Page 1 of 8

Canon

MATERIAL SAFETY DATA SHEET

IC1322-0101 Product Code: 0904A / F45-1101

MSDS #:

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

Product Name: Canon Fluorescent BJ Cartridge BC-29F

0904A / F45-1101 **Product Code:**

Manufacturer: Canon Inc.

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

Supplier: Canon Singapore Pte Ltd

1 HarbourFront Avenue, #04-01, Keppel Bay Tower, Singapore 098632

cspl_msds@canon.com.sg

Use of the Product: Ink for Ink Jet Printer

| SECTION 2 | COMPOSI | OMPOSITION/INFORMATION ON INGREDIENTS | | | | | | |
|---|-------------------------------|---------------------------------------|----------------------------|---|---|--|--|--|
| < Ingredient(s) > Chemical Name / Generic name | CAS#/ EC# | Weight | EU Symbol/ R-Phrase | USA OSHA PEL | ACGIH TLV | EU ILV | DFG MAK | |
| Glycerin | 56-81-5 / 200-289-5 | 5 - 10 | None / None | (as mist) Total dust TWA = 15 mg/m³ Respirable fraction TWA = 5 mg/m³ | (as mist) TWA = 10 mg/m ³ | Not established | Not established | |
| Thiodiglycol (Contained in color ink) | 111-48-8 / 203-874-3 | 5 - 10 | Xi / R36 | Not established | Not established | Not established | Not established | |
| Ethylene glycol (Contained only in black ink) | 107-21-1 / 203-473-3 | 3 - 8 | Xn / R22 | Not established | (aerosol) Ceiling = 100 mg/m³ | TWA = 20 ppm, 52 mg/m ³ STEL = 40 ppm, 104 mg/m ³ | 10 ppm, 26 mg/n | |
| Isopropyl alcohol (Contained only in black ink) | 67-63-0 / 200-661-7 | 2 - 5 | F / R11 Xi / R36 R67 | TWA = 400 ppm, 980 mg/m ³ | TWA = 200 ppm, 492 mg/m ³ STEL = 400 ppm, 984 mg/m ³ | Not established | 200 ppm, 500 mg/m ³ | |
| Triethanolamine (Contained only in yellow ink) | 102-71-6 / 203-049-8 | 2 - 5 | None / None | Not established | $TWA = 5 \text{ mg/m}^3$ | Not established | Not established | |
| Copper, [29H,31H-phthalocyaninato(2-)- N29,N30,N31,N32]-, aminosulfonyl sulfo derivs., sodium salts (Contained only in cyan ink) | 90295-11-7 / 291-001-7 | 1 - 3 | Xi / R36 | Not established | Not established | Not established | Copper and its compounds Inhalable fraction 1.0 mg/m ³ | |
| Poly(oxy-1,2-ethanediyl),.alpha. "alpha.'- [1,4-dimethyl-1,4-bis(2-methylp ropyl)- 2-butyne-1,4-diyl]bis [.omegahydroxy- | 9014-85-1 / Not applicable | < 2 | Xi / R41 | Not established | Not established | Not established | Not established | |
| Ammonia derivative | Confidential | 5 - 10 | None / None | Not established | Not established | Not established | Not established | |
| Water | 7732-18-5 / 231-79-12 | 65 - 85 | None / None | Not established | Not established | Not established | Not established | |
| | | | | | | | | |

Page 2 of 8



MATERIAL SAFETY DATA SHEET

MSDS #: IC1322-0101 Product Code: 0904A / F45-1101

< 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 set of four colors ink cartridges. (Black, 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:

Black: May cause minimal irritation. (See SECTION 11)

Color: May cause irritation.

Skin:

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

Color: May cause mild irritation.

