



Material Safety Data Sheet

Laser Printer PN: E450A11A

1. Product and company identification

Supplier/Manufacturer: Lexmark International, Inc.
740 West New Circle Road
Lexington, Ky 40550

Description:

Part numbers:

Return Program Toner Cartridge	E450A11A	E450A11E	E450A11L	E450A11P
Toner Cartridge	E450A21A	E450A21E	E450A21L	E450A21P
High Yield Return Program Toner Cartridge	E450H11A	E450H11E	E450H11L	E450H11P
High Yield Toner Cartridge	E450H21A	E450H21E	E450H21L	E450H21P

For actual printer/cartridge compatibility please reference www.lexmark.com

Application : Laser Printer (E450)

Information: 1-859-232-3000

Emergency: 1-859-323-3333

2. Composition/information on ingredients

Name	%	CAS number	OSHA PEL	ACGIH TLV
Polyester Resin	60 - 100	Trade secret NJTSRN 80100286-6001P	None	None
Iron Oxide	7 - 13	1317-61-9	None	None
Carbon Black	5 - 10	1333-86-4	3,5 mg/m ³ 8 hours TWA	3,5 mg/m ³ 8 hours TWA
Amorphous Silica (modified)	1 - 5	Trade secret NJTSRN 80100451-5015	None	None
Polymer Wax	1 - 5	Trade secret NJTSRN 80100451-5016	None	None
Titanium Dioxide	0.1 - 1	13463-67-7	15 mg/m ³ 8 hours TWA	10 mg/m ³ 8 hours TWA

3. Hazards identification

Hazard information

Inhalation

- : Primary Routes of Exposure: Dust inhalation, skin contact.
- : Low acute inhalation toxicity. As with exposure to high concentrations of any dust, minimal irritation of the respiratory tract may occur. Exposure not probable with intended use. Chronic: No adverse changes in the lungs result from this accumulation. Exposure not probable with intended use.

Skin contact

- : Not an irritant. Low dermal toxicity. Not a dermal sensitizer.

Eye contact

- : Toner may act as a mechanical irritant.

Ingestion

- : Low acute oral toxicity.

4 . First aid measures

- Inhalation** : If symptoms, such as shortness of breath or persistent coughing are experienced, remove source of contamination and move individual to fresh air. If symptoms persist, seek medical attention.
- Skin contact** : Wash with soap and water. Should irritation occur, seek medical attention.
- Eye contact** : Do not rub eyes. Flush immediately with plenty of water. Remove contact lenses and continue flushing for at least 15 minutes. If irritation develops and persists, seek medical attention.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Aggravated conditions** : Exposure to high airborne dust concentrations, including toner, may aggravate existing respiratory conditions.
- Notes to physician** : No specific antidote.

5 . Fire-fighting measures

- Flash point** : Solid, not applicable.
- Auto-ignition temperature** : Not applicable.
- Flammable limits** : Not determined.
- Extinguishing media** : Carbon dioxide, water spray or fog, dry chemical or foam.
- Hazardous combustion products** : Carbon monoxide, carbon dioxide, unidentified organics.
- Special exposure hazards** : Like many finely divided materials, toner dust, in high concentrations can form an explosive mixture in air which, if ignited, could result in a dust explosion.
- Special protective equipment for fire-fighters** : Fire fighters should wear full protective clothing, including self-contained breathing apparatus.
- NFPA Rating** : Health: 1 Flammability: 1 Reactivity: 0
- HMIS Classification** : Health: 1* Flammability: 1 Reactivity: 0

6 . Accidental release measures

- Personal precautions** : None required for intended use in printer.
- Environmental precautions** : Disposal is subject to national, state, regional, or provincial regulations.
- Methods for cleaning up** : If a dust cloud is possible due to a spill, remove all sources of ignition such as open sparks, flames, or static discharge to prevent the ignition of the dust. Minimize dust generation during clean up. Sweep up spill with non-metallic broom and dustpan. Contain for disposal. Oil permeated sweeping compound may be useful in cleaning up spills.

7 . Handling and storage

- Handling** : Avoid generating dust. To avoid damage to cartridge and accidental contact with toner, keep out of reach of children.
- Storage** : Store in a cool, dry place. Store away from oxidizing material.

8 . Exposure controls/personal protection

- Engineering measures** : Not required. Use in a well-ventilated area.
- Respiratory** : None required for intended use in printer.
- Gloves** : None required for intended use in printer.
- Skin protection** : None required for intended use in printer.
- Eyes** : None required for intended use in printer.

