

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

Product Identifier:

Product Name: Canon FINE Cartridge CL-541XL

Product Code: 5226B

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 | 1 - 5 | 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 | |
| Substituted phthalocyanine salt (Contained in cyan ink) | Confidential | 1 - 5 | Xi / Irritant | R41 R52/53 | Eye Dam. 1 Aquatic Chronic 3 | H318 H412 | |
| Substituted phthalocyanine (Contained in cyan ink) | Confidential | 1 - 5 | Xi / Irritant | R41 | Eye Dam. 1 | H318 | |
| Pyridine azo dye (Contained in magenta ink) | Confidential | 1 - 5 | N / Dangerous for environment | R51/53 | Aquatic Chronic 2 | H411 | |
| Glycol | Confidential | 5 - 10 | None | None | None | None | |
| Glycol | Confidential | 1 - 10 | 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:

May cause mild 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 | DFG MAK |
|---------------------|--|--|-----------------|-----------------|
| Product (Ink) | Not established | 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 | 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>6 - 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>Not available</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>Not available</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:

All colors: Mild irritant (rabbit)

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

Sensitization:

Skin:

All colors: Non-sensitizer (mouse)

OECD Guidelines No. 429 (2002), (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: Cyan and Yellow: Not available
 Magenta:
 Fish, Acute toxicity test:
 96-Hour LC50 > 100 mg/L (Oryzias latipes) (Estimate)
 OECD Guideline No. 203 (1992)
 Daphnia sp., Acute immobilisation test:
 48-Hour EC50 > 100 mg/L (Daphnia magna) (Estimate)
 OECD Guideline No. 202 (2004)
 Lemna sp., Growth inhibition test:
 EC50 (0-7day) > 100 mg/L, NOEC = 100 mg/L (Lemna minor) (Estimate)
 OECD Guideline No. 221 (2006)
 NOEC: No Observed Effect Concentration

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:

| Chemical Name | Weight % |
|---|---------------------|
| "Copper Compounds" (Contained in cyan ink) (as Cu) | 5 - 10 (< 0.35) |

California Proposition 65:

| Chemical Name | Weight % |
|---------------|----------|
| None | |

 < 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.
- R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

- H318: Causes serious eye damage.
- H319: Causes serious eye irritation.
- H411: Toxic to aquatic life with long lasting effects.
- H412: Harmful to aquatic life with long lasting effects.

<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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