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

Page 3 of 8



MATERIAL SAFETY DATA SHEET

MSDS #: IC1322-0101 Product Code: 0904A / F45-1101

| SECTION 5 FIRE FIG | GHTING MEASURES | | | | | |
|--|--|--|--|--|--|--|
| Fire Fighting Measures: | | | | | | |
| Extinguishing Media: | | | | | | |
| CO ₂ , water, foam or dry chemicals | | | | | | |
| Unsuitable Extinguishing Media: None | | | | | | |
| Special Fire Fighting Pro | Special Fire Fighting Procedures: None | | | | | |
| Unusual Fire and Explos | ion Hazards: | | | | | |
| None | Unusual Fire and Explosion Hazards: None | | | | | |
| Fire and Explosive Propertie | es (See also Section 9): | | | | | |
| Hazardous Combustion | | | | | | |
| CO, CO ₂ , NOx and SO | CO, CO ₂ , NOx and SOx | | | | | |
| Other Properties: | | | | | | |
| None | | | | | | |
| SECTION 6 ACCIDE | NTAL RELEASE MEASURES | | | | | |
| | NITE REELISE HEROCKES | | | | | |
| Personal Precautions: Avoid contact with skin, ey | ves and clothing | | | | | |
| Environmental Precautions: | | | | | | |
| | urface water or ground water. | | | | | |
| Method for Cleaning Up: | | | | | | |
| Wipe off with wet cloth or | paper. | | | | | |
| | ^ ^ | | | | | |
| SECTION 7 HANDLI | NG AND STORAGE | | | | | |
| Handling: | | | | | | |
| Use with adequate ventilation. | | | | | | |
| Avoid contact with skin, ey | t the contaminated area immediately. | | | | | |
| | t the containmated area miniediatery. | | | | | |
| Storage: Keen in a cool and dry place | ce. Protect from sunlight | | | | | |
| Keep in a cool and dry place. Protect from sunlight. Keep away from heat and flame. | | | | | | |
| 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. | | | | | | |
| SECTION 8 EXPOSU | RE CONTROLS / PERSONAL PROTECTION | | | | | |
| Exposure Guidelines: | | | | | | |
| Not established for this inl | c. (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 | | | | | |
| omii i i occuoni | ➤ Not Required | | | | | |
| | | | | | | |

Page 4 of 8

Canon

MATERIAL SAFETY DATA SHEET

MSDS #: IC1322-0101 Product Code: 0904A / F45-1101

| SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES | | | | |
|--|---|--|--|--|
| Appearance: | Black, cyan, magenta and yellow liquid | | | |
| Odor: | Slight odor | | | |
| pH: | 7.0 - 11.0 | | | |
| Boiling Point/Range(°C): | Not available | | | |
| Melting Point/Range(°C): | Not available | | | |
| Decomposition Temperature (°C): | Not available | | | |
| Flash Point(°C): | Black: 47.8 (Tag. Closed Cup. Combustion is not sustainable.) Color: Estimate: None | | | |
| Flammable (Explosive) Limits: | Not available | | | |
| Autoignition Temperature ($^{\circ}$ C): | Black: 539 (ASTM-E659) Color: Not available | | | |
| Flammability: | Black: Classified as "combustible liquid" under OSHA-HCS. Not classified as "flammable" or "combustible" under FHSA. Not classified as "flammable" under 1999/45/EC. Color: Neither flammable nor combustible. | | | |
| Explosive Properties: | None | | | |
| Oxidizing Properties: | None | | | |
| Vapor Pressure : | Not available | | | |
| Vapor Density: | Not available | | | |
| Density / Specific Gravity: | 1.04 - 1.10 | | | |
| Water Solubility: | Miscible | | | |
| Fat Solubility: | Not available | | | |
| Partition Coefficient (n-Octanol/Water) | : Not available | | | |
| Percent Volatile (%): | 65 - 85 | | | |
| Evaporation Rate: | Not available | | | |
| Viscosity (mPa s): | 1.4 - 2.2 | | | |
| SECTION 10 STABILITY AND R | EACTIVITY | | | |
| Stability: | ■ Stable □ Unstable | | | |
| Conditions to Avoid: | None | | | |
| Materials to Avoid: | Acids, bases, oxidizing materials and reducing agents | | | |
| Hazardous Decomposition Products: | CO, CO ₂ , NOx, Ammonia and SOx | | | |
| Hazardous Polymerization: | ☐ May Occur ☑ Will Not Occur | | | |
| Conditions to Avoid: | None | | | |

