

MATERIAL SAFETY DATA SHEET

 MSDS #: IC1203-0101
 Product Code: 0920A / F45-1561

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

Product Name: Canon Color BJ Cartridge BC-62e Photo
Product Code: 0920A / F45-1561
Manufacturer: Canon Inc.
 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan
Supplier: Canon Singapore Pte Ltd
 1 HarbourFront Avenue, #04-01, Keppel Bay Tower, Singapore 098632
 cspl_msds@canon.com.sg
Use of the Product: Ink for Ink Jet Printer

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

< Ingredient(s) >

Chemical Name / Generic name	CAS # / EC #	Weight %	EU Symbol/ R-Phrase	USA OSHA PEL	ACGIH TLV	EU ILV	DFG MAK
Glycerin	56-81-5 / 200-289-5	5 - 10	None / None	(as mist) Total dust TWA = 15 mg/m ³ Respirable fraction TWA = 5 mg/m ³	(as mist) TWA = 10 mg/m ³	Not established	Not established
Thiodiglycol	111-48-8 / 203-874-3	5 - 10	Xi / R36	Not established	Not established	Not established	Not established
Isopropyl alcohol	67-63-0 / 200-661-7	1 - 3	F / R11 Xi / R36 R67	TWA = 400 ppm, 980 mg/m ³	TWA = 400 ppm, 983 mg/m ³ STEL = 500 ppm, 1230 mg/m ³	Not established	200 ppm, 500 mg/m ³
Copper, [29H,31H-phthalocyaninato(2-) -N29,N30,N31,N32] -, aminosulfonyl sulfo derivs., sodium salts (Contained only in cyan ink)	90295-11-7 / 291-001-7	< 3	Xi / R36	Not established	Not established	Not established	Copper and its compounds Inhalable fraction 1.0 mg/m ³
C.I. Direct Violet 107 - The substance name in accordance with 67/547/EEC is stated in SECTION 16 (Contained only in magenta ink)	Not registered / 413-180-4	< 3	Xi / R41	Not established	Not established	Not established	Not established
C.I. Direct Yellow 173 (Contained only in yellow ink)	Not registered / 414-410-6	< 3	Xi / R41	Not established	Not established	Not established	Not established
Ammonia derivative	Confidential	5 - 10	None / None	Not established	Not established	Not established	Not established
Water	7732-18-5 / 231-79-12	60 - 80	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 set of six colors ink cartridges. (Cyan, Magenta, Yellow, Light cyan, Light magenta and Light 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.

Eye:

May cause minimal irritation. (See SECTION 11)

Skin:

May cause mild irritation and no sensitization. (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:**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 (See also Section 9):**Hazardous Combustion Products:**CO, CO₂, NO_x and SO_x**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:**

Use with adequate ventilation.

Avoid contact with skin, eyes and clothing.

In case of contact, wash out the contaminated area immediately.

Storage:

Keep in a cool and dry place. Protect from sunlight.

Keep away from heat and flame.

Keep out of the reach of children.

Specific Uses:

Ink for Ink Jet Printer.

For more information, please refer to the instruction of this product.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure Guidelines:**

Not established for this ink. (See also SECTION 2)

Engineering Controls:

Use adequate ventilation.

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 - 11.0
Boiling Point/Range(°C):	Not available
Melting Point/Range(°C):	Not available
Decomposition Temperature(°C):	Not available
Flash Point(°C):	Estimate : 57 - 60 (Tag Closed Cup. Combustion is not sustainable.)
Flammable (Explosive) Limits:	Not available
Autoignition Temperature(°C):	Estimate : 440 - 460 (ASTM-E659)
Flammability:	Classified as "Combustible liquid" under OSHA-HCS. Not classified as "flammable" or "combustible" under FHSA. Not classified as "flammable" under 1999/45/EC.
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 (%):	60 - 80
Evaporation Rate:	Not available
Viscosity (mPa s):	1.5 - 2.4

SECTION 10 STABILITY AND REACTIVITY

Stability:	<input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable
Conditions to Avoid:	None
Materials to Avoid:	Acids, bases, oxidizing materials and reducing agents
Hazardous Decomposition Products:	CO, CO ₂ , NO _x , Ammonia and SO _x
Hazardous Polymerization:	<input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur
Conditions to Avoid:	None

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation:

Not available

Ingestion:

