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## MATERIAL SAFETY DATA SHEET

MSDS #: IC1293-0101 Product Code: 4484A/F47-3181

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

**COMPANY/UNDERTAKING** 

**Product Name:** Canon Ink Tank BCI-3ePM Photo

Product Code: 4484A/F47-3181
Company Name: Canon Europa N.V.

Address: Bovenkerkerweg 59-61, 1185 XB, Amstelveen, The Netherland

**Use of the Product:** Ink for Ink Jet Printer

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

| _ 1 | Ingredient(s | -/-  |
|-----|--------------|------|
|     | mei caichas  | ,, _ |

| < Ingredient(s) > Chemical Name / Generic name | CAS # /<br>EC #          | Weight  | EU Symbol/<br>R-Phrase     | USA<br>OSHA PEL                                                       | ACGIH TLV                                                                           | EU ILV                                                                           | DFG MAK                           |
|------------------------------------------------|--------------------------|---------|----------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------|
| Glycerin                                       | 56-81-5 /<br>200-289-5   | 5 - 10  | None / None                | (as mist) Total dust TWA = 15 mg/m³ Respirable fraction TWA = 5 mg/m³ | (as mist)<br>TWA = 10 mg/m <sup>3</sup>                                             | Not established                                                                  | Not established                   |
| Ethylene glycol                                | 107-21-1 /<br>203-473-3  | 2 - 6   | Xn / R22                   | Not established                                                       | (aerosol)<br>Ceiling =<br>100 mg/m <sup>3</sup>                                     | TWA = 20 ppm,<br>52 mg/m <sup>3</sup><br>STEL = 40 ppm,<br>104 mg/m <sup>3</sup> | 10 ppm, 26 mg/m <sup>3</sup>      |
| Diethylene glycol                              | 111-46-6 /<br>203-872-2  | 2 - 6   | Xn / R22                   | Not established                                                       | Not established                                                                     | Not established                                                                  | 10 ppm, 44 mg/m <sup>3</sup>      |
| Isopropyl alcohol                              | 67-63-0 /<br>200-661-7   | 1 - 3   | F / R11<br>Xi / R36<br>R67 | TWA = 400 ppm,<br>980 mg/m <sup>3</sup>                               | TWA = 200 ppm,<br>492 mg/m <sup>3</sup><br>STEL = 400 ppm,<br>984 mg/m <sup>3</sup> | Not established                                                                  | 200 ppm,<br>500 mg/m <sup>3</sup> |
| Quinoline derivative                           | Confidential             | 1 - 3   | Xi / R36                   | 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 /<br>231-79-12 | 60 - 80 | None / None                | Not established                                                       | Not established                                                                     | Not established                                                                  | Not established                   |
|                                                |                          |         |                            |                                                                       |                                                                                     |                                                                                  |                                   |
|                                                |                          |         |                            |                                                                       |                                                                                     |                                                                                  |                                   |

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#### < 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:**

Ink tank containing magenta liquid ink 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:

May cause minimal irritation. (See SECTION 11)

### Skin:

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

#### **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

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# MATERIAL SAFETY DATA SHEET