Page 5 of 8



MATERIAL SAFETY DATA SHEET

MSDS #: IC1322-0101 Product Code: 0904A / F45-1101

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation:

Not available

Ingestion:

Not available

Eye:

Black: Minimal irritant, Maximum Group Mean Score = 5.3, Class 3 (rabbit)

OECD Guidelines No.405 (1987)

92/69/EEC Method B5

Color: Not available

Skin:

Black: Non-irritant, Primary Irritation Index = 0.0 (rabbit)

OECD Guidelines No.404 (1992)

92/69/EEC Method B4

Color: Not available

Sensitization:

Black: Non-sensitizer, Sensitization rate = 0 % (0/9) (guinea pig)

OECD Guidelines No.406 (1992)

92/69/EEC Method B6

Color: Not available

Mutagenicity:

Ames test:

Black: Negative (test strains: S. typhimurium)

Color: Negative (test strains: S. typhimurium & E. Coli)

Reproductive Toxicity:

Not available

Carcinogenicity:

Not available

Others:

Not available

Page 6 of 8

Canon

MATERIAL SAFETY DATA SHEET

MSDS #: IC1322-0101 Product Code: 0904A / F45-1101

| SECTION 12 | ECOLOGICAL INFORMATION | | | | | |
|-------------------------------|---|--|--|--|--|--|
| Mobility: | Not available | | | | | |
| Persistence / Degradability: | Not available | | | | | |
| Bioaccumulation: | Not available | | | | | |
| Ecotoxicity: | Not available | | | | | |
| Other Adverse Effec | Not available | | | | | |
| | DISPOSAL CONSIDERATION | | | | | |
| Method of Disposal: | | | | | | |
| Disposal should b | e subject to federal, state and local laws. | | | | | |
| SECTION 14 T | TRANSPORT INFORMATION | | | | | |
| UN #: | None | | | | | |
| UN Shipping Name: | None | | | | | |
| UN Classification: | None | | | | | |
| UN Packing Group: | None | | | | | |
| Marine Pollutant: | ☐ Yes Chemical name (wt%): No | | | | | |
| Special Precautions: | None | | | | | |
| SECTION 15 F | REGULATORY INFORMATION | | | | | |
| < EU Information > | EGULATORI INFORMATION | | | | | |
| Information on the I | Label: | | | | | |
| Symbol & Indica | ation: Not required | | | | | |
| R-Phrase: Not required | | | | | | |
| S-Phrase: | | | | | | |
| Not required | | | | | | |
| Dangerous Com None | ponent(s): | | | | | |
| Special Precauti | ons under 1999/45/EC Annex V: | | | | | |
| Not required | | | | | | |
| Specific Provisions in | n 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 | | | | | |
| | | | | | | |

Page 7 of 8



MATERIAL SAFETY DATA SHEET

MSDS #: IC1322-0101
Product Code: 0904A / F45-1101

< USA Information >

Information on the Label under FHSA:

Signal Word: Not required

Hazard warning:

Not required

Safety Advice:

Not required

Hazardous Component(s):

None

SARA Title III §313:

Chemical Name Weight %

"Ethylene glycol" (107-21-1) (Contained only in black ink) 3 - 8

"Copper Compounds" (Contained only in cyan ink) 1 - 3 (as Cu) (< 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>

R11: Highly flammable.

R22: Harmful if swallowed.

R36: Irritating to eyes.

R41: Risk of serious damage to eyes.

R67: Vapours may cause drowsiness and dizziness.

<Revised information from the previous version>

Entirely revised.

Page 8 of 8



MATERIAL SAFETY DATA SHEET

MSDS #: IC1322-0101
Product Code: 0904A / F45-1101

Literature Reference:

- 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 and 2000/39/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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