



MATERIAL SAFETY DATA SHEET

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MSDS #: IC1324-0101

Product Code: 0993A / F47-0011

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

Product Name:	Canon Ink Cartridge BJI-642
Product Code:	0993A / F47-0011
Manufacturer:	Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, PH # 03-3758-2111
Supplier:	Canon USA, Inc., One Canon Park, Melville, NY 11747, USA
Phone #:	1-800- OK-CANON 24 Hr. Emergency CHEMTREC # 1-800-424-9300

SECTION 2 COMPOSITION/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
Diethylene glycol	111-46-6 / 203-872-2	10 - 15	Xn / R22	Not established	Not established	Not established	10 ppm, 44 mg/m ³
Isopropyl alcohol	67-63-0 / 200-661-7	1 - 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
Water	7732-18-5 / 231-79-12	70 - 85	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 cartridge containing black liquid ink with slight odor.

Harmful if swallowed.

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:

No irritation is expected. (See SECTION 11)

Skin:

May cause mild irritation and no sensitization. (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

SECTION 5 FIRE FIGHTING MEASURES**Fire Fighting Measures:****Extinguishing Media:**

CO₂, water, foam or dry chemicals

Unsuitable Extinguishing Media:

None

Special Fire Fighting Procedures:

None

Unusual Fire and Explosion Hazards:

None

Fire and Explosive Properties (See also Section 9):**Hazardous Combustion Products:**

CO and CO₂

Other Properties:

None

SECTION 6 ACCIDENTAL RELEASE MEASURES**Personal Precautions:**

Avoid contact with skin, eyes and clothing.

Environmental Precautions:

Do not release to sewer, surface water or ground water.

Method for Cleaning Up:

Wipe off with wet cloth or paper.

SECTION 7 HANDLING AND STORAGE**Handling:**

Use with adequate ventilation.

Avoid contact with skin, eyes and clothing.

In case of contact, wash out the contaminated area immediately.

Storage:

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 EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure Guidelines:**

Not established for this ink. (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

Not Required

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Black liquid
Odor:	Slight odor
pH:	6.0 - 8.0
Boiling Point/Range(°C):	Not available
Melting Point/Range(°C):	Not available
Decomposition Temperature(°C):	Not available
Flash Point(°C):	55.2 (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 FHSAA. Not classified as "flammable" under 1999/45/EC.
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):	1.6 - 2.2

SECTION 10 STABILITY AND REACTIVITY

Stability:	<input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable
Conditions to Avoid:	None
Materials to Avoid:	Acids, bases, oxidizing materials and reducing agents
Hazardous Decomposition Products:	CO and CO ₂
Hazardous Polymerization:	<input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur
Conditions to Avoid:	None

SECTION 11 TOXICOLOGICAL INFORMATION**Acute Toxicity:****Inhalation:**

Not available

Ingestion:

$LD_{50} > 5000$ mg/kg, 0/10 mortalities at 5000 mg/kg (rat)

OECD Guidelines No.401 (1981)

84/449/EEC Method B1

FHSA 16 CFR Sec. 1500.3

Eye:

Non-irritant, Maximum Group Mean Score = 0.0, Class 1 (rabbit)

OECD Guidelines No.405 (1987)

FHSA 16 CFR Sec. 1500.42

Skin:**Acute Dermal Irritation:**

Mild irritant, Primary Irritation Index = 0.3 (rabbit)

OECD Guidelines No.404 (1981) & 84/449/EEC Method B4 & FHSA 16 CFR Sec. 1500.41

Acute Dermal Toxicity:

$LD_{50} > 2000$ mg/kg, 0/10 mortalities at 2000 mg/kg (rat)

OECD Guidelines No.402 (1981) & 84/449/EEC Method B3 & FHSA 16 CFR Sec. 1500.40

Sensitization:

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

OECD Guidelines No.406 (1992)

96/54/EC Method B6

Mutagenicity:

Ames test: Negative (test strains: *S.typhimurium*)

Reproductive Toxicity:

Not available

Carcinogenicity:

Not available

Others:

Not available



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SECTION 12 ECOLOGICAL INFORMATION

Mobility: Not available

Persistence / Degradability: Not available

Bioaccumulation: Not available

Ecotoxicity: Not available

Other Adverse Effects: Not available

SECTION 13 DISPOSAL CONSIDERATION

Method of Disposal:

Disposal should be subject to federal, state and local laws.

SECTION 14 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 REGULATORY INFORMATION

< EU Information >

Information on the Label:

Symbol & Indication: Not required

R-Phrase:

Not required

S-Phrase:

Not required

Dangerous Component(s):

None

Special Precautions 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

< USA Information >

Information on the Label under FHSA:**Signal Word:** WARNING!**Hazard warning:**HARMFUL IF SWALLOWED.**Safety Advice:**Keep out of the reach of children.**Hazardous Component(s):**Diethylene glycol (111-46-6) 10 - 15 %**SARA Title III §313:**

<u>Chemical Name</u>	<u>Weight %</u>
None	

California Proposition 65:

<u>Chemical Name</u>	<u>Weight %</u>
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 and dizziness.

<Revised information from the previous version>

Entirely revised.

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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