MSDS #: IC1293-0101 Product Code: 4484A/F47-3181

| SECTION 5 FIRE FIGH                                                                  | ITING MEASURES                               |  |  |  |  |  |
|--------------------------------------------------------------------------------------|----------------------------------------------|--|--|--|--|--|
| Fire Fighting Measures:                                                              |                                              |  |  |  |  |  |
| <b>Extinguishing Media:</b>                                                          |                                              |  |  |  |  |  |
| CO <sub>2</sub> , water, foam or dry                                                 | chemicals                                    |  |  |  |  |  |
| Unsuitable Extinguishing In None                                                     | Media:                                       |  |  |  |  |  |
| Special Fire Fighting Proc<br>None                                                   | cedures:                                     |  |  |  |  |  |
| Unusual Fire and Explosion                                                           | n Hazards:                                   |  |  |  |  |  |
| None                                                                                 |                                              |  |  |  |  |  |
| Fire and Explosive Properties                                                        | (See also Section 9):                        |  |  |  |  |  |
| <b>Hazardous Combustion Pr</b>                                                       | oducts:                                      |  |  |  |  |  |
| CO, CO <sub>2</sub> and NOx                                                          |                                              |  |  |  |  |  |
| Other Properties:                                                                    |                                              |  |  |  |  |  |
| None                                                                                 |                                              |  |  |  |  |  |
| SECTION 6 ACCIDEN                                                                    | TAL RELEASE MEASURES                         |  |  |  |  |  |
| <b>Personal Precautions:</b>                                                         |                                              |  |  |  |  |  |
| Avoid contact with skin, ex                                                          | yes and clothing.                            |  |  |  |  |  |
| <b>Environmental Precautions:</b>                                                    |                                              |  |  |  |  |  |
|                                                                                      | rface water or ground water.                 |  |  |  |  |  |
| Method for Cleaning Up:                                                              |                                              |  |  |  |  |  |
| Wipe off with wet cloth or                                                           | paper.                                       |  |  |  |  |  |
| SECTION 7 HANDLIN                                                                    | G AND STORAGE                                |  |  |  |  |  |
| Handling:                                                                            |                                              |  |  |  |  |  |
| Use with adequate ventilat                                                           |                                              |  |  |  |  |  |
| Avoid contact with skin, ey                                                          |                                              |  |  |  |  |  |
|                                                                                      | t the contaminated area immediately.         |  |  |  |  |  |
| Storage:                                                                             | Ductout from available                       |  |  |  |  |  |
| 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, plea                                                           | se refer to the instruction of this product. |  |  |  |  |  |
| SECTION 8 EXPOSUR                                                                    | RE CONTROLS / PERSONAL PROTECTION            |  |  |  |  |  |
| Exposure Guidelines:                                                                 | (C. 1. OFCEION 2)                            |  |  |  |  |  |
| Not established for this ink.                                                        | (See also SECTION 2)                         |  |  |  |  |  |
| Engineering Controls: Use adequate ventilation.                                      |                                              |  |  |  |  |  |
| Personal Protection Equipmer                                                         |                                              |  |  |  |  |  |
| Respiratory Protection: [                                                            |                                              |  |  |  |  |  |
|                                                                                      | Required                                     |  |  |  |  |  |
|                                                                                      | ☑ Required  ☑ Not Required                   |  |  |  |  |  |
|                                                                                      | Required                                     |  |  |  |  |  |
|                                                                                      | ☑ Not Required                               |  |  |  |  |  |
|                                                                                      |                                              |  |  |  |  |  |

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## MATERIAL SAFETY DATA SHEET

