Canon

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: BCI-16C

DESCRIPTION: Colour Ink Tank

USED WITH MACHINES: PIXMA iP90, SELPHY DS700

MANUFACTURER: Canon Inc

30-2, Shimomaruko 3-Chome, Ohta-Ku

Tokyo 146, Japan Phone: 03-3758-2111

DISTRIBUTER: Canon (UK) Ltd

Woodhatch Reigate Surrey RH2 8BF

Phone: 01737 220000

DATE PREPARED: 23/01/2004

DATE REVISED: 10/10/2005

UK MSDS REF: MSDSCCI3269



SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

Product Name: Canon Ink Tank BCI-16 Color

Product Code: 9818A
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 /	CAS#/	Weight	EU Symbol/	USA	ACGIH TLV	EU ILV	DFG MAK
Generic name	EC#	%	R-Phrase	OSHA PEL			
Glycerin	56-81-5 / 200-289-5	4 - 10	None / None	(as mist) Total dust TWA = 15 mg/m³ Respirable fraction TWA = 5 mg/m³	(as mist) $TWA = 10 \text{ mg/m}^3$	Not established	Not established
Ethylene glycol (Contained in cyan and magenta ink)	107-21-1 / 203-473-3	5 - 10	Xn / R22	Not established	(aerosol) Ceiling = 100 mg/m ³	$TWA = 20 \text{ ppm},$ 52 mg/m^3 $STEL = 40 \text{ ppm},$ 104 mg/m^3	10 ppm, 26 mg/m ³
Diethylene glycol (Contained only in yellow ink)	111-46-6 / 203-872-2	5 - 10	Xn / R22	Not established	Not established	Not established	10 ppm, 44 mg/m ³
Substituted phthalocyanine (Contained only in cyan ink)	Confidential	2 - 6	Xi / R41 R52/53	Not established	Not established	Not established	Copper and its compounds Inhalable fraction 1.0 mg/m³
Substituted anthraquinone derivative (Contained only in magenta ink)	Confidential	2 - 6	None / R52/53	Not established	Not established	Not established	Not established
Poly(oxy-1,2-ethanediyl), .alpha,.alpha.'-[1,4-dimethyl-1,4 -bis(2-methylpropyl)-2-butyne- 1,4-diyl]bis[.omegahydroxy-	9014-85-1 / Not applicable	< 2	Xi / R41	Not established	Not established	Not established	Not established
Ammonia derivative (Contained in cyan and magenta ink)	Confidential	5 - 10	None / None	Not established	Not established	Not established	Not established
Lactam	Confidential	5 - 10	None / None	Not established	Not established	Not established	Not established
Water	7732-18-5 / 231-791-2	55 - 75	None / None	Not established	Not established	Not established	Not established



< 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:

A three-color ink tank. (Cyan, Magenta and Yellow)

All the ink is liquid mixture with slight odor.

Potential Health Effects and Symptoms:

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.

Eve:

Cyan and Magenta: May cause slight irritation.

Yellow: Practically non-irritation is expected.

(See SECTION 11)

Skin:

Cyan: May cause no irritation and mild sensitization.

Magenta and Yellow: Neither irritation nor sensitization is expected.

(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 lukewarm, gently flowing 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:					
CO ₂ , 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 ₂ , NOx and SOx					
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:					
Handling: Use with adequate ventilation.					
Use with adequate ventilation. Avoid contact with skin, eyes and clothing.					
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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES				
Appearance:	Cyan, magenta and yellow liquid			
Odor:	Slight odor			
pH:	7.0 - 9.0			
Boiling Point/Range(°C):	Not available			
Melting Point/Range(°C):	Not available			
Decomposition Temperature (${}^{\circ}$ C):	Not available			
Flash Point(°C):	None (Tag. Closed Cup.)			
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 (%):	55 - 75			
Evaporation Rate:	Not available			
Viscosity (mPa s):	2.2 - 2.6			
SECTION 10 STABILITY AND REACTIVITY				
	■ Stable			
Stability:	☐ Unstable			
Conditions to Avoid:	None			
Materials to Avoid:	Acids, bases, oxidizing materials and reducing agents			
Hazardous Decomposition Products:	CO, CO ₂ , NOx, SOx and Ammonia			
Hazardous Polymerization:	☐ May Occur			
•	Will Not Occur			
Conditions to Avoid:	None			



SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation:

Not available

Ingestion:

All colors: LD₅₀ > 2000 mg/kg, 0/6 mortalities at 2000 mg/kg (rat)

OECD Guidelines No.423 (2001)

96/54/EC Method B1 tris

Eye:

Cyan: Slightly irritating, Maximum Average Score = 4.00 (rabbit)

Magenta: Slightly irritating, Maximum Average Score = 2.67 (rabbit)

Yellow: Practically non-irritating, Maximum Average Score = 2.00 (rabbit)

OECD Guidelines No.405 (2002)

92/69/EEC Method B5

Skin:

Cyan and Yellow: Not irritant, Primary Irritation Index = 0.0 (rabbit)

Magenta: Considered to be "not irritating" based on the classification criteria under 2001/59/EC (rabbit)

OECD Guidelines No.404 (2002)

92/69/EEC Method B4

Sensitization:

Cyan: Mild sensitizer, Sensitization rate = 11 % (1/9) (guinea pig)

Magenta and Yellow: Non-sensitizer, Sensitization rate = 0 % (0/10) (guinea pig)

OECD Guidelines No.406 (1992)

96/54/EC Method B6

Mutagenicity:

Ames test:

All colors: Negative (test strains: S. typhimurium & E. Coli)

Reproductive Toxicity:

Not available

Carcinogenicity:

Not available

Others:

Not available

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MATERIAL SAFETY DATA SHEET

SECTION 12	ECOLOGICAL INFORMATION				
Mobility:	Not available				
Persistence / Degradability:	Not available				
Bioaccumulation:	Not available				
Ecotoxicity:	Not available				
Other Adverse Effe	Not available				
	DISPOSAL CONSIDERATION				
Method of Disposal					
Disposal should b	pe 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				
CT CTV ON A F					
SECTION 15 SECTI	REGULATORY INFORMATION				
Information on the					
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:					
Specific Provisions i	in Kelation to Frotection of Man of the Environment:				
76/769/EEC:	Not regulated				
-	Not regulated				
76/769/EEC:	Not regulated				



< 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) (Contained in cyan and magenta ink)	5 - 10
"Copper Compounds" (Contained only in cyan ink)	2 - 6
(as Cu)	(< 0.35)

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.

Others: This product contains a chemical substance which is being introduced under a Low Volume Chemical Permit granted under section 21U(2) of the Industrial Chemicals (Notification and Assessment) Act 1989.

SECTION 16 OTHER INFORMATION

<R phrase list>

R22: Harmful if swallowed.

R41: Risk of serious damage to eyes.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

<Revised information from the previous version>

Section 15



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, (EC)304/2003
- 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 Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.

TWA: Time Weighted Average. STEL: Short Term Exposure Limit.

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.

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