

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

Product Name: Color BJ Cartridge BC-81

Product Code: F45-1181

Manufacturer: Canon Inc., 30-2,Shimomaruko 3-Chome,Ohta-ku,Tokyo,Japan, Ph # 03-3758-2111

Supplier: Canon USA, Inc., One Canon Park, Melville, NY 11747, USA

Phone #: 1-800-OK-CANON 24 Hr. Emergency CHEMTREC # 1-800-424-9300

MSDS #: IC0207-0101

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

Isopropyl alcohol	67-63-0	< 3	No health risk	No health risk
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Chemical Name	USA OSHA PEL	ACGIH TLV
Glycerin	(as mist) Total dust TWA = 15 mg/m3 Respirable fraction TWA = 5mg/m3	(as mist) TWA = 10 mg/m3

Isopropyl alcohol	TWA = 400 ppm, 980mg/m3	TWA = 400ppm, 983 mg/m3 STEL = 500ppm, 1230 mg/m3
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Chemical Name	EU ILV	DFG MAK
Glycerin	Not established	Not established

Isopropyl alcohol	Not established	TWA = 200ppm, 500mg/m3
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SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS - Continued

Carcinogen

Chemical Name	CAS #	Reference
None		

Other Ingredient(s)

Chemical/Generic Name	Weight %
Water	60 - 90
Ammonia derivatives	5 - 10
Glycols	< 8

SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview: A set of three colors ink cartridge.(cyan, magenta, yellow)
All the ink is liquid mixture with slight odor.

Over exposure to vapor or mist may cause irritation.
Combustible liquids.

Potential Health Effects and Symptoms:

Inhalation: No adverse effects are expected under normal use.
Over exposure to isopropyl alcohol may cause nausea, headache, vomiting, dizziness, drowsiness, cough, sore throat. Glycerin mist may cause physical irritation, difficulty breathing.

Ingestion: Over ingestion of isopropyl alcohol and glycerin may cause nausea, drowsiness, dizziness, vomiting, abdominal pain, headache, diarrhea, sore throat.

Eye: May cause minimal irritant based on the animal test data. (See SECTION 11)

Skin: May cause mild irritant based on the animal test data. (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: Give one or two glasses of water.
If irritation or discomfort occur, 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:

Flash Point(°C): Cyan 57.9°C/Magenta 58.0°C/Yellow 56.0°C(Tag Closed Cup:Do not sustain combustion)

Flammable(Explosive) Limits: No data available

Autoignition Temperature(°C): No data available

Flammability: Classified as "combustible liquid" under OSHA-HCS(USA) and "non-flammable" under 88/379/EEC(EU)

SECTION 5 FIRE FIGHTING MEASURES - Continued

Fire and Explosive Properties - Continued:

Autoflammability:	None
Explosive Properties:	None
Oxidizing Properties:	None
Hazardous Combustion Products:	CO, CO ₂ and NO _x .
Other Properties:	None

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin, eyes and clothing.

Environmental Precautions: It's recommended not to 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: Avoid contact with skin, eyes and clothing. When contact, wash out immediately.

Storage: Keep out of the reach of children.
Store in cool and dry place.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines: Not established for this material.
See SECTION 2

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

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:	Cyan, magenta and yellow liquid
Odor:	Slight odor
pH:	9.2 - 10.7
Boiling Point/Range(°C):	No data available
Melting Point/Range(°C):	No data available
Decomposition Temperature(°C):	No data available
Flash Point(°C):	Cyan 57.9°C/Magenta 58.0°C/Yellow 56.0°C(Tag Closed Cup:Do not sustain
Flammable (Explosive) Limits:	No data available
Autoignition Temperature(°C):	No data available
Flammability:	Classified as "combustible liquid" under OSHA-HCS(USA) and "non-flammable" under 88/379/EEC(EU)
Autoflammability:	None
Explosive Properties:	None
Oxidizing Properties:	None
Vapor Pressure:	No data available
Vapor Density:	No data available
Density / Specific Gravity:	Cyan 1.07/Magenta 1.07/Yellow 1.07
Water Solubility:	Miscible
Fat Solubility:	No data available
Partition Coefficient (n-Octanol/Water):	No data available
Percent Volatile:	65 - 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 Polymerization: May Occur Will Not Occur
 Conditions to Avoid: None

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:
 Inhalation: No data available

Ingestion: No data available

Eye:
 Cyan - Minimal irritant; Maximum Group Mean Score=5.3 Class 3
 Magenta-Minimal irritant; Maximum Group Mean Score=2.7 Class 3
 Yellow -Practically nonirritant;Maximum Group Mean Score=0.7 Class 2
 (rabbit)
 OECD Guidelines No.405

Skin:
 Cyan - Mild irritant;Primaly Irritation Index (PII)=1.7
 Magenta - Mild irritant;Primaly Irritation Index (PII)=1.0
 Yellow - Mild irritant;Primaly Irritation Index (PII)=1.5
 (rabbit)
 OECD Guidelines No.404
 Commission Directive 92/69/EEC Method B4

Sensitization: Non sensitizer;Sensitization rate= 0% (0/10) (guinea pig)
 OECD Guidelines No.406
 Commission Directive 92/69/EEC Method B6

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

Reproductive Toxicity: No data available

SECTION 11 TOXICOLOGICAL INFORMATION - Continued

Carcinogenicity: No human carcinogen or potential carcinogen, according to ACGIH, DFG, 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: Dispose in accordance with all applicable regulations.

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 %
Copper compound	< 5
As Copper metal (Contained only in cyan ink)	< 0.35

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. 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, 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 Governmental 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).

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Date of Issue: January 13, 1999

Revised Date: _____