

**SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**Product Identifier:**

**Product Name:** Canon Ink Tank BCI-3eM

**Product Code:** 4481A

**Relevant Identified Uses:** Ink for Ink Jet Printer

**Details of Supplier of Safety Data Sheet:**

**Supplier:** Canon Europa NV

**Address:** Bovenkerkerweg 59, 1185XB Amstelveen, The Netherlands

**Telephone Number:** +31 20 5458545, +31 20 5458222

**E-mail Address:** www.canon-europe.com, ceu-Reach@canon-europe.com

**Emergency Telephone Number:** DENMARK: +45 82 12 12 12; GERMANY: +49 30 19240, +49 761 19240; BELGIUM & NETHERLANDS: +32 70 245 245; FRANCE: +33 1 40 05 48 48; UK only 0845 4647; FINLAND: +358 9 471 977; SWEDEN: +46 8 33 12 31

**Manufacturer:** Canon Inc.

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

**SECTION 2 HAZARDS IDENTIFICATION**

**Emergency Overview:**

Ink tank containing magenta liquid ink with slight odor.

**US Regulatory Status under FHSA:**

Not classified as hazardous.

**US Label Elements under FHSA:**

**Signal Word:** Not required

**Hazard Warning:** Not required

**Safety Advice:** Not required

**Hazardous Component:** Not required

**EU Classification under 1999/45/EC:**

Not classified as dangerous.

**EU Label Elements under 1999/45/EC:**

**Symbol & Indication:** Not required

**R-Phrase:** Not required

**S-Phrase:** Not required

**Dangerous Component:** Not required

**Applicable Label Elements in accordance with Annex V to 1999/45/EC:**

Not required

**Other Hazards:**

None

**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS**

Substance or Mixture: Mixture

**Ingredient(s):**

Chemical Name/ Generic Name	CAS #/ EC #	Concentration/ Concentration Range (%)	EU Classification according to 67/548/EEC		EU Classification according to (EC) No 1272/2008		Note to Other Hazards* <sup>2</sup>
			Symbol/ Indication of Danger	R-Phrase* <sup>1</sup>	Hazard Class/ Category Code	Hazard Statement* <sup>1</sup>	
Glycerin	56-81-5 / 200-289-5	5 - 10	None	None	None	None	(1)
Ethylene glycol	107-21-1 / 203-473-3	1 - 5	Xn / Harmful	R22	Acute Tox. 4	H302	(1)
Diethylene glycol	111-46-6 / 203-872-2	1 - 5	Xn / Harmful	R22	Acute Tox. 4	H302	(1)
Isopropyl alcohol	67-63-0 / 200-661-7	1 - 5	F / Highly flammable Xi / Irritant	R11 R36 R67	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336	(1)
Quinoline derivative	Confidential	1 - 5	Xi / Irritant	R36	Eye Irrit. 2	H319	
Triazine derivative	Confidential	1 - 5	Xi / Irritant	R36 R52/53	Eye Irrit. 2 Aquatic Chronic 3	H319 H412	
Ammonia derivative	Confidential	5 - 10	None	None	None	None	
Water	7732-18-5 / 231-791-2	60 - 80	None	None	None	None	

\*1 Full texts of R-phrase(s) and Hazard statement(s) are listed in SECTION 16

\*2 The following substance(s) is (are) marked with (1), (2) and/or (3)

(1) Substance for which Occupational Exposure Limit(s) is (are) established (See SECTION 8)

(2) PBT substance or vPvB substance under Regulation (EC) No 1907/2006

(3) Substance listed in Candidate List of SVHC for Authorisation under Regulation (EC) No 1907/2006

**Carcinogen(s):**

No component of this ink is listed as a human carcinogen or a potential carcinogen in IARC Monographs, NTP, OSHA regulations or Part 3 of Annex VI to Regulation (EC) No 1272/2008.

**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.

**Skin:**

Wash with water and soap or mild detergent.

If irritation persists, obtain medical advice.

**Eye:**

Immediately flush with lukewarm, gently flowing water for 5 minutes or until the chemical is removed.

If irritation persists, obtain medical advice immediately.

**Most Important Symptoms and Effects, both Acute and Delayed:**

**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.

**Skin:**

May cause mild irritation and no sensitization. (See SECTION 11)

**Eye:**

May cause minimal irritation. (See SECTION 11)

**Chronic Effects:**

Not identified

**Indication of Any Immediate Medical Attention and Special Treatment Needed:**

None

**SECTION 5 FIRE FIGHTING MEASURES**

**Extinguishing Media:**

**Suitable Extinguishing Media:**

CO<sub>2</sub>, water, foam or dry chemicals

**Unsuitable Extinguishing Media:**

None

**Special Hazards:**

None

**Hazardous Combustion Products:**

CO, CO<sub>2</sub>, SiO<sub>2</sub>, NO<sub>x</sub> and SO<sub>x</sub>

**Advice for Fire-fighters:**

None

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Avoid contact with skin, eyes and clothing.

