

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

Product Identifier:

Product Name: Canon FINE Cartridge CL-546XL

Product Code: 8288B

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:

A three-color ink cartridge. (Cyan, Magenta and Yellow)
 All the ink is liquid mixture 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/ Generic Name | CAS #/ EC # | Concentration/ Concentration Range (%) | EU Classification according to 67/548/EEC | | EU Classification according to (EC) No 1272/2008 | | Note to Other Hazards* ² |
|--|-------------------------------|--|--|------------------------|---|-----------------------------------|---|
| | | | Symbol/ Indication of Danger | R-Phrase* ¹ | Hazard Class/ Category Code | Hazard Statement* ¹ | |
| Glycerin | 56-81-5 / 200-289-5 | 5 - 10 | None | None | None | None | (1) |
| Ethylene urea | 120-93-4 / 204-436-4 | 1 - 5 | Xi / Irritant | R36 | Eye Irrit. 2 | H319 | |
| Poly(oxy-1,2-ethanediyl), . alpha...alpha.-[1,4-dimethyl -1,4-bis(2-methylpropyl)-2- butyne-1,4-diyl]bis[.omega.- hydroxy- | 9014-85-1 / Not applicable | 0.1 - 5 | Xi / Irritant | R41 | Eye Dam. 1 | H318 | |
| Glycol | Confidential | 1 - 10 | None | None | None | None | |
| Substituted phthalocyanine (Contained in cyan ink) | Confidential | 1 - 5 | None | None | None | None | |
| Water | 7732-18-5 / 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:

Cyan and Yellow: May cause minimal irritation.

Magenta: May cause moderate 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:

CO₂, water, foam or dry chemicals

Unsuitable Extinguishing Media:

None

Special Hazards:

None

Hazardous Combustion Products:

CO, CO₂, NO_x and SO_x

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 OSHA PEL | ACGIH TLV | EU OEL |
|---------------|--|--|-----------------|
| Product (Ink) | Not established | Not established | Not established |
| Glycerin | Glycerin mist: TWA 15 mg/m ³ (Total dust) TWA 5 mg/m ³ (Respirable fraction) | Glycerin mist: TWA 10 mg/m ³ | Not established |

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:

| | |
|--|---|
| Appearance: | <u>Cyan, magenta and yellow liquid</u> |
| Odor: | <u>Slight odor</u> |
| pH: | <u>7 - 9</u> |
| Melting Point/Freezing Point (°C): | <u>Not available</u> |
| Initial Boiling Point and Boiling Range (°C): | <u>Not available</u> |
| Flash Point(°C): | <u>None (Estimate)</u> |
| Evaporation Rate: | <u>Not available</u> |
| Flammability: | <u>Neither flammable nor combustible.</u> |
| Upper/Lower Flammable or Explosive Limits: | <u>None (Estimate)</u> |
| Vapor Pressure : | <u>Not available</u> |
| Vapor Density : | <u>Not available</u> |
| Relative Density: | <u>1.0 - 1.1</u> |
| Water Solubility : | <u>Miscible</u> |
| Fat Solubility : | <u>Not available</u> |
| Partition Coefficient (n-Octanol/Water): | <u>Not available</u> |
| Auto-ignition Temperature (°C): | <u>None (Estimate)</u> |
| Decomposition Temperature(°C): | <u>Not available</u> |
| Viscosity (mPa s): | <u>1 - 5</u> |
| Explosive Properties: | <u>None (Estimate)</u> |
| Oxidizing Properties: | <u>None (Estimate)</u> |
| Other Information: | <u>Not available</u> |

SECTION 10 STABILITY AND REACTIVITY

| | |
|--|--|
| Reactivity: | <u>None</u> |
| Chemical Stability: | <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable |
| Possibility of Hazardous Reactions: | <u>None</u> |
| Conditions to Avoid: | <u>None</u> |
| Incompatible Materials: | <u>Acids, bases, oxidizing materials and reducing agents</u> |
| Hazardous Decomposition Products: | <u>CO, CO₂, NO_x and SO_x</u> |

SECTION 11 TOXICOLOGICAL INFORMATION

Information on Toxicological Effects:

Acute Toxicity:

Inhalation:

Not available

Ingestion:

Not available

Corrosivity/Irritation:

Skin:

All colors: Non-irritant (rabbit)

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

Eye:

Cyan and Yellow: Minimal irritant (rabbit)

Magenta: Moderate irritant (rabbit)

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

Sensitization:

Skin:

All colors: Non-sensitizer (mouse)

OECD Guidelines No. 429 (2010), (EC) No 440/2008 Method B42

Repeated Dose Toxicity:

Not available

Carcinogenicity:

Not available

Mutagenicity:

Ames test:

All colors: Negative (*S. typhimurium* & *E. Coli*)

Toxicity for Reproduction:

Not available

Other Information:

Not available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity: Not available

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>"Copper Compounds" (Contained in cyan ink) (as Cu)</u> | <u>1 - 5 (< 0.35)</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

<EU R-phrase according to 67/548/EEC>

R36: Irritating to eyes.

R41: Risk of serious damage to eyes.

<EU Hazard statement according to (EC) No 1272/2008>

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

<EU SDS information>

This safety data sheet (SDS) is supplied under (EC) No 1907/2006 Article 31-3.

<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
- 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
- TWA: Time Weighted Average
- STEL: Short Term Exposure Limit
- WHMIS: Workplace Hazardous Materials Information System
- NOHSC: National Occupational Health and Safety Commission

The information, data and recommendations set forth herein (the "Information") are presented in good faith and are believed to be correct as of the date hereof. The company/manufacturer makes no representations as to the completeness or accuracy of the Information and disclaims responsibility for any reliance thereon. The Information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of the Information must be determined by the user to be in accordance with applicable Federal, state and local laws and regulations. In no event will the company/manufacturer be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE WITH RESPECT TO THE INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS.