MATERIAL SAFETY DATA SHEET

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

| Product Identifier: | |
|---|--|
| Product Name: Ca | non Ink Tank BCI-3eY |
| Product Code: 44 | 82A |
| Relevant Identified Uses: | Ink for Ink Jet Printer |
| Details of Supplier of Safe | ty Data Sheet: |
| Supplier: Ca | anon Europa NV |
| Address: BC | ovenkerkerweg 59, 1185XB Amstelveen, The Nederlands |
| Telephone Number: <u>+</u> 3 | 31 20 5458545, +31 20 5458222 |
| E-mail Address: | ww.canon-europe.com, ceu-Reach@canon-europe.com |
| Emergency Telephone Nu | DENMARK: +45 82 12 12 12; GERMANY: +49 30 19240, +49 761 19240; mber: 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: <u>Ca</u> | non Inc. |
| Address: <u>30</u> | -2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan |
| | |
| SECTION 2 HAZA | RDS IDENTIFICATION |
| Emergency Overview: Ink tank containing yell | low liquid ink with slight odor. |
| US Regulatory Status und | er FHSA: |
| Not classified as hazard | ous. |
| US Label Elements under | FHSA: |
| Signal Word: Not | required |
| Hazard Warning: Not | required |
| | required |
| Hazardous Componer | nt: Not required |
| EU Classification under 1 Not classified as dang | |
| EU Label Elements under | 1999/45/EC: |
| Symbol & Indication: | Not required |
| R-Phrase: | Not required |
| S-Phrase: | Not required |
| Dangerous Componen | It: Not required |
| Applicable Label Elem Not required | nents in accordance with Annex V to 1999/45/EC: |
| Other Hazards: None | |



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SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

| 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 ^{*2} |
| Glycerin | 56-81-5 / 200-289-5 | 5 - 10 | None | None | None | None | (1) |
| Diethylene glycol | 111-46-6 / 203-872-2 | 1 - 5 | Xn / Harmful | R22 | Acute Tox. 4 | H302 | (1) |
| Isopropyl alcohol | 67-63-0 / 200-661-7 | 1 - 5 | F / Highly flammable Xi / Irritant | R11 R36 R67 | Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 | H225 H319 H336 | (1) |
| Ammonia derivative | Confidential | 5 - 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.



Inhalation:

Ingestion:

Skin:

Eye:

SECTION 4

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MSDS #:

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FIRST AID MEASURES **First Aid Measures:** If symptoms are experienced, move victim to fresh air and obtain medical advice. 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. 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:

May cause mild irritation and no sensitization. (See SECTION 11)

Eye:

May cause minimal 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.

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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 away from heat and flame. 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

| trol 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 |
| Diethylene glycol | Not established | Not established | Not established | 10 ppm, 44 mg/m ³ |
| Isopropyl alcohol | 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 |
| | | | | |
| | | | | |

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

Respiratory Protection: Required Not Required



MSDS #:

Product Code:

Information on Basic Physical and Chemical Properties: Appearance: Yellow liquid **Odor:** Slight odor 8 - 9 pH: Melting Point/Freezing Point (°C): Not available **Initial Boiling Point and** Not available Boiling Range (°C): Flash Point(°C): 55.5 (Tag Closed Cup. Combustion is not sustainable.) Not available **Evaporation Rate:** Classified as "combustible liquid" under OSHA-HCS. Flammability: Not classified as "flammable" or "combustible" under FHSA. Not classified as "flammable" under 1999/45/EC. 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 (°C): Not available **Decomposition Temperature(°C):** Not available Viscosity (mPa s): 1 - 5 **Explosive Properties:** None (Estimate) **Oxidizing Properties:** None (Estimate) **Other Information:** Not available STABILITY AND REACTIVITY **SECTION 10 Reactivity:** None \boxtimes Stable \square Unstable **Chemical Stability:** Possibility of Hazardous Reactions: None **Conditions to Avoid:** None Acids, bases, oxidizing materials and reducing agents **Incompatible Materials:** Hazardous Decomposition Products: CO, CO2, NOx, SOx and Ammonia