**Environmental Precautions:**

Do not release to sewer, surface water or ground water.

**Methods and Material for Containment and Cleaning Up:**

Wipe off with wet cloth or paper.

**SECTION 7 HANDLING AND STORAGE**

**Precautions for Safe Handling:**

Use with adequate ventilation.  
 Avoid contact with skin, eyes and clothing.  
 In case of contact, wash out the contaminated area immediately.

**Conditions for Safe Storage, Including Any Incompatibilities:**

Keep in a cool and dry place. Protect from sunlight.  
 Keep away from heat and flame.  
 Keep out of the reach of children.

**Specific End Uses:**

Ink for Ink Jet Printer.  
 For more information, please refer to the instruction of this product.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

Control Parameters:	USA OSHA PEL	ACGIH TLV	EU OEL	DFG MAK
Product (Ink)	Not established	Not established	Not established	Not established
Glycerin	Glycerin mist: TWA 15 mg/m <sup>3</sup> (Total dust) TWA 5 mg/m <sup>3</sup> (Respirable fraction)	Glycerin mist: TWA 10 mg/m <sup>3</sup>	Not established	Not established
Ethylene glycol	Not established	aerosol: Ceiling 100 mg/m <sup>3</sup>	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>
Diethylene glycol	Not established	Not established	Not established	10 ppm, 44 mg/m <sup>3</sup>
Isopropyl alcohol	TWA 400 ppm, 980 mg/m <sup>3</sup>	TWA 200 ppm, 492 mg/m <sup>3</sup> STEL 400 ppm, 984 mg/m <sup>3</sup>	Not established	200 ppm, 500 mg/m <sup>3</sup>

**Exposure Controls:**

**Engineering Controls:** No special ventilation equipment is needed under intended use of this product.

**Individual Protection Measures:**

- Eye/Face Protection:**  Required  Not Required  
**Skin Protection:**  Required  Not Required  
**Respiratory Protection:**  Required  Not Required

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

**Information on Basic Physical and Chemical Properties:**

<b>Appearance:</b>	<u>Magenta liquid</u>
<b>Odor:</b>	<u>Slight odor</u>
<b>pH:</b>	<u>9 - 10</u>
<b>Melting Point/Freezing Point (°C):</b>	<u>Not available</u>
<b>Initial Boiling Point and Boiling Range (°C):</b>	<u>Not available</u>
<b>Flash Point(°C):</b>	<u>55 - 57 (Tag Closed Cup. Combustion is not sustainable.) (Estimate)</u>
<b>Evaporation Rate:</b>	<u>Not available</u>
<b>Flammability:</b>	<u>Classified as "combustible liquid" under OSHA-HCS. Not classified as "flammable" or "combustible" under FHSA. Not classified as "flammable" under 1999/45/EC.</u>
<b>Upper/Lower Flammable or Explosive Limits:</b>	<u>Not available</u>
<b>Vapor Pressure :</b>	<u>Not available</u>
<b>Vapor Density :</b>	<u>Not available</u>
<b>Relative Density:</b>	<u>1.0 - 1.1</u>
<b>Water Solubility :</b>	<u>Miscible</u>
<b>Fat Solubility :</b>	<u>Not available</u>
<b>Partition Coefficient (n-Octanol/Water):</b>	<u>Not available</u>
<b>Auto-ignition Temperature (°C):</b>	<u>Not available</u>
<b>Decomposition Temperature(°C):</b>	<u>Not available</u>
<b>Viscosity (mPa s):</b>	<u>1 - 5</u>
<b>Explosive Properties:</b>	<u>None (Estimate)</u>
<b>Oxidizing Properties:</b>	<u>None (Estimate)</u>
<b>Other Information:</b>	<u>Not available</u>

**SECTION 10 STABILITY AND REACTIVITY**

<b>Reactivity:</b>	<u>None</u>
<b>Chemical Stability:</b>	<input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable
<b>Possibility of Hazardous Reactions:</b>	<u>None</u>
<b>Conditions to Avoid:</b>	<u>None</u>
<b>Incompatible Materials:</b>	<u>Acids, bases, oxidizing materials and reducing agents</u>
<b>Hazardous Decomposition Products:</b>	<u>CO, CO<sub>2</sub>, SiO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub> and Ammonia</u>

