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# MATERIAL SAFETY DATA SHEET

MSDS #:

IC1283-0101 Product Code: 0958A / F47-0771

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

**COMPANY/UNDERTAKING** 

**Product Name:** Canon Ink Cartridge BCI-11Color

**Product Code:** 0958A / F47-0771 Canon Europa N.V. **Company Name:** 

 $Bovenkerkerweg\ 59\text{-}61, 1185XB, Amstelveen, The\ Netherlands$ Address:

**Use of the Product:** Ink for Ink Jet Printer

#### **SECTION 2** COMPOSITION/INFORMATION ON INGREDIENTS

_ 1	Ingredient(s	-/-
	mei caichas	,, _

< 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/m³ Respirable fraction TWA = 5 mg/m³	(as mist) TWA = 10 mg/m <sup>3</sup>	Not established	Not established
Thiodiglycol	111-48-8 / 203-874-3	5 - 10	Xi / R36	Not established	Not established	Not established	Not established
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>
Isopropyl alcohol	67-63-0 / 200-661-7	1 - 3	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>
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- methylpropyl)- 2-butyne-1,4-diyl]bis	9014-85-1 / Not applicable	1 - 3	Xi / R41	Not established	Not established	Not established	Not established
f.omegahydroxy- 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





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## < 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 three colors ink cartridges. (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.

#### Eve:

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

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SECTION 5 FIRE FIG	CHTING MEASURES		
Fire Fighting Measures:			
<b>Extinguishing Media:</b>			
CO <sub>2</sub> , water, foam or dr	ry chemicals		
Unsuitable Extinguishing	g Media:		
None			
Special Fire Fighting Property None	ocedures:		
Unusual Fire and Explosi	ion Hazards:		
Fire and Explosive Propertie	s (See also Section 9):		
Hazardous Combustion 1			
CO, CO <sub>2</sub> , NOx and SO			
Other Properties:			
None			
SECTION 6 ACCIDE	NTAL RELEASE MEASURES		
<b>Personal Precautions:</b>			
Avoid contact with skin,	eyes and clothing.		
<b>Environmental Precautions:</b>			
Do not release to sewer, s	surface water or ground water.		
Method for Cleaning Up:			
Wipe off with wet cloth o	r paper.		
SECTION 7 HANDLI	NG AND STORAGE		
Handling:			
Use with adequate ventila			
Avoid contact with skin,			
•	out the contaminated area immediately.		
Storage:			
	ace. 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, ple	ease refer to the instruction of this product.		
SECTION 8 EXPOSU	RE CONTROLS / PERSONAL PROTECTION		
<b>Exposure Guidelines:</b> Not established for this in	k. (See also SECTION 2)		
<b>Engineering Controls:</b>			
Use adequate ventilation			
Personal Protection Equipme	ent(s):		
<b>Respiratory Protection:</b>	☐ Required ☐ Not Required		
Eye/Face Protection:	Required		
-	Not Required   Not Required		
Skin Protection:	Required		
	Not Required		

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# MATERIAL SAFETY DATA SHEET

MSDS #: IC1283-0101
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SECTION 9 PHYSICAL AND CHI	EMICAL PROPERTIES
Appearance:	Cyan, magenta and yellow liquid
Odor:	Slight odor
pH:	8.2 - 10.3
Boiling Point/Range( ${}^{\circ}C$ ):	Not available
Melting Point/Range(°C):	Not available
Decomposition Temperature (°C):	Not available
Flash Point(°C):	Estimate: 55 - 57 (Tag Closed Cup. Combustion is not sustainable.)
Flammable (Explosive) Limits:	Not available
Autoignition Temperature ( $^{\circ}$ C):	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.
<b>Explosive Properties:</b>	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
<b>Partition Coefficient (n-Octanol/Water):</b>	Not available
Percent Volatile (%):	60 - 80
<b>Evaporation Rate:</b>	Not available
Viscosity (mPa s):	1.9 - 2.6
SECTION 10 STABILITY AND RE	ACTIVITY
Stability:	
Conditions to Avoid:	None
Materials to Avoid:	Acids, bases, oxidizing materials and reducing agents
<b>Hazardous Decomposition Products:</b>	CO, CO <sub>2</sub> , NOx, Ammonia and SOx
Hazardous Polymerization:	☐ May Occur ☑ Will Not Occur
Conditions to Avoid:	None

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## SECTION 11 TOXICOLOGICAL INFORMATION

**Acute Toxicity:** 

**Inhalation:** 

Not available

**Ingestion:** 

Not available

Eye:

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:

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:

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

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SECTION 12	ECOLOGICAL INFORMATION					
Mobility:	Not available					
Persistence / Degradability:	Not available					
Bioaccumulation:	Not available					
<b>Ecotoxicity:</b>	Not available					
Other Adverse Effe	Not available 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 Chemical name (wt%):					
	No					
Special Precautions	None None					
SECTION 15	REGULATORY INFORMATION					
< EU Information >						
Information on the l						
Symbol & Indic	ation: Not required					
R-Phrase: Not required						
S-Phrase:						
Not required						
Dangerous Com None	iponent(s):					
Special Precaut	ions under 1999/45/EC Annex V:					
Not required						
Specific Provisions i	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					

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(< 0.35)

#### < 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) 2 - 6

(as Cu)

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":

-1,3,5-triaz in-2-yl]-2,5-dimethylpiperaz in-1-yl]-6-hydroxy-1,3,5-triaz in-2-ylamino]-1-hydroxy-3,6-disulfonatonaphthalen-2-ylazo]-isophthalate; ammonium 5-[8-[4-[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]

is ophthalate; 5-[8-[4-[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.





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#### 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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