

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

**Product Identifier:**

**Product Name:** Canon FINE Cartridge PG-540XL

**Product Code:** 5222B

**Relevant Identified Uses:** Ink for Ink Jet Printer

**Details of Supplier of Safety Data Sheet:**

**Supplier:** Canon Europa NV

**Address:** Bovenkerkerweg 59, 1185XB Amstelveen, The Netherlands

**Telephone Number:** +31 20 5458545, +31 20 5458222

**E-mail Address:** www.canon-europe.com, ceu-Reach@canon-europe.com

**Emergency Telephone Number:** DENMARK: +45 82 12 12 12; GERMANY: +49 30 19240, +49 761 19240; BELGIUM & NETHERLANDS: +32 70 245 245; FRANCE: +33 1 40 05 48 48; UK only 0845 4647; FINLAND: +358 9 471 977; SWEDEN: +46 8 33 12 31

**Manufacturer:** Canon Inc.

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

**SECTION 2 HAZARDS IDENTIFICATION**

**Emergency Overview:**

Ink cartridge containing black liquid ink with slight odor.

**US Regulatory Status under FHSA:**

Not classified as hazardous.

**US Label Elements under FHSA:**

**Signal Word:** Not required

**Hazard Warning:** Not required

**Safety Advice:** Not required

**Hazardous Component:** Not required

**EU Classification under 1999/45/EC:**

Not classified as dangerous.

**EU Label Elements under 1999/45/EC:**

**Symbol & Indication:** Not required

**R-Phrase:** Not required

**S-Phrase:** Not required

**Dangerous Component:** Not required

**Applicable Label Elements in accordance with Annex V to 1999/45/EC:**

Not required

**Other Hazards:**

None

**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS**

Substance or Mixture: Mixture

**Ingredient(s):**

| Chemical Name/<br>Generic Name | CAS #/<br>EC #           | Concentration/<br>Concentration<br>Range (%) | EU Classification according to<br>67/548/EEC |                        | EU Classification according to<br>(EC) No 1272/2008 |                                   | Note to<br>Other<br>Hazards* <sup>2</sup> |
|--------------------------------|--------------------------|--|--|------------------------|---|-----------------------------------|---|
|                                |                          |  | Symbol/<br>Indication of Danger              | R-Phrase* <sup>1</sup> | Hazard Class/<br>Category Code                      | Hazard<br>Statement* <sup>1</sup> |   |
| Glycerin                       | 56-81-5 /<br>200-289-5   | 10 - 15                                      | None   | None                   | None  | None                              | (1)                                       |
| Triethylene glycol             | 112-27-6 /<br>203-953-2  | 5 - 10                                       | None   | None                   | None  | None                              | (1)                                       |
| Lactam                         | Confidential             | 5 - 10                                       | None   | None                   | None  | None                              |   |
| Water                          | 7732-18-5 /<br>231-791-2 | 60 - 80                                      | None   | None                   | None  | None                              |   |

\*1 Full texts of R-phrase(s) and Hazard statement(s) are listed in SECTION 16

\*2 The following substance(s) is (are) marked with (1), (2) and/or (3)

- (1) Substance for which Occupational Exposure Limit(s) is (are) established (See SECTION 8)
- (2) PBT substance or vPvB substance under Regulation (EC) No 1907/2006
- (3) Substance listed in Candidate List of SVHC for Authorisation under Regulation (EC) No 1907/2006

**Carcinogen(s):**

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.

**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.

**Skin:**

Wash with water and soap or mild detergent.

If irritation persists, obtain medical advice.

**Eye:**

Immediately flush with lukewarm, gently flowing water for 5 minutes or until the chemical is removed.

If irritation persists, obtain medical advice immediately.

**Most Important Symptoms and Effects, both Acute and Delayed:**

**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.

**Skin:**

Neither irritation nor sensitization is expected. (See SECTION 11)

**Eye:**

May cause minimal irritation. (See SECTION 11)

**Chronic Effects:**

Not identified

**Indication of Any Immediate Medical Attention and Special Treatment Needed:**

None

**SECTION 5 FIRE FIGHTING MEASURES**

**Extinguishing Media:**

**Suitable Extinguishing Media:**

CO<sub>2</sub>, water, foam or dry chemicals

**Unsuitable Extinguishing Media:**

None

**Special Hazards:**

None

**Hazardous Combustion Products:**

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

**Advice for Fire-fighters:**

None

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Avoid contact with skin, eyes and clothing.

**Environmental Precautions:**

Do not release to sewer, surface water or ground water.

**Methods and Material for Containment and Cleaning Up:**

Wipe off with wet cloth or paper.