PHYSICAL AND CHEMICAL PROPERTIES **SECTION 9**



| Callvii | MATERIAL SAFETY DATA SHEET | Product Code: | 4482A |
|------------------------------|--|---------------|-------|
| ECTION 11 TO | DXICOLOGICAL INFORMATION | | |
| nformation on Toxic | ological Effects: | | |
| Acute Toxicity: | | | |
| Inhalation: | | | |
| Not available | | | |
| Ingestion: | | | |
| Not available | - | | |
| Corrosivity/Irritat Skin: | cion: | | |
| Mild irritant (ra | bbit) | | |
| | elines No. 404 (1992), 92/69/EEC Method B4 | | |
| Eye: | | | |
| Minimal irritan | | | |
| OECD Guid | elines No. 405 (1987), 92/69/EEC Method B5 | | |
| Sensitization: Skin: | | | |
| Non-sensitizer | (guinea pig) | | |
| OECD Guid | elines No. 406 (1992), 96/54/EC Method B6 | | |
| Repeated Dose To | xicity: | | |
| Not available | • | | |
| Carcinogenicity: | | | |
| Not available | | | |
| Mutagenicity: | | | |
| Ames test: Neg | ative (S. typhimurium & E. Coli) | | |
| Toxicity for Repro | | | |
| Not available | | | |
| Other Information | 1: | | |
| Not available | | | |

| Camor | | MSDS #: | Page 7 of 8 IC3147-0101 |
|--|--|-----------------|----------------------------|
| Canon | MATERIAL SAFETY DATA SHEET | Product Code: | 4482A |
| SECTION 12 ECOLO | GICAL INFORMATION | | |
| Toxicity: | Not available | | |
| Persistence and Degradabi | | | |
| Bioaccumulative Potential: | | | |
| Mobility in Soil: | Not available | | |
| Results of PBT and vPvB Assessment: | No results that the component(s) of this ink meet(s) t Regulation (EC) No 1907/2006. | the PBT or vPvB | criteria under |
| Other Adverse Effects: | Not available | | |
| Waste Treatment Methods | AL CONSIDERATIONS : ibject to federal, state and local laws. | | |
| SECTION 14 TRANS | PORT INFORMATION | | |
| UN Number: | None | | |
| UN Proper Shipping Name | : None | | |
| Transport Hazard Class: | None | | |
| Packing Group: | None | | |
| Environmental Hazards: | Not classified as environmentally hazardous under Ul pollutant under IMDG Code. | N Model Regula | tions and marii |
| Special Precautions for Us | * | | |
| | ATORY INFORMATION | | |
| < USA Information > | | | |
| SARA Title III §313: Chemical Name | | Weight 0/ | |
| None | | Weight % |) |
| California Proposition 65 | 1 | | |
| Chemical Name | | Weight % |) |
| None | | | |
| < EU Information > Safety, Health and Enviro | onmental Regulations/Legislation: | | |
| (EC) No 1907/2006: Au | thorisation: Not regulated | | |
| Re | striction: Not regulated | | |
| (EC) No 1005/2009: <u>No</u> | t regulated | | |
| (EC) No 850/2004: <u>No</u> | ot regulated | | |
| (EC) No 689/2008: <u>No</u> | t regulated | | |
| Others: <u>No</u> | one | | |
| Chemical Safety Assessme < Canada Information > WHMIS Controlled Pro | ent under (EC) No 1907/2006: <u>Not required</u> oduct: Not applicable (Manufactured article) | | |
| < Australia Information > Statement of Hazardou | s Nature: Not classified as hazardous according to criteria | a of NOHSC. | |

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Product Code:

OTHER INFORMATION SECTION 16

- <EU R-phrase according to 67/548/EEC>
- R11: Highly flammable.
- R22: Harmful if swallowed.
- R36: Irritating to eyes.

Canon

R67: Vapours may cause drowsiness and dizziness.

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

H225: Highly flammable liquid and vapour.

H302: Harmful if swallowd.

H319: Causes serious eye irritation.

H336: May cause drowsiness and dizziness.

<Revised information from the previous version> Entirely revised

<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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