

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

<b>Product Name:</b>	Canon Color BJ Cartridge BC-11e
<b>Product Code:</b>	0907A / F45-1321
<b>Manufacturer:</b>	Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, Ph# 03-3758-2111
<b>Supplier:</b>	Canon USA, Inc, One Canon Park, Melville, NY 11747, USA
<b>Phone # :</b>	1-800-OK-CANON 24 Hr. Emergency CHEMTREC # 1-800-424-9300

**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 <sup>3</sup> Respirable fraction TWA = 5 mg/m <sup>3</sup>	(as mist) TWA = 10 mg/m <sup>3</sup>	Not established	Not established
Thiodiglycol (Contained in cyan, magenta and yellow ink)	111-48-8 / 203-874-3	5 - 10	Xi / R36	Not established	Not established	Not established	Not established
Ethylene glycol (Contained only in black ink)	107-21-1 / 203-473-3	2 - 6	Xn / R22	Not established	(aerosol) Ceiling = 100 mg/m <sup>3</sup>	TWA = 20 ppm, 52 mg/m <sup>3</sup> STEL = 40 ppm, 104 mg/m <sup>3</sup>	10 ppm, 26 mg/m <sup>3</sup>
Isopropyl alcohol	67-63-0 / 200-661-7	2 - 6	F / R11 Xi / R36 R67	TWA = 400 ppm, 980 mg/m <sup>3</sup>	TWA = 200 ppm, 492 mg/m <sup>3</sup> STEL = 400 ppm, 984 mg/m <sup>3</sup>	Not established	200 ppm, 500 mg/m <sup>3</sup>
Copper compound (Contained only in cyan ink)	Confidential	2 - 6	None / None	Not established	Not established	Not established	Copper and its compounds Inhalable fraction 1.0 mg/m <sup>3</sup>
C.I. Direct Violet 107 (Contained only in magenta ink) - The substance name in accordance with 67/547/EEC is stated in SECTION 16	Not registered / 413-180-4	1 - 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	1 - 3	Xi / R41	Not established	Not established	Not established	Not established
Poly(oxy-1,2-ethanediyl),.alpha... .alpha.- [1,4-dimethyl-1,4-bis(2-methylpro pyl)- 2-butyne-1,4-diyl]bis [.omega.-hydroxy- (Contained in cyan, magenta and yellow ink)	9014-85-1 / Not applicable	1 - 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	65 - 85	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 four colors ink cartridges. (Black, 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.

**Eye:**

May cause minimal irritation. (See SECTION 11)

**Skin:**

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<sub>2</sub>, 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<sub>2</sub>, NO<sub>x</sub> and SO<sub>x</sub>

**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

# MATERIAL SAFETY DATA SHEET

MSDS #: IC1281-0101  
Product Code: 0907A / F45-1321

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Black, cyan, magenta and yellow liquid
Odor:	Slight odor
pH:	8.2 - 10.5
Boiling Point/Range(°C):	Not available
Melting Point/Range(°C):	Not available
Decomposition Temperature(°C):	Not available
Flash Point(°C):	Black : 49.0, Color : Estimate 55 - 57 (Tag Closed Cup. Combustion is not sustainable.)
Flammable (Explosive) Limits:	Not available
Autoignition Temperature(°C):	Black : Estimate 510 - 520 Color : Estimate 470 - 490 (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 (%):	65 - 85
Evaporation Rate:	Not available
Viscosity (mPa s):	1.5 - 2.6

## 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 <sub>2</sub> , NO <sub>x</sub> , Ammonia and SO <sub>x</sub>
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:**

Black : Minimal irritant, Maximum Group Mean Score = 2.7, Class 3 (rabbit)

Cyan : Minimal irritant, Maximum Group Mean Score = 5.3, Class 3 (rabbit)

Magenta : Minimal irritant, Maximum Group Mean Score = 3.3, Class 3 (rabbit)

OECD Guidelines No.405 (1987) & 92/69/EEC Method B5

Yellow : Minimal irritant, Maximum Group Mean Score = 4.0 (rabbit)

EPA(FIFRA) Pesticide Assessment Guideline par.81-4

EPA(TSCA) Federal Regulation Subpart E Sec.798.4500

**Skin:**

Black, Cyan and Magenta : Non irritant, Primary Irritation Index = 0.0 (rabbit)

OECD Guidelines No.404 (1992) & 92/69/EEC Method B4

Yellow : Non irritant, Primary Irritation Index = 0.0 (rabbit)

EPA(FIFRA) Pesticide Assessment Guideline par.81-5

EPA(TSCA) Federal Regulation Subpart E Sec.798.4470

**Sensitization:**

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

OECD Guidelines No.406 (1992)

96/54/EC Method B6

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

OECD Guidelines No.406 (1992)

92/69/EEC 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

**(EC)304/2003:** 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 %
"Ethylene glycol" (107-21-1) (Contained only in black ink)	2 - 6
"Copper Compounds" (Contained only in cyan ink) (as Cu)	2 - 6 (< 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-disulfonatonaphthalen-2-ylazo]-isophthalic acid"

<R phrase list>

R11 : Highly flammable. R22 : Harmful if swallowed. 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, (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 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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