MSDS #: IC1293-0101 Product Code: 4484A/F47-3181

| SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES                            |                                                                                                                                                                 |  |  |  |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Appearance:                                                           | Magenta liquid                                                                                                                                                  |  |  |  |
| Odor:                                                                 | Slight odor                                                                                                                                                     |  |  |  |
| pH:                                                                   | 9.0 - 10.0                                                                                                                                                      |  |  |  |
| Boiling Point/Range( ${}^{\circ}C$ ):                                 | Not available                                                                                                                                                   |  |  |  |
| Melting Point/Range( $^{\circ}$ C):                                   | Not available                                                                                                                                                   |  |  |  |
| Decomposition Temperature (°C):                                       | Not available                                                                                                                                                   |  |  |  |
| Flash Point(°C):                                                      | Estimate: 55 -57 (Tag Closed Cup. Combustion is not sustainable.)                                                                                               |  |  |  |
| Flammable (Explosive) Limits:                                         | Not available                                                                                                                                                   |  |  |  |
| Autoignition Temperature (°C):                                        | Not available                                                                                                                                                   |  |  |  |
| Flammability:                                                         | Classified as "Combustible liquid" under OSHA-HCS.  Not classified as "flammable" or "combustible" under FHSA.  Not classified as "flammable" under 1999/45/EC. |  |  |  |
| <b>Explosive Properties:</b>                                          | 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                                                                                                                                                   |  |  |  |
| $\label{partition} \textbf{Partition Coefficient (n-Octanol/Water):}$ | Not available                                                                                                                                                   |  |  |  |
| Percent Volatile (%):                                                 | 60 - 80                                                                                                                                                         |  |  |  |
| <b>Evaporation Rate:</b>                                              | Not available                                                                                                                                                   |  |  |  |
| Viscosity (mPa s):                                                    | 1.7 - 2.3                                                                                                                                                       |  |  |  |
| SECTION 10 STABILITY AND REA                                          | ACTIVITY                                                                                                                                                        |  |  |  |
| Stability:                                                            |                                                                                                                                                                 |  |  |  |
| Conditions to Avoid:                                                  | None                                                                                                                                                            |  |  |  |
| Materials to Avoid:                                                   | Acids, bases, oxidizing materials and reducing agents                                                                                                           |  |  |  |
| <b>Hazardous Decomposition Products:</b>                              | CO, CO <sub>2</sub> , NOx and Ammonia                                                                                                                           |  |  |  |
| Hazardous Polymerization:                                             | ☐ May Occur ☑ Will Not Occur                                                                                                                                    |  |  |  |
| Conditions to Avoid:                                                  | None                                                                                                                                                            |  |  |  |

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MSDS #: \_\_ Product Code: IC1293-0101 4484A/F47-3181

SECTION 11 TOXICOLOGICAL INFORMATION

**Acute Toxicity:** 

**Inhalation:** 

Not available

**Ingestion:** 

[Data of similar composition ink] Estimated  $LD_{50} > 2500$  mg/kg (rat)

OECD Guidelines No.423 (1996)

96/54/EC Method B1 tris

Eye:

[Data of similar composition ink] Minimal irritant (rabbit)

OECD Guidelines No.405 (1987)

92/69/EEC Method B5

Skin:

[Data of similar composition ink] Non irritant (rabbit)

OECD Guidelines No.404 (1992)

92/69/EEC Method B4

**Sensitization:** 

[Data of similar composition ink] Non sensitizer (guinea pig)

OECD Guidelines No.406 (1992)

96/54/EC Method B6

Mutagenicity:

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

Reproductive Toxicity:

Not available

Carcinogenicity:

Not available

Others:

Not available

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MSDS #: IC1293-0101 Product Code: 4484A/F47-3181

| SECTION 12 E                    | COLOGICAL INFORMATION                             |
|---------------------------------|---------------------------------------------------|
| Mobility:                       | Not available                                     |
| Persistence<br>/ Degradability: | Not available                                     |
| Bioaccumulation:                | Not available                                     |
| Ecotoxicity:                    | Not available                                     |
| Other Adverse Effect            | Not available                                     |
|                                 | ISPOSAL CONSIDERATION                             |
| Method of Disposal:             |                                                   |
| Disposal should b               | be subject to federal, state and local laws.      |
| SECTION 14 T                    | RANSPORT 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 R                    | EGULATORY INFORMATION                             |
| < EU Information >              |                                                   |
| Information on the La           | abel:                                             |
| Symbol & Indicat                | ion: Not required                                 |
| R-Phrase:                       |                                                   |
| Not required                    |                                                   |
| S-Phrase: Not required          |                                                   |
|                                 |                                                   |
| None None                       | onem(s):                                          |
| Special Precaution              | ons under 1999/45/EC Annex V:                     |
| Not required                    |                                                   |
| Specific Provisions in          | 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                                              |
|                                 |                                                   |

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## MATERIAL SAFETY DATA SHEET

MSDS #: IC1293-0101 Product Code: 4484A/F47-3181

< 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) 2 - 6

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.

R67: Vapours may cause drowsiness or dizziness.

<Revised information from the previous version>

Entirely revised.





## MATERIAL SAFETY DATA SHEET

MSDS #: IC1293-0101 Product Code: 4484A/F47-3181

#### 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 Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft.

TWA: Time Weighted Average.

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 Act 1985.

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