

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

**Product Name:** Canon FINE Cartridge CL-38  
**Product Code:** 2146B  
**Company Name:** Canon Europa N.V.  
**Address:** Bovenkerkerweg 59-61, 1185 XB, Amstelveen, The Netherlands  
**Use of the Product:** Ink for Ink Jet Printer

**SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS**
**< Ingredient(s) >**

| Chemical Name /<br>Generic Name                           | CAS # /<br>EC #          | Weight<br>% | EU Symbol/<br>R-Phrase | USA<br>OSHA PEL   | ACGIH TLV                                       | EU ILV   | DFG MAK                      |
|---|--------------------------|-------------|------------------------|---|---|--|------------------------------|
| Ethylene glycol<br>(Contained in cyan and<br>magenta ink) | 107-21-1 /<br>203-473-3  | 5 - 10      | Xn / R22               | Not established   | (aerosol)<br>Ceiling =<br>100 mg/m <sup>3</sup> | TWA = 20 ppm,<br>52 mg/m <sup>3</sup><br>STEL = 40 ppm,<br>104 mg/m <sup>3</sup> | 10 ppm, 26 mg/m <sup>3</sup> |
| Diethylene glycol<br>(Contained in yellow<br>ink)         | 111-46-6 /<br>203-872-2  | 5 - 10      | Xn / R22               | Not established   | Not established                                 | Not established  | 10 ppm, 44 mg/m <sup>3</sup> |
| Glycerin  | 56-81-5 /<br>200-289-5   | 1 - 10      | None / None            | (as mist)<br>Total dust<br>TWA = 15 mg/m <sup>3</sup><br>Respirable fraction<br>TWA = 5 mg/m <sup>3</sup> | (as mist)<br>TWA = 10 mg/m <sup>3</sup>         | Not established  | Not established              |
| Substituted<br>phthalocyanine<br>(Contained in cyan ink)  | Confidential             | 5 - 10      | Xi / R41<br>R52/53     | Not established   | Not established                                 | Not established  | Not established              |
| Magenta dye<br>(Contained in magenta<br>ink)              | Confidential             | 5 - 10      | None / None            | Not established   | Not established                                 | Not established  | Not established              |
| Lactam  | Confidential             | 1 - 10      | None / None            | Not established   | Not established                                 | Not established  | Not established              |
| Water   | 7732-18-5 /<br>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

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### 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

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### 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.

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### 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.

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### 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>                         | None (Estimate)                    |
| <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>                    | None (Estimate)                    |
| <b>Oxidizing Properties:</b>                    | None (Estimate)                    |
| <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<br><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<br><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: LD<sub>50</sub> > 2000 mg/kg (rat) (Estimate)

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

**Eye:**

Cyan: Practically non-irritant (rabbit) (Estimate)

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

Magenta: Mild irritant (rabbit) (Estimate)

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

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

**Skin:**

Cyan and Magenta: Mild irritant (rabbit) (Estimate)

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

Yellow: Not irritant (rabbit) (Estimate)

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

**Sensitization:**

Cyan and Magenta: Non-sensitizer (mouse) (Estimate)

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

Yellow: 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:**

**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)<br>(as Cu)            | 5 - 10<br>(< 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.

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 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, 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.

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