Not available

Eye:

Cyan : Minimal irritant, Maximum Group Mean Score = 4.0, Class 3 (rabbit)
 Magenta : Minimal irritant, Maximum Group Mean Score = 5.3, Class 3 (rabbit)
 Yellow : Minimal irritant, Maximum Group Mean Score = 5.3, Class 3 (rabbit)
 Light cyan, Light magenta and Light yellow : [Data of similar composition ink] Minimal irritant (rabbit)
 OECD Guidelines No.405 (1987)
 92/69/EEC Method B5

Skin:

Cyan : Mild irritant, Primary Irritation Index = 0.5 (rabbit)
 Magenta : Mild irritant, Primary Irritation Index = 0.3 (rabbit)
 Yellow : Mild irritant, Primary Irritation Index = 0.7 (rabbit)
 Light cyan, Light magenta and Light yellow : [Data of similar composition ink] Mild irritant (rabbit)
 OECD Guidelines No.404 (1992)
 92/69/EEC Method B4

Sensitization:

Cyan : Non sensitizer, Sensitization rate = 0 % (0/10) (guinea pig)
 Magenta : Non sensitizer, Sensitization rate = 0 % (0/10) (guinea pig)
 Yellow : Non sensitizer, Sensitization rate = 0 % (0/10) (guinea pig)
 Light cyan, Light magenta and Light yellow : [Data of similar composition ink] Non sensitizer (guinea pig)
 OECD Guidelines No.406 (1992)
 96/54/EC Method B6

Mutagenicity:

Ames test :
 All colors : Negative (test strains: *S.typhimurium*)

Reproductive Toxicity:

Not available

Carcinogenicity:

Not available

Others:

Not available

SECTION 12 ECOLOGICAL INFORMATION

Mobility: Not available
Persistence / Degradability: Not available
Bioaccumulation: Not available
Ecotoxicity: Not available
Other Adverse Effects: Not available

SECTION 13 DISPOSAL CONSIDERATION

Method of Disposal:
 Disposal should 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
Marine Pollutant: Yes No **Chemical name (wt%):**
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
Special Precautions under 1999/45/EC Annex V: Not required
Specific Provisions in Relation to Protection of Man or the Environment:
76/769/EEC: Not regulated
(EC)2037/2000: Not regulated
(EEC)2455/92: Not regulated
Others: None

< 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 %
"Copper Compounds" (Contained only in cyan ink) (as Cu)	1 - 3 (< 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.

SECTION 16 OTHER INFORMATION

<SECTION 2 Ingredient(s) / Substance name(s)>

"C. I. Direct Violet 107 " :

"A mixture of: sodium 5-[8-[4-[4-[7-(3,5-dicarboxylatophenylazo)-8-hydroxy-3,6-disulfonatonaphthalen-1-ylamino]-6-hydroxy-1,3,5-triazin-2-yl]-2,5-dimethylpiperazin-1-yl]-6-hydroxy-1,3,5-triazin-2-ylamino]-1-hydroxy-3,6-disulfonatonaphthalen-2-ylazo]-isophthalate; ammonium 5-[8-[4-[4-[7-(3,5-dicarboxylatophenylazo)-8-hydroxy-3,6-disulfonatonaphthalen-1-ylamino]-6-hydroxy-1,3,5-triazin-2-yl]-2,5-dimethylpiperazin-1-yl]-6-hydroxy-1,3,5-triazin-2-ylamino]-1-hydroxy-3,6-disulfonatonaphthalen-2-ylazo]-isophthalate; 5-[8-[4-[4-[7-(3,5-dicarboxylatophenylazo)-8-hydroxy-3,6-disulfonatonaphthalen-1-ylamino]-6-hydroxy-1,3,5-triazin-2-yl]-2,5-dimethylpiperazin-1-yl]-6-hydroxy-1,3,5-triazin-2-ylamino]-1-hydroxy-3,6-disulfonaphthalen-2-ylazo]-isophthalic acid"

<R phrase list>

R11 : Highly flammable. R36 : Irritating to eyes.
 R41 : Risk of serious damage to eyes. R67 : Vapours may cause drowsiness and dizziness.

<Revised information from the previous version>
 Entirely revised.

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, (EEC)2455/92
- 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 Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft.
- TWA: Time Weighted Average.
- 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 Act 1985.

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