

MATERIAL SAFETY DATA SHEET

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

Product Name: Canon Ink Tank BCI-15 Black
Product Code: 8190A
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/m ³ Respirable fraction TWA = 5 mg/m ³	(as mist) TWA = 10 mg/m ³	Not established	Not established
Diethylene glycol	111-46-6 / 203-872-2	2 - 6	Xn / R22	Not established	Not established	Not established	10 ppm, 44 mg/m ³
Ammonium benzoate	1863-63-4 / 217-468-9	1 - 3	Xi / R36	Not established	Not established	Not established	Not established
Triol	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 >

Chemical Name	CAS #	Reference
None		

None

SECTION 3 HAZARDS IDENTIFICATION

EU Classification:

Not classified as dangerous.

Emergency Overview:

Ink tank 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 diethylene glycol may cause headache, nausea, dizziness, vomiting, drowsiness and cough.

Ingestion:

Ingestion of glycerin and/or diethylene glycol may cause headache, nausea, dizziness, vomiting, drowsiness, abdominal pain, dullness and diarrhea.

Eye:

May cause minimal irritation based on the animal test data of similar composition ink.
 (See SECTION 11)

Skin:

May be no irritation and no sensitization based on the animal test data of similar composition 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

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.

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Black liquid
Odor:	Slight odor
pH:	7.7 - 8.3
Boiling Point/Range(°C):	Not available
Melting Point/Range(°C):	Not available
Decomposition Temperature(°C):	Not available
Flash Point(°C):	Estimate : None
Flammable (Explosive) Limits:	Not available
Autoignition Temperature(°C):	Not available
Flammability:	Neither flammable nor combustible.
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):	1.68 - 2.28

SECTION 10 STABILITY AND REACTIVITY

Stability:	<input checked="" type="checkbox"/> Stable <input type="checkbox"/> 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:	<input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur
Conditions to Avoid:	None

SECTION 11 TOXICOLOGICAL INFORMATION**Acute Toxicity:****Inhalation:**

Not available

Ingestion:

Not available

Eye:

[Data of similar composition ink]

Minimal irritant (rabbit)

OECD Guidelines No.405 (1987)

92/69/EEC Method B5

Skin:

[Data of similar composition ink]

Non irritant (rabbit)

OECD Guidelines No.404 (1992)

92/69/EEC Method B4

Sensitization:

[Data of similar composition ink]

Non sensitizer (guinea pig)

OECD Guidelines No.406 (1992)

96/54/EC Method B6

Mutagenicity:Ames test : Negative (test strains: *S.typhimurium* & *E.Coli*)**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**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 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

< 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 %
None	

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>
R22 : Harmful if swallowed.
R36 : Irritating to eyes.

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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