

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

**Product Name:** Canon FINE Cartridge CL-52

**Product Code:** 0619B

**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 HAZARDS IDENTIFICATION**

**EU Classification:**  
Not classified as dangerous.

**Emergency Overview:**  
A three-color ink cartridge. (Black, Cyan and Magenta)  
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:**  
Black: May cause moderate irritation.  
Cyan: May cause slight irritation.  
Magenta: Practically non-irritation is expected. (See SECTION 11)

**Skin:**  
Black and Cyan: Neither irritation nor sensitization is expected.  
Magenta: 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 3 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 - 15	None / None	(as mist) Total dust TWA = 15 mg/m <sup>3</sup>	(as mist) TWA = 10 mg/m <sup>3</sup>	Not established	Not established
Ethylene glycol	107-21-1 / 203-473-3	5 - 10	Xn / R22	Respirable fraction TWA = 5 mg/m <sup>3</sup> 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>
Ethylene urea (Contained in black ink)	120-93-4 / 204-436-4	5 - 10	Xi / R36	Not established	Not established	Not established	Not established
Isopropyl alcohol (Contained in cyan and magenta ink)	67-63-0 / 200-661-7	1 - 5	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>
Substituted naphthalene sulfonic acid (Contained in black ink)	Confidential	1 - 5	Xi / R41	Not established	Not established	Not established	Not established
Substituted phthalocyanine (Contained in cyan ink)	Confidential	1 - 5	Xi / R41 R52/53	Not established	Not established	Not established	Not established
Lactam (Contained in cyan and magenta ink)	Confidential	1 - 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 Part 3 of Annex VI to Regulation (EC) No 1272/2008.

< PBT substance and vPvB substance >

No component of this ink is a PBT or vPvB substance under Regulation (EC) No 1907/2006.

**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 3)

**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:** Black, cyan and magenta liquid

**Odor:** Slight odor

**pH:** 7 - 10

**Boiling Point/Range(°C):** Not available

**Melting Point/Range(°C):** Not available

**Decomposition Temperature(°C):** Not available

**Flash Point(°C):** Black: None (Tag, Closed Cup.)  
Cyan and Magenta: 60 - 65 (Tag, Closed Cup. Combustion is not sustainable.) (Estimate)

**Flammable (Explosive) Limits:** Not available

**Autoignition Temperature(°C):** Not available

**Flammability:** Black: Neither flammable nor combustible.  
Cyan and Magenta: 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 (Estimate)

**Oxidizing Properties:** None (Estimate)

**Vapor Pressure :** Not available

**Vapor Density :** Not available

**Density / Specific Gravity:** 1.0 - 1.1

**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

**SECTION 10 STABILITY AND REACTIVITY**

**Stability:**  Stable  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> and SO<sub>x</sub>

**Hazardous Polymerization:**  May Occur  Will Not Occur

**Conditions to Avoid:** None

**SECTION 11 TOXICOLOGICAL INFORMATION**

**Acute Toxicity:**

**Inhalation:**

Not available

**Ingestion:**

Black: LD<sub>50</sub> > 2000 mg/kg (rat)

Cyan and Magenta: LD<sub>50</sub> > 2000 mg/kg (rat) (Estimate)

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

**Eye:**

Black: Moderately irritating (rabbit)

Cyan: Slightly irritating (rabbit) (Estimate)

Magenta: Practically non-irritating (rabbit) (Estimate)

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

**Skin:**

Black: Not irritant (rabbit)

Cyan: Not irritant (rabbit) (Estimate)

Magenta: Mild irritant (rabbit) (Estimate)

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

**Sensitization:**

Black: Non-sensitizer (guinea pig)

Cyan and Magenta: Non-sensitizer (guinea pig) (Estimate)

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:**

**(EC) No 1907/2006 Annex XVII (Restrictions):** Not regulated

**(EC) No 2037/2000:** Not regulated

**(EC) No 689/2008:** 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:**

<u>Chemical Name</u>	<u>Weight %</u>
"Ethylene glycol" (107-21-1)	5 - 10
"Copper Compounds" (Contained in cyan ink) (as Cu)	1 - 5 ( < 0.35)

**California Proposition 65:**

<u>Chemical Name</u>	<u>Weight %</u>
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>

- R11: Highly flammable.
- R22: Harmful if swallowed.
- R36: Irritating to eyes.
- R41: Risk of serious damage to eyes.
- R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R67: Vapours may cause drowsiness and dizziness.

<Revised information from the previous version>

Entirely revised

<Term explanation>

Estimate: Estimate based on data of similar ink or the ingredient(s).

**Literature References:**

- 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 (EC) No 1907/2006 Annex XVII (Restriction), 1999/45/EC
- EU Regulation (EC) No 2037/2000, (EC) No 689/2008, (EC) No 1907/2006, (EC) No 1272/2008
- 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, 2000/39/EC and 2006/15/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.
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative

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