



MATERIAL SAFETY DATA SHEET

F45-1231
IC-158-0101

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

Product Name: CANON BJ CARTRIDGE BC-60

STATEMENT OF HAZARDOUS NATURE: Not classified as hazardous according to the criteria on Worksafe Australia.

Manufacturer: Canon Inc.
30-2, Shimomaruko 3-Chome, Ohta-ku Tokyo, Japan
Phone: 03-3758-2111Distributor: Canon Australia Pty Ltd
1 Thomas Holt Drive
North Ryde NSW 2113
Phone: (02) 9805-2000

Date of preparation: 9 September 1997

Revised: 13 October 1997

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)

Chemical Name	CAS#	Weight %	EU Symbol	EU R-Phrase
Glycerin	56-81-5	5-10	None	None
Diethylene glycol (contained only in slightly yellow ink)	111-46-6	3-7	Xn	R22
Isopropyl alcohol (contained only in black ink)	67-63-0	<5	No Concern with health	No Concern with health

Chemical Name	USA OSHA PEL	ACGIH TLV
Glycerin	(as mist) Total dust TWA=15 mg/m3 Respirable fraction TWA=5mg/m3	(as mist) Total dust TWA=10 mg/m3
Diethylene glycol (contained only in slightly yellow ink)	None	None
Isopropyl alcohol (contained only in black ink)	TWA=400 ppm, 980mg/m3	TWA=400 ppm, 983mg/m3 STEL=500 ppm, 1230mg/m3
Chemical Name	EU ILV	DFG MAK
Glycerin	None	None
Diethylene glycol (contained only in slightly yellow ink)	None	MAK=10ppm, 44mg/m3
Isopropyl alcohol (contained only in black ink)	None	MAK=400 ppm, 980mg/m3

Date of Issue: July 10, 1997

Revised:



 SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS – Continued

Carcinogen

Chemical Name	CAS #	Reference
None		

Other Ingredient(s)

Chemical / Generic Name	Weight %
Water	70 – 90
Water-soluble organic compound	5 – 10
Water-soluble organic solvent	5 – 10

 SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview: A set of two colours ink cartridge (Black, slightly yellow)
All the ink is liquid mixture with slight odour.

Potential Health Effects and Symptoms:

Inhalation: No effects are expected under intended use.
If over exposed to Glycerin mist, Diethylene glycol and Isopropyl alcohol may cause irritation, difficulty breathing, nausea, headache, dizziness etc..

Ingestion: Ingestion of Diethylene glycol and Isopropyl alcohol may cause nausea, Headache, vomiting, diarrhoea, stomach pain, irregular heartbeat etc..

Eye: Black: May be no irritant based on the animal test data of similar ink.
Slightly yellow: May cause slight irritation.

Skin: Black: May cause slight irritation based on the animal test data of similar ink.
Slightly yellow: May cause slight irritation.

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 person breathes in large amounts, remove to fresh air.
Get medical attention.

Ingestion: Give one or two glasses of water.
Call a physician.

Eye: Immediately flush with water for 5 minutes.
If irritation persists, get medical attention.

Skin: Wash with water and detergent.
If irritation persists, get medical attention.

Note to Physicians: None.

SECTION 5 FIRE FIGHTING MEASURES

Fire Fighting Measures:

Extinguishing Media: CO₂, Water or dry chemicals.

Unsuitable Extinguishing Media: None.

Special Fire Fighting Procedures: None.

Unusual Fire and Explosion Hazards: None.

Fire and Explosive Properties:

Flash Point (°C): Black: 45-50 °C (Combustion not continued) (estimate), Slightly yellow: None (estimate)

Flammable (Explosive) Limits: No data available.

Autoignition Temperature (°C): Black: 515-545 °C (estimate), Slightly yellow: No data available

Flammability: Black ink: judging from the estimated flash point, classified as “combustible liquid” under OSHA-HCS (USA), “non-flammable” under 88/379/EEC (EU) and FSHA (USA).



SECTION 5 FIRE FIGHTING MEASURES - Continued

Fire and Explosive Properties – Continued:

Autoflammability: None.

Explosive Properties: None.

Oxidising Properties: None.

Hazardous
Combustion Products: CO, CO₂, NO_x and Ammonia.

Other Properties: None.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin and eyes.

Environmental
Precautions: It is recommended to keep away from drains, surface- and
ground-water.Method for
Cleaning Up: Wipe off with wet cloth or paper.

SECTION 7 HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes and clothing, when contact, wash
out immediately.

