

MATERIAL SAFETY DATA SHEET

MSDS NO. IHP-0004-000

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SECTION 1 - IDENTIFICATION

PRODUCT NAME: IP-S Cartridge (Black)

DESCRIPTION: An assembly for IHP-SX, composed of photosensitive drum, black toner powder and a cleaner blade. The toner powder cannot be removed, until the cartridge is forced to be broken.

CANON ITEM NO: R64-0002

SECTION 2 - INGREDIENTS OF TONER

Principal Components	wt%	OSHA (TWA)	ACGIH (TWA)
Styrene acrylate copolymer	55-65		
Iron oxide (1317-61-9)	30-40		
Sallyclic acid chromium chelate (72869-85-3)	1-3	0.5mg(Cr)/M3	0.5mg(Cr)/M3

Concerning carcinogenicity, each ingredient is not listed on NTP, Third Annual Report on carcinogens, IARC Monograph or OSHA listing.

SECTION 3 PHYSICAL DATA

BOILING POINT (°C): Not available for solid mixtures.
 MELTING POINT (°C): 100 - 150°C
 VAPOR PRESSURE (mmHg.): Negligible
 VAPOR DENSITY (AIR=1): Not applicable
 SOLUBILITY IN WATER: Negligible
 SOLUBILITY IN ORGANIC SOLVENTS: Toluene, xylene, etc.
 SPECIFIC GRAVITY (H₂O=1): 1.4 - 1.5
 PERCENT VOLATILE BY VOLUME (%): Negligible
 EVAPORATION RATE (BUTYL ACETATE=1): Negligible
 PH IN CONCENTRATE: Cannot be determined.
 PH IN DILUTION AS USED: See the SECTION 1 - DESCRIPTION.
 APPEARANCE AND ODR: Toner is fine powder, with slight plastic odor.

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): Not applicable
 IGNITION TEMPERATURE: (Some ingredients start melting at 100°C or higher.)
 FLAMMABLE LIMITS: Not applicable
 EXTINGUISHING MEDIA: Combustible
 SPECIAL FIRE FIGHTING PROCEDURES: CO₂, water, dry chemicals.
 UNUSUAL FIRE AND EXPLOSION HAZARDS: None

TONER material, like most organic material in powder form, is capable of creating a dust explosion. Refer to USA NFPA Pamphlet No. 654 "Standard for the Prevention of Fire and Dust Explosion in the Chemical, Dye, Pharmaceutical and Plastics Industries", if this material is to be reduced or collected as a powder.

SECTION 5 HEALTH HAZARD DATA OF TONER

Toner powder is not accessible, until the cartridge is forced to be broken.

EXPOSURE LIMITS:

See SECTION 2.

EFFECS OF OVEREXPOSURE:

Inhalation: Gaspng. Do not breathe the dust.
 Eye contact: No specific hazard is known to Canon. However, any material that contacts the eye may be irritating.
 Skin: Low hazard for industrial handling.
 No data available for chronic effects of overexposure.

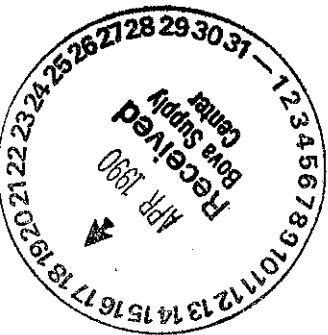
EMERGENCY AND FIRST AID PROCEDURES:

In case of eye contact, flush with plenty of water. Negative mutagenicity (test species: S. typhimurium)

TOXICITY DATA:

SECTION 6 REACTIVITY DATA

STABILITY: Stable
 INCOMPATIBILITY: Strong oxidizers.
 HAZARDOUS DECOMPOSITION PRODUCTS: As with any other organic material, combustion will produce carbon dioxide and probably carbon monoxide.
 HAZARDOUS POLYMERIZATION: Will not occur.



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SECTION 7 SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

No toner spillage occurs in normal operation or handling. If it should occur, avoid inhalation of the dust. Sweep material onto paper and place in fiber carton. Package appropriately for safe feed to an incinerator or dissolve in compatible waste solvents prior to incineration.

WASTE DISPOSAL METHOD:

Dispose in an approved incinerator or contract with licensed chemical disposal agency. Disposal may be subject to federal, state or local laws.

SECTION 8 SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

VENTILATION:

None required.

Good general ventilation should be sufficient.

PROTECTIVE GLOVES:

None required.

EYE PROTECTION:

None required.

OTHER PROTECTIVE EQUIPMENT:

None

SECTION 9 SPECIAL PROTECTION INFORMATION

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Keep out of reach of children.
Keep from contact with oxidizing materials.

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