

## MATERIAL SAFETY DATA SHEET

MSDS #: IC1441-0202

Product Code: 0618B

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

**Product Name:** Canon FINE Cartridge CL-51

**Product Code:** 0618B

**Company Name:** Canon Inc.

**Address:** 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan

**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	1 - 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
Ethylene glycol (Contained in cyan and magenta ink)	107-21-1 / 203-473-3	5 - 10	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>
Diethylene glycol (Contained in yellow ink)	111-46-6 / 203-872-2	5 - 10	Xn / R22	Not established	Not established	Not established	10 ppm, 44 mg/m <sup>3</sup>
Substituted phthalocyanine (Contained in cyan ink)	Confidential	5 - 10	Xi / R41 R52/53	Not established	Not established	Not established	Not established
Lactam	Confidential	1 - 10	None / None	Not established	Not established	Not established	Not established
Magenta dye (Contained in magenta ink)	Confidential	5 - 10	None / None	Not established	Not established	Not established	Not established
Water	7732-18-5 / 231-791-2	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 three-color ink cartridge. (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:**

Cyan and Yellow: No irritation is expected.  
Magenta: May cause mild irritation.  
(See SECTION 11)

**Skin:**

Cyan and Magenta: May cause mild irritation and no sensitization.  
Yellow: 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 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**

<b>Appearance:</b>	Cyan, magenta and yellow liquid
<b>Odor:</b>	Slight odor
<b>pH:</b>	7 - 10
<b>Boiling Point/Range(°C):</b>	Not available
<b>Melting Point/Range(°C):</b>	Not available
<b>Decomposition Temperature(°C):</b>	Not available
<b>Flash Point(°C):</b>	Estimate: None
<b>Flammable (Explosive) Limits:</b>	Not available
<b>Autoignition Temperature(°C):</b>	Not available
<b>Flammability:</b>	Neither flammable nor combustible.
<b>Explosive Properties:</b>	Estimate: None
<b>Oxidizing Properties:</b>	Estimate: None
<b>Vapor Pressure :</b>	Not available
<b>Vapor Density :</b>	Not available
<b>Density / Specific Gravity:</b>	1.0 - 1.1
<b>Water Solubility :</b>	Miscible
<b>Fat Solubility :</b>	Not available
<b>Partition Coefficient (n-Octanol/Water):</b>	Not available
<b>Percent Volatile (%):</b>	60 - 80
<b>Evaporation Rate:</b>	Not available
<b>Viscosity (mPa s):</b>	1 - 5

**SECTION 10 STABILITY AND REACTIVITY**

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

**SECTION 11 TOXICOLOGICAL INFORMATION**

**Acute Toxicity:**

**Inhalation:**

Not available

**Ingestion:**

Cyan and Magenta: Not available

Yellow: [Data of similar composition ink] LD<sub>50</sub> > 2000 mg/kg (rat)

OECD Guidelines No.423 (2001), 96/54/EC Method B1 tris

**Eye:**

Cyan: [Data of similar composition ink] Practically non-irritant (rabbit)

OECD Guidelines No.405 (2002), 2004/73/EC Method B5

Magenta: [Data of similar composition ink] Mild irritant (rabbit)

Yellow: [Data of similar composition ink] Practically non-irritating (rabbit)

OECD Guidelines No.405 (2002), 92/69/EEC Method B5

**Skin:**

Cyan and Magenta: [Data of similar composition ink] Mild irritant (rabbit)

OECD Guidelines No.404 (2002), 2004/73/EC Method B4

Yellow: [Data of similar composition ink] Not irritant (rabbit)

OECD Guidelines No.404 (2002), 92/69/EEC Method B4

**Sensitization:**

Cyan and Magenta: [Data of similar composition ink] Non-sensitizer (mouse)

OECD Guidelines No.429 (2002), 2004/73/EC Method B42

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 (*S. typhimurium* & *E. Coli*)

**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 CONSIDERATIONS

**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):**  
 Not required

**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):**  
Not required

**SARA Title III §313:**

Chemical Name	Weight %
"Ethylene glycol" (107-21-1) (Contained in cyan and magenta ink)	5 - 10
"Copper Compounds" (Contained in cyan ink) (as Cu)	5 - 10 (< 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**

<R phrase list>

R22: Harmful if swallowed.

R41: Risk of serious damage to eyes.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

<Revised information from the previous version>

Section 2, 3, 9, 11 and 15

**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 Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.  
TWA: Time Weighted Average.  
STEL: Short Term Exposure Limit.  
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.

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