5 - 10	None / None	(as mist) Total dust TWA = 15 mg/m ³ Respirable fraction TWA = 5 mg/m ³	(as mist) TWA = 10 mg/m ³	Not established	Not established
Ethylene glycol	107-21-1 / 203-473-3	2 - 6	Xn / R22	Not established	(aerosol) Ceiling = 100 mg/m ³	TWA = 20 ppm, 52 mg/m ³ STEL = 40 ppm, 104 mg/m ³	10 ppm, 26 mg/m ³
Isopropyl alcohol	67-63-0 / 200-661-7	2 - 6	F / R11 Xi / R36 R67	TWA = 400 ppm, 980 mg/m ³	TWA = 400 ppm, 983 mg/m ³ STEL = 500 ppm, 1230 mg/m ³	Not established	200 ppm, 500 mg/m ³
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

**MATERIAL SAFETY DATA SHEET**< **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

**MATERIAL SAFETY DATA SHEET****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 and NO_x**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.

Storage:

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**Skin Protection:** ☐ Required
☒ Not Required



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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. Do not sustain combustion.)
Flammable (Explosive) Limits:	Not available
Autoignition Temperature(°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.
Explosive Properties:	None
Oxidizing Properties:	None
Vapor Pressure :	Not available
Vapor Density :	Not available
Density / Specific Gravity:	1.04
Water Solubility :	Miscible
Fat Solubility :	Not available
Partition Coefficient (n-Octanol/Water):	Not available
Percent Volatile (%):	60 - 80
Evaporation Rate:	Not available
Viscosity (mPa s):	1.5 - 2.1

SECTION 10 STABILITY AND REACTIVITY

Stability:	☒ Stable ☐ Unstable
Conditions to Avoid:	None
Materials to Avoid:	Acids, bases, oxidizing materials and reducing agents
Hazardous Decomposition Products:	CO, CO ₂ , NO _x and Ammonia
Hazardous Polymerization:	☐ May Occur ☒ Will Not Occur
Conditions to Avoid:	None

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

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 may 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

(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.

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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