9 . Physical and chemical properties

Physical state	: Solid (Toner Cartridge.)
Color	: Black.
Odor	: Faint odor (Plastic.)
Solubility	: Insoluble in water.
Melting/freezing point	: Not determined.
Specific gravity	: Not determined.
Volatility	: Not determined.

10 . Stability and reactivity

Stability and reactivity	: The product is stable.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Materials to avoid	: Strong oxidizing materials.
Hazardous decomposition products	: Carbon monoxide, carbon dioxide, unidentified organics.
Hazardous polymerization	: Will not occur.
Additional guidelines	: None known.

11 . Toxicological information

Primary routes of exposure	: Inhalation of dust, skin contact.
Ingestion	: Low acute oral toxicity. Exposure not probable with intended use.
Acute toxicity oral rat LD50 (mg/kg)	: >5000
Inhalation	: Low acute inhalation toxicity. As with exposure to high concentrations of any dust, minimal irritation of the respiratory tract may occur. Pure carbon black and titanium dioxide, minor components of this product, has been listed by IARC as a group 2B (possible carcinogen). This classification is based on rat "lung particulate overload" studies performed with airborne particulate. Toner is not listed by IARC, NTP, or OSHA.
Aggravating conditions	: Exposure to high airborne dust concentrations, including toner, may aggravate existing respiratory conditions.
Potential chronic health effects	: CARCINOGENIC EFFECTS: Classified 2B (Possible for humans.) by IARC [Carbon Black]. Classified 2B (Possible for humans.) by IARC [Titanium dioxide]. MUTAGENIC EFFECTS: Toner is negative (nonmutagenic) in the Ames assay. TERATOGENIC EFFECTS: Not available. Toner dust is a particulate not otherwise classified (PNOC) or regulated (PNOR).

12 . Ecological information

Mobility	: Not determined.
Persistence/degradability	: Not determined.
Other information	: None known.

13 . Disposal considerations

Waste disposal	: This product is not a listed hazardous waste in accordance with Federal Regulation 40 CFR Part 261. If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material has been contaminated and should be classified as a hazardous waste. Disposal is subject to local, state and federal regulations.
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14 . Transport information

Not regulated by any transport mode.

15 . Regulatory information

United States

- TSCA (USA)** : All ingredients are listed on the Toxic Substances Control Act (TSCA) inventory, have been registered, or are exempt.
- SARA / EPCRA (USA)** : None of the ingredients in this product has a final reportable quantity (RQ) under Emergency Planning and Community Right-to Know Act (EPCRA)- Section 302: Extremely Hazardous Substances (EHS) or notification requirements for EHS under Section 304.
- California Prop. 65** : This product contains no known materials at levels which the State of California has found to cause cancer, birth defects or other reproductive harm - California Proposition 65.

International regulations lists

- EINECS (Europe)** : All ingredients are listed on the European Inventory of Existing Commercial Substances (EINECS) list, have been registered on the European List of New Chemical Substances (ELINCS), or are exempt.
 - ENCS (Japan)** : All ingredients are listed on the Japanese Existing and New Chemical Substances (ENCS) list, have been registered, or are exempt.
 - AICS (Australia)** : All ingredients are listed in Australian Inventory of Commercial Substances (AICS), have been registered, or are exempt.
 - Philippines inventory (PICCS)** : All ingredients are listed on the Philippines Inventory (PICCS) or are exempt.
 - Korea inventory (KECI)** : All ingredients are listed on the Korean Existing Chemicals List (ECL), have been registered, or are exempt.
 - China inventory (IECSC)** : All ingredients are listed on the Chinese inventory (IECSC) or are exempt.
- Canada**
- WHMIS (Canada)** : Not controlled under WHMIS (Canada).
 - DSL/NDSL** : All ingredients are listed on the Canadian Domestic Substances List (DSL), have been registered on the Non-Domestic Substances List (NDSL), or are exempt.
- Mexico Classification** : Health: 1 Flammability: 1 Reactivity: 0

16 . Other information

- Revision comments** : No significant revisions to health and safety information.
- References** : ANSI Z400.5, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005. - Official Mexican Standards NOM-018-STPS-2000 and NOM-004-SCT2-1994.
- Date of issue** : 03/31/2008
- Version** : 1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.