
MATERIAL SAFETY DATA SHEET

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

Distributor:

Date of preparation: January 19, 1994 ver. 1.3

SECTION 1 IDENTIFICATION

PRODUCT NAME : INK CARTRIDGE W/O PRINT HEAD FOR CLR INK JET PRNTR BJ-A160A
(Cyan)(M1949G/A)(641-0089)
DESCRIPTION : Liquid mixture, cyan ink for BJ-A160A
CANON ITEM NO : F47-0701-500

SECTION 2 INGREDIENTS

<u>Principal components</u>	<u>Wt. %</u>	<u>USA OSHA*</u>	<u>ACGIH**</u>	<u>DFG***</u>
Water (7732-18-5)	60-78	---	---	---
Water-soluble organic solvent	10-15	---	---	---
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	---
Water-soluble organic compound	5-10	---	---	---

--- 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
 SPECIFIC GRAVITY (H₂O=1): 1.07 - 1.08
 PERCENT VOLATILE BY VOLUME (%): No data available
 EVAPORATION RATE (BUTYL ACETATE=1): No data available
 pH: 6 to 10
 APPEARANCE AND ODOR: Cyan liquid, mild odor

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

ORIGINAL 0000 HEADLINE 1/12
 BX002

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) : None (impossible of measurement:closed cup)
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 : May be harmful if inhaled in large amounts.
Ingestion : May be harmful if swallowed.
Eye contact : May cause slight irritation.
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

MUTAGENICITY: Negative (test strains: S. typhimurium)

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

* The term "IARC" stands for International Agency for Research on Cancer.
** 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 may be subject to federal, state or local laws.

SECTION 8 SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION : Not required
VENTILATION : Not required
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 CHEMICALS

Copper compounds	2 - 5 %
As copper metal	0.4 %(maximum)

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.

MATERIAL SAFETY DATA SHEET

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

Distributor:

Date of preparation: January 19, 1994 ver. 1.3

SECTION 1 IDENTIFICATION

PRODUCT NAME : Ink Cartridge W/O Print Head for CLR Ink Jet Prntr BJ-A160A
(Magenta) (M1950G/A) (641-0090)
DESCRIPTION : Liquid mixture, magenta ink for BJ-A160A
CANON ITEM NO : F47-0711-500

SECTION 2 INGREDIENTS

<u>Principal components</u>	<u>Wt. %</u>	<u>USA OSHA*</u>	<u>ACGIH**</u>	<u>DFG***</u>
Water (7732-18-5)	60-78	—	—	—
Water-soluble organic solvent	10-15	—	—	—
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	—
Water-soluble organic compound	5-10	—	—	—

— 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
SPECIFIC GRAVITY (H₂O=1): 1.07 - 1.08
PERCENT VOLATILE BY VOLUME (%): No data available
EVAPORATION RATE (BUTYL ACETATE=1): No data available
pH: 6 to 10
APPEARANCE AND ODOR: Magenta liquid, mild odor

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

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) : None (impossible of measurement:closed cup)
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 : May be harmful if inhaled in large amounts.
Ingestion : May be harmful if swallowed.
Eye contact : May cause slight irritation.
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

MUTAGENICITY: Negative (test strains: S. typhimurium)

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

* The term "IARC" stands for International Agency for Research on Cancer.

** 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 may be subject to federal, state or local laws.

SECTION 8 SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION : Not required
VENTILATION : Not required
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:
None

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.

MATERIAL SAFETY DATA SHEET

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

Distributor:

Date of preparation: January 19, 1994 ver. 1.3

SECTION 1 IDENTIFICATION

PRODUCT NAME : Ink Cartridge W/O Print Head for CLR Ink Jet Prntr BJ-A160A
 (Black)(M1952G/A)(641-0092)
 DESCRIPTION : Liquid mixture, black ink for BJ-A160A
 CANON ITEM NO : F47-0691-500

SECTION 2 INGREDIENTS

<u>Principal components</u>	<u>Wt. %</u>	<u>USA OSHA*</u>	<u>ACGIH**</u>	<u>DFG***</u>
Water (7732-18-5)	60-78	—	—	—
Water-soluble organic solvent	10-15	—	—	—
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	—
Water-soluble organic compound	5-10	—	—	—

— 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
SPECIFIC GRAVITY (H ₂ O=1):	1.07 - 1.08
PERCENT VOLATILE BY VOLUME (%):	No data available
EVAPORATION RATE (BUTYL ACETATE=1):	No data available
pH:	6 to 10
APPEARANCE AND ODOR:	Black liquid, mild odor

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

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) : None (impossible of measurement:closed cup)
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 : May be harmful if inhaled in large amounts.
Ingestion : May be harmful if swallowed.
Eye contact : May cause slight irritation.
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

MUTAGENICITY: Negative (test strains: S. typhimurium)

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

* The term "IARC" stands for International Agency for Research on Cancer.

** 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 may be subject to federal, state or local laws.

SECTION 8 SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION : Not required
VENTILATION : Not required
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:
None

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.

MATERIAL SAFETY DATA SHEET

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

Distributor:

Date of preparation: January 19, 1994 ver. 1.3

SECTION 1 IDENTIFICATION

PRODUCT NAME : Ink Cartridge W/O Print Head for CLR Ink Jet Prntr BJ-A160A
(Yellow)(M1951G/A)(641-0091)
DESCRIPTION : Liquid mixture, yellow ink for BJ-A160A
CANON ITEM NO : F47-0721-500

SECTION 2 INGREDIENTS

Principal components	Wt. %	USA OSHA*	ACGIH**	DFG***
Water (7732-18-5)	60-78	---	---	---
Water-soluble organic solvent	10-15	---	---	---
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	---
Water-soluble organic compound	5-10	---	---	---

--- 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
SPECIFIC GRAVITY (H₂O=1): 1.07 - 1.08
PERCENT VOLATILE BY VOLUME (%): No data available
EVAPORATION RATE (BUTYL ACETATE=1): No data available
pH: 6 to 10
APPEARANCE AND ODOR: Yellow liquid, mild odor

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

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) : None (impossible of measurement:closed cup)
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 : May be harmful if inhaled in large amounts.
Ingestion : May be harmful if swallowed.
Eye contact : May cause slight irritation.
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

MUTAGENICITY: Negative (test strains: S. typhimurium)

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

* The term "IARC" stands for International Agency for Research on Cancer.

** 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 may be subject to federal, state or local laws.

SECTION 8 SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION : Not required
VENTILATION : Not required
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:

None

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.