**SECTION 7 HANDLING AND STORAGE**

**Precautions for Safe Handling:**

- Use with adequate ventilation.
- Avoid contact with skin, eyes and clothing.
- In case of contact, wash out the contaminated area immediately.

**Conditions for Safe Storage, Including Any Incompatibilities:**

- Keep in a cool and dry place.
- Protect from sunlight.
- Keep out of the reach of children.

**Specific End Uses:**

- Ink for Ink Jet Printer.
- For more information, please refer to the instruction of this product.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Control Parameters:**

|                    | USA<br>OSHA PEL  | ACGIH TLV                                  | EU OEL          | DFG MAK                |
|--------------------|--|--|-----------------|------------------------|
| Product (Ink)      | Not established  | Not established                            | Not established | Not established        |
| Glycerin           | Glycerin mist:<br>TWA 15 mg/m <sup>3</sup><br>(Total dust)<br>TWA 5 mg/m <sup>3</sup><br>(Respirable fraction) | Glycerin mist:<br>TWA 10 mg/m <sup>3</sup> | Not established | Not established        |
| Triethylene glycol | Not established  | Not established                            | Not established | 1000 mg/m <sup>3</sup> |

**Exposure Controls:**

**Engineering Controls:** No special ventilation equipment is needed under intended use of this product.

**Individual Protection Measures:**

- Eye/Face Protection:**  Required  Not Required
- Skin Protection:**  Required  Not Required
- Respiratory Protection:**  Required  Not Required

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

**Information on Basic Physical and Chemical Properties:**

|  |   |
|--|---|
| <b>Appearance:</b>                                   | <u>Black liquid</u>                       |
| <b>Odor:</b>   | <u>Slight odor</u>                        |
| <b>pH:</b>   | <u>8 - 9</u>                              |
| <b>Melting Point/Freezing Point (°C):</b>            | <u>Not available</u>                      |
| <b>Initial Boiling Point and Boiling Range (°C):</b> | <u>Not available</u>                      |
| <b>Flash Point(°C):</b>                              | <u>None (Estimate)</u>                    |
| <b>Evaporation Rate:</b>                             | <u>Not available</u>                      |
| <b>Flammability:</b>                                 | <u>Neither flammable nor combustible.</u> |
| <b>Upper/Lower Flammable or Explosive Limits:</b>    | <u>Not available</u>                      |
| <b>Vapor Pressure :</b>                              | <u>Not available</u>                      |
| <b>Vapor Density :</b>                               | <u>Not available</u>                      |
| <b>Relative Density:</b>                             | <u>1.0 - 1.1</u>                          |
| <b>Water Solubility :</b>                            | <u>Miscible</u>                           |
| <b>Fat Solubility :</b>                              | <u>Not available</u>                      |
| <b>Partition Coefficient (n-Octanol/Water):</b>      | <u>Not available</u>                      |
| <b>Auto-ignition Temperature (°C):</b>               | <u>Not available</u>                      |
| <b>Decomposition Temperature(°C):</b>                | <u>Not available</u>                      |
| <b>Viscosity (mPa s):</b>                            | <u>1 - 5</u>                              |
| <b>Explosive Properties:</b>                         | <u>None (Estimate)</u>                    |
| <b>Oxidizing Properties:</b>                         | <u>None (Estimate)</u>                    |
| <b>Other Information:</b>                            | <u>Not available</u>                      |

**SECTION 10 STABILITY AND REACTIVITY**

|  |  |
|--|--|
| <b>Reactivity:</b>                         | <u>None</u>  |
| <b>Chemical Stability:</b>                 | <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable |
| <b>Possibility of Hazardous Reactions:</b> | <u>None</u>  |
| <b>Conditions to Avoid:</b>                | <u>None</u>  |
| <b>Incompatible Materials:</b>             | <u>Acids, bases, oxidizing materials and reducing agents</u>                 |
| <b>Hazardous Decomposition Products:</b>   | <u>CO, CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub> and PO<sub>x</sub></u> |

**SECTION 11 TOXICOLOGICAL INFORMATION****Information on Toxicological Effects:****Acute Toxicity:****Inhalation:**

Not available

**Ingestion:**

Not available

**Corrosivity/Irritation:****Skin:**

Non-irritant (rabbit) (Estimate)

OECD Guidelines No. 404 (2002), (EC) No 440/2008 Method B4

**Eye:**

Minimal irritant (rabbit) (Estimate)

OECD Guidelines No. 405 (2002), (EC) No 440/2008 Method B5

**Sensitization:****Skin:**

Non-sensitizer (mouse) (Estimate)