**SECTION 11 TOXICOLOGICAL INFORMATION**

**Information on Toxicological Effects:**

**Acute Toxicity:**

**Inhalation:**

Not available

**Ingestion:**

Estimated LD<sub>50</sub> > 2500 mg/kg (rat) (Estimate)

OECD Guidelines No. 423 (1996), 96/54/EC Method B1 tris

**Corrosivity/Irritation:**

**Skin:**

Mild irritant (rabbit) (Estimate)

OECD Guidelines No. 404 (1992), 92/69/EEC Method B4

**Eye:**

Minimal irritant (rabbit) (Estimate)

OECD Guidelines No. 405 (1987), 92/69/EEC Method B5

**Sensitization:**

**Skin:**

Non-sensitizer (guinea pig) (Estimate)

OECD Guidelines No. 406 (1992), 96/54/EC Method B6

**Repeated Dose Toxicity:**

Not available

**Carcinogenicity:**

Not available

**Mutagenicity:**

Ames test:

Negative (*S. typhimurium* & *E. Coli*)

Chromosome aberration test:

Negative (*Human peripheral blood lymphocytes*)

**Toxicity for Reproduction:**

Not available

**Other Information:**

Not available

**SECTION 12 ECOLOGICAL INFORMATION**

**Toxicity:** Not available

**Persistence and Degradability:** Not available

**Bioaccumulative Potential:** Not available

**Mobility in Soil:** Not available

**Results of PBT and vPvB Assessment:** No results that the component(s) of this ink meet(s) the PBT or vPvB criteria under Regulation (EC) No 1907/2006.

**Other Adverse Effects:** Not available

**SECTION 13 DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods:**  
Disposal should be subject to federal, state and local laws.

**SECTION 14 TRANSPORT INFORMATION**

**UN Number:** None

**UN Proper Shipping Name:** None

**Transport Hazard Class:** None

**Packing Group:** None

**Environmental Hazards:** Not classified as environmentally hazardous under UN Model Regulations and marine pollutant under IMDG Code.

**Special Precautions for User:** None

**SECTION 15 REGULATORY INFORMATION**

< USA Information >

**SARA Title III §313:**

<u>Chemical Name</u>	<u>Weight %</u>
<u>"Ethylene glycol" (107-21-1)</u>	<u>1 - 5</u>

**California Proposition 65:**

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

< EU Information >

**Safety, Health and Environmental Regulations/Legislation:**

**(EC) No 1907/2006: Authorisation:** Not regulated

**Restriction:** Not regulated

**(EC) No 1005/2009:** Not regulated

**(EC) No 850/2004:** Not regulated

**(EC) No 689/2008:** Not regulated

**Others:** None

**Chemical Safety Assessment under (EC) No 1907/2006:** Not required

< 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**

<EU R-phrase according to 67/548/EEC>

- R11: Highly flammable.
- R22: Harmful if swallowed.
- R36: Irritating to eyes.
- R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R67: Vapours may cause drowsiness and dizziness.

<EU Hazard statement according to (EC) No 1272/2008>

- H225: Highly flammable liquid and vapour.
- H302: Harmful if swallowd.
- H319: Causes serious eye irritation.
- H336: May cause drowsiness and dizziness.
- H412: Harmful to aquatic life with long lasting effects.

<Revised information from the previous version>

Entirely revised

<Term explanation>

Estimate: Estimate based on data of similar product or the ingredient(s) of this product.

**Literature References:**

- 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 1999/45/EC
- EU Regulation (EC) No 1907/2006, (EC) No 1272/2008, (EC) No 1005/2009, (EC) No 850/2004, (EC) No 689/2008
- Canada Workplace Hazardous Materials Information System
- Australia National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substance [NOHSC:1008]

**Abbreviations:**

- OSHA HCS: Occupational Safety and Health Act, Hazard Communication Standard (USA)
- FHSA: Federal Hazardous Substances Act (USA)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- SVHC: Substances of Very High Concern
- IARC: International Agency for Research on Cancer
- NTP: National Toxicology Program (USA)
- 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 OEL: Occupational exposure limits at Community level under Directive 2004/37/EC, 98/24/EC, 91/322/EEC, 2000/39/EC, 2006/15/EC and 2009/161/EU
- DFG MAK: MAK(Maximale Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft
- TWA: Time Weighted Average
- STEL: Short Term Exposure Limit
- WHMIS: Workplace Hazardous Materials Information System
- NOHSC: National Occupational Health and Safety Commission

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