MSDS #: ____

IC3111-0101

Page 1 of 8

Product Code: 5227B

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

Product Identifier:

Product Name: Canon FINE Cartridge CL-541

Product Code: 5227B

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 Nederlands

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

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

DENMARK: +45 82 12 12 12; GERMANY: +49 30 19240, +49 761 19240;

Emergency Telephone Number: 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



MSDS #:

IC3111-0101

Page 2 of 8

Product Code: 5227B

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Mixture: Mixture

Ingredient(s):

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
			Symbol/ Indication of Danger	R-Phrase*1	Hazard Class/ Category Code	Hazard Statement*1	Hazards*
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[.omegahydroxy-	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	
Pyiridine 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

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.

^{*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



MSDS #: Product Code:

IC3111-0101

5227B

Page 3 of 8

FIRST AID MEASURES **SECTION 4**

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.

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, NOx and SOx

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.

Page 4 of 8 IC3111-0101 227B

	MSDS #:	IC3111-0
MATERIAL SAFETY DATA SHEET	Product Code:	52

SECTION 7 HANDLING AND STORAGE							
Precautions for Safe Han	_						
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:							
Protect from sunlight. Keep out of the reach of children.							
Specific End Uses:	or ciliaren.						
Ink for Ink Jet Printer.							
	please refer to the instru	ction of this product					
Tor more information,	pieuse refer to the mstru	etion of this product.					
SECTION 8 EXPO	SURE CONTROLS / 1	PERSONAL PROT	ECTION				
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/m³ (Total dust) TWA 5 mg/m³ (Respirable fraction)	Glycerin mist: TWA 10 mg/m ³	Not established	Not established			
Individual Protection Eye/Face Protect Skin Protection:	ion: Required D	☑ Not Required ☑ Not Required	under intended use	of this product.			

Canon

MATERIAL SAFETY DATA SHEET

Page 5 of 8 IC3111-0101 MSDS #:

5227B

Product Code:

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES				
Information on Basic Physical and Chemical Properties:				
Appearance:	Cyan, magenta and yellow liquid			
Odor:	Slight odor			
pH:	6 - 9			
Melting Point/Freezing Point ($^{\circ}$ C):	Not available			
Initial Boiling Point and Boiling Range (°C):	Not available			
Flash Point(°C):	None (Estimate)			
Evaporation Rate:	Not available			
Flammability:	Neither flammable nor combustible.			
Upper/Lower Flammable or Explosive Limits:	Not available			
Vapor Pressure :	Not available			
Vapor Density:	Not available			
Relative Density:	1.0 - 1.1			
Water Solubility:	Miscible			
Fat Solubility:	Not available			
Partition Coefficient (n-Octanol/Water):	Not available			
Auto-ignition Temperature (${}^{\circ}$ C):	Not available			
Decomposition Temperature (${}^{\circ}C$):	Not available			
Viscosity (mPa s):	1 - 5			
Explosive Properties:	None (Estimate)			
Oxidizing Properties:	None (Estimate)			
Other Information:	Not available			
SECTION 10 STABILITY AND REA	CTIVITY			
Reactivity: None				
Chemical Stability:	table Unstable			
Possibility of Hazardous Reactions: None				
Conditions to Avoid: None				
Incompatible Materials: Acids	s, bases, oxidizing materials and reducing agents			
Hazardous Decomposition Products: CO, CO ₂ , NOx and SOx				

MSDS #: __ Product Code:

IC3111-0101

5227B

Page 6 of 8

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

MSDS #: _

IC3111-0101

Page 7 of 8

Product Code: 5227B

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

No results that the component(s) of this ink meet(s) the PBT or vPvB criteria under

Assessment: 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) 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.



MSDS #: _

IC3111-0101

Page 8 of 8

Product Code: 5227B

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

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.