

MATERIAL SAFETY DATA SHEET

Manufacturer: Canon Inc.
30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146, Japan

Distributor:

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SECTION 1 IDENTIFICATION

PRODUCT NAME : INK CARTRIDGE, W/O PRINT HEAD FOR COLOR INK JET PRINTER
BJ-A531A (BLACK) (M3330G/A)
DESCRIPTION : Liquid mixture, black ink for Apple Style Writer
CANON ITEM NO : F47-0881-500

SECTION 2 INGREDIENTS

<u>Principal components</u>	<u>Wt. %</u>	<u>USA OSHA*1</u>	<u>ACGIH*2</u>	<u>DFG*3</u>
Water (7732-18-5)	70-90	---	---	---
Glycerin (56-81-5)	5-10	(as mist) Total dust TWA 15 mg/m ³ Respirable fraction TWA 5 mg/m ³	(as mist) Total dust TWA 10mg/m ³	---
Ethylene glycol(107-21-1)	<10	---	Vapor and mist TWA 50ppm(Ceiling)	MAK 10ppm
Water-soluble organic compound	5-10	---	---	---
Isopropyl alcohol	< 5	TWA 400ppm	TWA 400ppm	MAK 400ppm
--- Not established				

SECTION 3 PHYSICAL DATA

BOILING POINT / MELTING POINT: No data available
 VAPOR PRESSURE (mmHg): No data available
 VAPOR DENSITY (AIR=1): No data available
 SOLUBILITY IN WATER : Miscible
 SOLUBILITY IN ORGANIC SOLVENT: Glycerin, ethylene glycol, isopropyl alcohol
 SPECIFIC GRAVITY (H₂O=1): 1.04
 PERCENT VOLATILE BY VOLUME (%): No data available
 EVAPORATION RATE (BUTHYL ACETATE=1): No data available
 pH: 8 to 10
 APPEARANCE AND ODOR: Black liquid, slight odor

- *1 The column "OSHA" reveals PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration.
- *2 The column "ACGIH" reveals TLV(Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.
- *3 The column "DFG" reveals MAK(Maximum Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft.

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) : No data available
IGNITION TEMPERATURE : No data available
FLAMMABILITY : No data available
FLAMMABLE LIMITS : No data available
EXTINGUISHING MEDIA : Water, CO₂, Dry chemicals
SPECIAL FIRE FIGHTING PROCEDURES : None
UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SECTION 5 HEALTH HAZARD DATA

EXPOSURE LIMITS: See SECTION 2

EFFECTS OF OVEREXPOSURE:

Inhalation : No specific hazard are known to canon .
Ingestion : May be harmful if swallowed.
Eye contact : May be no irritant based on the animal test data of similar ink.
Skin contact : May cause slight irritation.

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation : If person breathes in large amounts, remove to fresh air.
Get medical attention.
Ingestion : Call a physician.
Eye contact : Flush with plenty of water .
Skin contact : Wash with water and soap.

TOXICITY DATA: No data available
Data of similar composition ink:
Eye irritant : Non-irritating
a maximum group mean score of 0.0
(FHSA*⁴ : U.S.16 CFR 1500.42, according to
a modified Key and Calandra system)
Skin irritant: Mild irritant
a primary irritation index of 1.1
(FHSA : U.S.16 CFR 1500.41, according to
the Draize classification scheme)

MUTAGENICITY: Negative (test strains: S. typhimurium)

CARCINOGENICITY: No human carcinogen or potential carcinogen, according to
IARC Monographs*⁵, NTP*⁶, OSHA(USA) regulation and
Annex I to Directive 67/548/EEC.

*4 The term "FHSA" stands for Federal Hazardous Substances Act.
*5 The term "IARC" stands for International Agency for Research on Cancer.
*6 The term "NTP" stands for National Toxicology Program (USA).

SECTION 6 REACTIVITY DATA

STABILITY : Stable
INCOMPATIBILITY : None
HAZARDOUS DECOMPOSITION PRODUCTS : Ammonia
HAZARDOUS POLYMERIZATION : Will not occur

SECTION 7 SAFE USE OR HANDLING

STEPS TO BE TAKEN
IN CASE MATERIAL IS RELEASED OR SPILLED:
Wipe off with paper or wet cloth.

WASTE DISPOSAL METHOD:
Disposal should be subject to federal, state or local laws.

SECTION 8 SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION : Not required
VENTILATION : Usual ventilation
PROTECTIVE GLOVES : Not required
EYE PROTECTION : Not required
OTHER PROTECTIVE EQUIPMENT : Not required

SECTION 9 SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
Keep out of reach of children.
Do not take internally.

SECTION 10 USA INFORMATION

CHEMICALS REQUIRED TO REPORT UNDER SARA TITLE III:
§313 Chemical

Ethylene glycol (107-21-1) 5 - 10 %

This information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any other process. And, it is based on the level of our knowledge as of the date of preparation.