MATERIAL SAFETY DATA SHEET

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

Product Identifier:

I Iouuci Iuenimei.					
Product Name:	luct Name: Canon BJ Cartridge BC-02				
Product Code:	0881A / F45-0241				
Relevant Identified U	Jses: Ink for Ink Jet Printer				
Details of Supplier of	i Safety Data Sheet:				
Supplier:	Canon Europa NV				
Address:	Bovenkerkerweg 59, 1185XB Amstelveen, The Nederlands				
Telephone Numbe	er:+31 20 5458545, +31 20 5458222				
E-mail Address: Emergency Telephon	The appoint of the set Boachedapon of the set				
Manufacturer:	Canon Inc.				
Address:	30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan				
SECTION 2 H	AZARDS IDENTIFICATION				
Emergency Overview Ink cartridge conta	v: aining black liquid ink with slight odor.				
US Regulatory Status	s under FHSA:				
Not classified as h	azardous.				
US Label Elements u	ınder FHSA:				
Signal Word: Hazard Warning	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



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SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s): Chemical Name/ Generic Name	CAS #/ EC #	Concentration/ Concentration Range (%)	67/548/EEC		EU Classification according to (EC) No 1272/2008		Note to Other
			Symbol/ Indication of Danger	R-Phrase ^{*1}	Hazard Class/ Category Code	Hazard Statement ^{*1}	Hazards*2
Glycerin	56-81-5 / 200-289-5	5 - 10	None	None	None	None	(1)
Thiodiglycol	111-48-8 / 203-874-3	5 - 10	Xi / Irritant	R36	Eye Irrit. 2	H319	
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)
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, heada
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:
No irritation is expected. (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_2 , water, foam or dry chemicals
Unsuitable Extinguishing Media:
None
Special Hazards:
None

Hazardous Combustion Products:

CO, CO₂, NOx and SOx

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

trol Parameters:	USA OSHA PEL	ACGIH TLV	EU OEL	
Product (Ink)	Not established	Not established	Not established	
Glycerin	Glycerin mist: TWA 15 mg/m ³ (Total dust) TWA 5 mg/m ³ (Respirable fraction)	Glycerin mist: TWA 10 mg/m ³	Not established	
Isopropyl alcohol	TWA 400 ppm, 980 mg/m ³	TWA 200 ppm, 492 mg/m ³ STEL 400 ppm, 984 mg/m ³	Not established	

Exposure Controls:

Engineering Controls: <u>No special ventilation equipment is needed under intended use of this product.</u> **Individual Protection Measures:**

Respiratory Protection: Required Not Required

Information on Basic Physical and Chemical Properties: Appearance: Black liquid **Odor:** Slight odor 7 - 8 pH: Melting Point/Freezing Point (°C): Not available **Initial Boiling Point and** Not available Boiling Range (°C): Flash Point(°C): 48.5 (Tag. Closed Cup. Combustion is not sustainable.) Not available **Evaporation Rate:** Classified as "Combustible liquid" under OSHA-HCS. Flammability: Not classified as "flammable" or "combustible" under FHSA. Not classified as "flammable" under 1999/45/EC. Upper/Lower Flammable or **Explosive Limits:** Not available Vapor Pressure : Not available Vapor Density : Not available **Relative Density:** 1.0 - 1.1 Water Solubility : Miscible **Fat Solubility :** Not available Partition Coefficient (n-Octanol/Water): Not available Auto-ignition Temperature (°C): Not available **Decomposition Temperature(°C):** Not available Viscosity (mPa s): 1 - 5 **Explosive Properties:** None (Estimate) **Oxidizing Properties:** None (Estimate) **Other Information:** Not available STABILITY AND REACTIVITY **SECTION 10 Reactivity:** None ⊠ Stable □ Unstable **Chemical Stability:** Possibility of Hazardous Reactions: None **Conditions to Avoid:** None Acids, bases, oxidizing materials and reducing agents **Incompatible Materials:** Hazardous Decomposition Products: CO, CO2, NOx, SOx and Ammonia

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES



CTION 11	TOXICOLOGICAL INFORMATION
	Soxicological Effects:
Acute Toxicity Inhalation:	Y:
Not availal	ble
Ingestion:	
-	00 mg/kg (rat)
•••	Guidelines No. 401 (1981), 84/449/EEC Method B1
	6 CFR Sec.1500.3
Corrosivity/Ir	
Skin:	
Acute dern	nal irritation: Mildly irritating (rabbit)
FHSA 1	6 CFR Sec.1500.41
Acute dern	nal toxicity: $LD_{50} > 2000 \text{ mg/kg}$ (rat)
OECD	Guidelines No. 402 (1981), 84/449/EEC Method B3
	6 CFR Sec.1500.40
Eye:	
Non irritan	
	6 CFR Sec.1500.42
Sensitization: Skin:	
	izer (guinea pig)
OECD	Guidelines No. 406 (1992), 96/54/EC Method B6
Repeated Dos	e Toxicity:
Not availa	ble
Carcinogenici	ty:
Not availa	
Mutagenicity:	
	Negative (S. typhimurium)
	me aberration test: Negative (Human peripheral blood lymphocytes, A Chinese hamster fibrobla
	plated from the lung)
Toxicity for R	•
Not availal	ble
Other Inform	ation:
Not availal	ble

Canon	MATERIAL SAFETY DATA SHEE	MSDS #: IC1213-0202 T Product Code: 0881A / F45-0241			
SECTION 12 ECOL	OGICAL INFORMATION				
Toxicity:	Not available				
Persistence and Degrada	bility: Not available				
Bioaccumulative Potential: Not available					
Mobility in Soil:	Not available				
Results of PBT and vPvBNo results that the component(s) of this ink meet(s) the PBT or vPvAssessment:Regulation (EC) No 1907/2006.					
Other Adverse Effects:	Not available				
Waste Treatment Metho	SAL CONSIDERATIONS ds: subject to federal, state and local laws.				
SECTION 14 TRAN	SPORT INFORMATION				
UN Number:	None				
UN Proper Shipping Nar	ne: None				
Transport Hazard Class:	None				
Packing Group:	None				
Environmental Hazards:	Not classified as environmentally hazardous under UN Model Regulations and mari pollutant under IMDG Code.				
Special Precautions for U	Jser: None				
SECTION 15 REGU < USA Information > SARA Title III §313: Chemical Name	LATORY INFORMATION	Weight %			
None					
California Proposition 6 Chemical Name	5:	Weight %			
<u>None</u> < EU Information > Safety, Health and Envi	ronmental Regulations/Legislation:				
(EC) No 1907/2006: A	uthorisation: Not regulated				
F	estriction: Not regulated				
(EC) No 1005/2009: <u>N</u>	Not regulated				
(EC) No 850/2004: <u>N</u>	Not regulated				
(EC) No 689/2008: <u>1</u>	Not regulated				
Others:	Vone				
< Canada Information > WHMIS Controlled F < Australia Information >		teria of NOHSC.			

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SECTION 16 OTHER INFORMATION

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

R11: Highly flammable.

- R36: Irritating to eyes.
- R67: Vapours may cause drowsiness and dizziness.

<EU Hazard statement according to (EC) No 1272/2008> H225: Highly flammable liquid and vapour. H319: Causes serious eye irritation.

H336: May cause drowsiness and dizziness.

<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

- 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

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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