Storage: Keep out of the reach of children.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines: Not established.
See SECTION 2

Engineering Controls: Use usual ventilation to keep airborne concentrations below the exposure limit. (See SECTION 2)

Personal Protection Equipment(s):

Respiratory Protection:	<input type="checkbox"/> Required	<input checked="" type="checkbox"/> Not Required
-------------------------	-----------------------------------	--

Eye / Face Protection:	<input type="checkbox"/> Required	<input checked="" type="checkbox"/> Not Required
------------------------	-----------------------------------	--

Skin Protection:	<input type="checkbox"/> Required	<input checked="" type="checkbox"/> Not Required
------------------	-----------------------------------	--

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Two colours ink, Black and slightly yellow

Odour: Slight odour

pH: Black ink: 8 – 10, Slightly yellow ink: 6-8

Boiling Point / Range (°C): No data available

Melting Point / Range (°C): No data available

Decomposition Temperature (°C): No data available

Flash Point (°C): Black: 45-50 °C (combustion not continued) (estimate), Slightly yellow: None (estimate)

Flammable (Explosive) Limits: No data available

Autoignition Temperature (°C): Black: 515-545 °C (estimate), Slightly yellow: None (estimate)

Flammability: Black ink: judging from the estimated flash point, classified as “combustible liquid” under OSHA-HCS (USA), “non-flammable” under 88/379/EEC (EU) and FHSA (USA).

Autoflammability: None

Explosive Properties: None

Oxidizing Properties: None

Vapour Pressure: No data available

Vapour Density: No data available

Density / Specific Gravity: Black ink: 1.06- 1.07, Slightly yellow ink: 1.05

Water Solubility: miscible

Fat Solubility: No data available

Partition Coefficient (n-Octanol / Water): No data available

Percent Volatile: ≥ 90%

Evaporation Rate: No data available



SECTION 10 STABILITY AND REACTIVITY

Stability: Stable Unstable

Conditions to Avoid: None

Materials to Avoid: None

Hazardous Decomposition Products: CO, CO₂, NO_x and Ammonia

Hazardous Polymerisation May Occur Will Not Occur

Conditions to Avoid: None

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation: No data available

Ingestion: No data available

Eye: No data available
(Black ink): Data of similar composition ink;
Rabbit: Non-irritating:
A maximum group mean score = 0.0
(FSHA: US 16 CFR 1500.42, According to the Draize classification scheme)

Skin: No data available
(Black ink): Data of similar composition ink;
Rabbit: Mild irritant:
A primary irritation index = 1.1
(FSHA: US 16CFR 1500.41, According to the Draize classification scheme)

Sensitisation: No data available

Mutagenicity: No data available
(Black / Slightly yellow): Data of similar composition ink;
Negative (Ames test: test strains: *S. typhimurium*)

Reproductive Toxicity: No data available



SECTION 11 TOXICOLOGICAL INFORMATION - Continued

Carcinogenicity: No human carcinogen or potential carcinogen, according to IARC Monographs, NTP, OSHA(USA) regulation and EU Directive (Annex I to Directive 67/548/EEC).

Others: None

SECTION 12 ECOLOGICAL INFORMATION

Mobility: No data available

Persistence /
Degradability: No data available

Bioaccumulation: No data available

Ecotoxicity: No data available

Other Adverse
Effects: No data 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

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

Specific Provisions in Relation to Protection of Man or the Environment:

76/769/EEC: Not regulated

(EC)3093/94: Not regulated

(EEC)2455/92: Not regulated

Others: None

USA Information:

Information on the Label:

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



SECTION 16 OTHER INFORMATION

Other Information:

None

Literature Reference:

- U.S. Department of Labor, 29CFR Part 1910
- U.S. Environment 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 Organisation 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, 88/379/EEC and their amendments
- EU Regulation (EC)3093/94, (EEC)2455/92 and their amendments

Abbreviations:

‘EU’ stands for European Union.

‘OSHA PEL’ stands for PEL (Permissible Exposure Limit) under Occupational Safety and Health Administration.

‘ACGIH TLV’ stands for TLV (Threshold Limit Value) under American Conference of Government Industrial Hygienists.

‘EU ILV’ stands for Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC.

‘DFG MAK’ stands for MAK (Maximale Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft.

‘TWA’ stands for Time Weighted Average

‘IARC’ stands for International Agency for Research on Cancer.

‘NTP’ stands for National Toxicology Program (USA).

The Information, data and recommendations set forth herein (the “Information”) are presented in good faith and are believed to be correct as of the date hereof. The company / manufacturer makes no representations as to the completeness or accuracy of the Information and disclaims responsibility for any reliance thereon. The Information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of the information must be determined by the user to be in accordance with applicable Federal, State and Local laws and regulations. In no event will the company / manufacturer be responsible for damages for any nature whatsoever resulting from the use or reliance upon the Information.

NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE WITH RESPECT TO THE INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS.