



**MATERIAL SAFETY DATA SHEET**  
**LEXMARK TONER CARTRIDGE; BLACK: P/N 10E0043**

Revised 05/10/00

Lexmark International, Inc.  
740 West New Circle Rd.  
Lexington, Kentucky 40550-1876 Information: 1-859-232-3000  
**Emergency: 1-859-232-3333**

Lexmark has determined that Material Safety Data Sheets are not required for print cartridges. For customer convenience, Lexmark provides product information in this familiar format.

**SECTION 1 - PRODUCT IDENTIFICATION**

**Name:** Lexmark Toner Cartridge; Black  
**P/N:** 10E0043  
**Chemical Family:** Contains Toner  
**Product Use:** Lexmark Optra C710 Printer

**SECTION 2 - GENERAL COMPOSITION OF TONER CONTAINED IN CARTRIDGE**

<b>COMPONENT</b>	<b>PERCENT (wt.)</b>	<b>CAS #</b>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>
Polyester Resin 1	40-50	(1)	(2)	(2)
Polyester Resin 2	40-50	(1)	(2)	(2)
Carbon Black	5-7	1333-86-4	3.5 mg/m <sup>3</sup> (3)	3.5 mg/m <sup>3</sup> (3)
Charge Control Agent	2-5	104815-18-1 119029-85-5 125304-21-4	(2)	(2)
Silica (Amorphous)	1-2	7631-86-9	<u>80 mg/m<sup>3</sup></u> %SiO <sub>2</sub>	10 mg/m <sup>3</sup>

Notes: (1) Trade Secret or patented molecule.  
(2) Specific workplace exposure limits have not been established.  
(3) Total dust, measured as carbon black.

**SECTION 3 - HAZARDS IDENTIFICATION**

**Primary Routes of Entry:** Inhalation of dust, skin contact.  
**Signs and Symptoms of Exposure:** Toner on skin or mucus membranes (mouth, eyes or nose) may cause discomfort.  
**Medical Conditions Aggravated by Exposure:** None known at intended levels of use.  
**Physical Hazards:** As with most finely divided dusts, explosion is possible when extremely high concentrations of dust and an ignition source are present. Not a hazard under normal conditions of use.

**MATERIAL SAFETY DATA SHEET**  
**LEXMARK TONER CARTRIDGE; BLACK: P/N 10E0043**

**POTENTIAL HEALTH EFFECTS:**

**Inhalation:** Short Term Exposure - Minimal respiratory tract irritation may occur as with any exposure to large amounts of dust. Exposure not probable with intended use.

Long Term Exposure - Chronic inhalation exposure to high airborne concentrations may result in irreversible adverse pulmonary effects. Significant exposure not probable with intended use.

**Skin Contact:** Short Term Exposure - Not a skin irritant.

Long Term Exposure -No adverse effects known. Significant exposure not probable with intended use.

**Eye Contact:** Short Term Exposure - Toner may act as a mechanical irritant.

Long Term Exposure - No adverse chronic effects known. Significant exposure not probable with intended use.

**Ingestion:** Short Term Exposure - Expected to have low oral toxicity. Exposure not probable with intended use.

Long Term Exposure -No information available. Exposure not probable with intended use.

**SECTION 4 - FIRST AID MEASURES**

**Inhalation:** If symptoms are experienced, remove source of contamination or move victim to fresh air. Seek medical advice if symptoms persist.

**Skin Contact:** Wash with soap and water. Should irritation occur, obtain medical advice.

**Eye Contact:** Do not rub eyes. Flush immediately with plenty of water. Remove contact lenses and continue flushing for at least 15 minutes. Seek medical attention if irritation develops and persists.

**Ingestion:** Immediately rinse mouth out with plenty of water. If irritation occurs, seek medical advice.

**SECTION 5 - FIRE FIGHTING MEASURES**

**Flash Point:** Not Applicable

**Extinguishing Media:** CO<sub>2</sub>, water spray, foam, or dry chemical. Avoid full water jet.

**Firefighting:** NIOSH approved self-contained breathing apparatus (SCBA) may be required if large number of cartridges is involved..

**Fire and Explosion Hazard:** Like many finely divided materials, toner dust, in high concentrations can form an explosive mixture in air which, if ignited, could result in dust explosion.

**MATERIAL SAFETY DATA SHEET**  
**LEXMARK TONER CARTRIDGE; BLACK: P/N 10E0043**

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Occupational Spill:** 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 dust pan. Contain for disposal. To avoid possible dust explosion, do not use vacuum cleaners when large amounts of toner are involved in a spill. Oil permeated sweeping compound may assist in the clean-up of toner spilled on nonporous surfaces. Avoid inhalation of dust.

**SECTION 7 - HANDLING AND STORAGE**

**To avoid damage to cartridge and accidental contact with toner - KEEP OUT OF REACH OF SMALL CHILDREN.**

**STORE IN A COOL, DRY PLACE.**

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Limits:**

<b>OSHA:</b>	15 mg/m <sup>3</sup> (dust, measured as total dust-PNOR)
	5 mg/m <sup>3</sup> (dust, measured as respirable dust-PNOR)
<b>ACGIH:</b>	10 mg/m <sup>3</sup> (dust, measured as total dust-PNOR)
	3 mg/m <sup>3</sup> (dust, measured as respirable dust-PNOR)

**Ventilation:** None required with intended use. Mechanical room ventilation recommended

**Eye Protection:** None required for intended use in printer

**Protective Clothing:** None required for intended use in printer

**Gloves:** None required for intended use in printer

**Respirator:** None required for intended use in printer

**Other:** Wash hands after handling

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**Description:** Cartridge contains finely divided black powder with faint to no odor.

**Particle Size:** <0.03 mm (toner)

**Pressurized:** No

**Solubility in Water:** Negligible (toner)

**% Volatility:** Not applicable

**SECTION 10 - STABILITY AND REACTIVITY**

**Stability:** Stable

**Conditions to Avoid:** Ignition sources in combustible atmospheres of toner dust.  
Throwing toner into an open fire.

**MATERIAL SAFETY DATA SHEET**  
**LEXMARK TONER CARTRIDGE; BLACK: P/N 10E0043**

**Incompatibilities:** Strong oxidizers      **Hazardous Decomposition:** Oxides of carbon  
**Polymerization:** This product will not polymerize.

**MATERIAL SAFETY DATA SHEET**  
**LEXMARK TONER CARTRIDGE; BLACK: P/N 10E0043**

**SECTION 11 - TOXICOLOGY INFORMATION**

**Acute Toxicity:** Not expected to be acutely toxic

**Chronic Toxicity:** Contents of cartridge not expected to be toxic. Industry tests on similar generic toner showed no signs of overt toxicity. Rats exposed to high levels of toner showed a chronic inflammatory response and a mild to moderate degree of lung fibrosis. There were no pulmonary changes of any type at the lower toner exposure level, which is most relevant in regards to potential human exposures. Pure carbon black, a minor component of toner, has been listed by **IARC** as group 2B based on rat "lung particulate overload" studies. Toner is not listed by **IARC**, **NTP** or **OSHA**.

**SECTION 12 - ECOLOGICAL INFORMATION**

**Environmental impact rating (0-4):** Not available

**Acute Aquatic Toxicity:** Not available

**Degradability:** Not available

**Log Bioconcentration Factor (BCF):** Not available

**Log Octanol/Water Partition Coefficient:** Not available

**SECTION 13 - DISPOSAL INFORMATION**

Dispose of in accordance with local, state, and federal regulations.

**SECTION 14 - TRANSPORTATION INFORMATION**

Not classified as a hazardous material or substance under **DOT**.

**SECTION 15 - REGULATORY INFORMATION**

All ingredients are registered under the **Toxic Substances Control Act (TSCA)** or under polymer exemption.

All ingredients are registered or considered registered (polymers) under **European Inventory of Existing Commercial Chemical Substances (EINECS/ELINCS)**.

All ingredients are listed under **Japan EICS**.

All ingredients are listed on the **Australian Inventory of Chemical Substances (AICS)** or registered.

**SECTION 16 - OTHER**

**Disclaimer:** Data is most current known to Lexmark at the time of preparation and is believed to be accurate. No warranty as to its accuracy or completeness is expressed or implied.