OECD Guidelines No. 429 (2002), (EC) No 440/2008 Method B42

**Repeated Dose Toxicity:**

Not available

**Carcinogenicity:**

Not available

**Mutagenicity:**Ames test: Negative (*S. typhimurium* & *E. Coli*)**Toxicity for Reproduction:**

Not available

**Other Information:**

Not available

**SECTION 12 ECOLOGICAL INFORMATION**

**Toxicity:** Fish, Acute toxicity test:  
 96 Hour LL50 > 1000 mg/l LR WAF, NOEL = 1000mg/l LR WAF (Oncorhynchus mykiss) (Estimate)  
 OECD Guideline No. 203 (1992), (EC) No 440/1008 Method C.1  
 Daphnia sp., Acute immobilisation test:  
 48-Hour EL50 > 1000 mg/l LR WAF, NOEL = 1000 mg/l LR WAF (Daphnia magna) (Estimate)  
 OECD Guideline No. 202 (2004), (EC) No 440/1008 Method C.2  
 Freshwater Alga and Cyanobacteria, Growth Inhibition test:  
 ErL50 (0-72 h) > 1000 mg/l LR WAF, EyL50 (0-72 h) = 840 mg/l LR WAF,  
 NOEL = 320 mg/l LR WAF, LOEL = 1000 mg/l LR WAF (Desmodesmus subspicatus) (Estimate)  
 OECD Guideline No. 201 (2006), (EC) No 440/1008 Method C.3  
 LL: Lethal Loading rate, EL: Effective Loading rate, NOEL: No Observed Effect Loading rate,  
 LOEL: Lowest Observed Effect Loading Rate, LR WAF: Loading Rate Water Accommodated Fraction

**Persistence and Degradability:** Not available

**Bioaccumulative Potential:** Not available

**Mobility in Soil:** Not available

**Results of PBT and vPvB Assessment:** No results that the component(s) of this ink meet(s) the PBT or vPvB criteria under Regulation (EC) No 1907/2006.

**Other Adverse Effects:** Not available

**SECTION 13 DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods:**  
Disposal should be subject to federal, state and local laws.

**SECTION 14 TRANSPORT INFORMATION**

**UN Number:** None

**UN Proper Shipping Name:** None

**Transport Hazard Class:** None

**Packing Group:** None

**Environmental Hazards:** Not classified as environmentally hazardous under UN Model Regulations and marine pollutant under IMDG Code.

**Special Precautions for User:** None

**SECTION 15 REGULATORY INFORMATION**

< USA Information >

**SARA Title III §313:**

| <u>Chemical Name</u> | <u>Weight %</u> |
|----------------------|-----------------|
| <u>None</u>          |                 |

**California Proposition 65:**

| <u>Chemical Name</u> | <u>Weight %</u> |
|----------------------|-----------------|
| <u>None</u>          |                 |

< EU Information >

**Safety, Health and Environmental Regulations/Legislation:**

**(EC) No 1907/2006: Authorisation:** Not regulated

**Restriction:** Not regulated

**(EC) No 1005/2009:** Not regulated

**(EC) No 850/2004:** Not regulated

**(EC) No 689/2008:** Not regulated

**Others:** None

**Chemical Safety Assessment under (EC) No 1907/2006:** Not required

< Canada Information >

**WHMIS Controlled Product:** This product will not be shipped to Canada.

< Australia Information >

**Statement of Hazardous Nature:** This product will not be shipped to Australia.

**SECTION 16 OTHER INFORMATION**

<Term explanation>

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

**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 1999/45/EC
- EU Regulation (EC) No 1907/2006, (EC) No 1272/2008, (EC) No 1005/2009, (EC) No 850/2004, (EC) No 689/2008
- Canada Workplace Hazardous Materials Information System
- Australia National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substance [NOHSC:1008]

**Abbreviations:**

- OSHA HCS: Occupational Safety and Health Act, Hazard Communication Standard (USA)
- FHSA: Federal Hazardous Substances Act (USA)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- SVHC: Substances of Very High Concern
- IARC: International Agency for Research on Cancer
- NTP: National Toxicology Program (USA)
- 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 OEL: Occupational exposure limits at Community level under Directive 2004/37/EC, 98/24/EC, 91/322/EEC, 2000/39/EC, 2006/15/EC and 2009/161/EU
- DFG MAK: MAK(Maximale Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft
- TWA: Time Weighted Average
- STEL: Short Term Exposure Limit
- WHMIS: Workplace Hazardous Materials Information System
- NOHSC: National Occupational Health and Safety Commission

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