



MATERIAL SAFETY DATA SHEET

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MSDS #: IC1360-0202

Product Code: 0992A / Q80-0670

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

Product Name:	Canon Ink Cartridge BJI-481
Product Code:	0992A / Q80-0670
Manufacturer:	Canon Inc. 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo , Japan, Phone # 03-3758-2111
Supplier:	Canon USA, Inc. One Canon Park, Melville, NY 11747
Phone #:	1-800-OK-CANON , 24Hr 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	15 - 20	Xn / R22	Not established	Not established	Not established	10 ppm, 44 mg/m ³
Ethanol	64-17-5 / 200-578-6	5 - 10	F / R11	TWA = 1000 ppm, 1900 mg/m ³	TWA = 1000 ppm, 1880 mg/m ³	Not established	500 ppm, 960 mg/m ³
Tetralithium 6-amino-4-hydroxy-3-(7-sulfonato-4-(5-sulfonato-2-naphthylazo)-1-naphthylazo)naphthalene-2,7-disulfonate	107246-80-0 / 403-660-1	1 - 5	N / R51/53	Not established	Not established	Not established	Not established
Water	7732-18-5 / 231-791-2	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 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:

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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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, CO₂, NOx and SOx

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



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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Black liquid
Odor:	Slight odor
pH:	6 - 8
Boiling Point/Range(°C):	Not available
Melting Point/Range(°C):	Not available
Decomposition Temperature(°C):	Not available
Flash Point(°C):	56.7 (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.
Explosive Properties:	Estimate: None
Oxidizing Properties:	Estimate: None
Vapor Pressure :	Not available
Vapor Density :	Not available
Density / Specific Gravity:	1.0 - 1.1
Water Solubility :	Miscible
Fat Solubility :	Not available
Partition Coefficient (n-Octanol/Water):	Not available
Percent Volatile (%):	60 - 80
Evaporation Rate:	Not available
Viscosity (mPa s):	1 - 5

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, CO ₂ , NO _x and SO _x
Hazardous Polymerization:	<input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur
Conditions to Avoid:	None



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SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:**Inhalation:**

Not available

Ingestion:

Not available

Eye:

Minimal irritant (rabbit)

OECD Guidelines No.405 (2002), 92/69/EEC Method B5

Skin:

Non-irritant (rabbit)

OECD Guidelines No.404 (2002), 92/69/EEC Method B4

Sensitization:

Non-sensitizer (mouse)

OECD Guidelines No.429 (2002)

Mutagenicity:

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

Chromosome aberration test: Negative (*A Chinese hamster fibroblast cell line isolated from the lung*)

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: Tetralithium 6-amino-4-hydroxy-3-[7-sulfonato-4-(5-sulfonato-2-naphthylazo)-1-naphthylazo] naphthalene-2,7-disulfonate (107246-80-0):
Fish, Acute Toxicity Test: 96h LC₅₀ 560-1000 mg/l, NOEC > 560 mg/l (*Cypris carpio*)
OECD Guidelines No.203 (1984), 84/449/EEC Method C1
Daphnia sp., Acute Immobilisation Test: 24h EC₅₀ 560-1000 mg/l, NOEC 560 mg/l (*Daphnia magna*)
OECD Guidelines No.202 (1984), 84/449/EEC Method C2
Daphnia sp., Acute Reproduction Test: 19 days NOEC 5.6 mg/l, LOEC 18 mg/l (*Daphnia magna*)
OECD Guidelines No.202 (1984)

NOEC: No Observed Effect Concentration, LOEC: Lowest Observed Effect Concentration

Other Adverse Effects: Not available

SECTION 13 DISPOSAL CONSIDERATIONS

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):

Not required

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



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< 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) 15 - 20 %

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.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

<Revised information from the previous version>

Section 2, 3, 9, 11 and 15



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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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