LEXMARK™

Material Safety Data Sheet
PN X644H11A

X644, X646 High Yield Return Program Print Cartridge

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 and Company Identification

Product Name:	X644, X646 High Yield Return Program Print Cartridge	**Manufacturer:**	Lexmark International, Inc.
Product ID:	X644H11A		740 West New Circle Road
Chemical Family:	Toner Cartridge		Lexington, KY 40550
Application:	Laser Printer	**Information:**	1-859-232-3000
Prepared By:	Product Environmental Programs	**Emergency:**	**1-859-232-3333**

Section 2 - Composition / Information on Ingredients

Ingredients	Percent (wt.)	CAS Number	OSHA PEL	ACGIH TLV
Polyester Resin NJTSRN 80100286-6001P	65-85	Trade Secret	None	None
Iron Oxide	6-13	1317-61-9	None	None
Carbon Black	1-10	1333-86-4	3.5 mg/m³ TWA	3.5 mg/m³ TWA
Polymer Wax NJTSRN 80100451-5016	1-5	Trade Secret	None	None
Amorphous Silica (modified) NJTSRN 80100451-5015	1-3	Trade Secret	None	None

Section 3 - Hazards Identification

The following information is based on testing of the product as a whole and/or characteristics of components.

Hazard Information: Primary Routes of Exposure: Dust inhalation, skin contact.

Inhalation: 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.

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. Exposure not probable with intended use.

Section 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. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.
Aggravated Conditions:	Exposure to high airborne dust concentrations, including toner, may aggravate existing respiratory conditions.
Notes to Physician:	No specific antidote.

Section 5 - Fire Fighting Measures

Flash Point/Range:	Solid, not applicable
Autoignition Temperature:	Not applicable
Flammable Limits in Air UEL:	Not determined
Flammable Limits in Air LEL:	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:	Fire fighters should wear full protective clothing, including self-contained breathing apparatus, if a large number of cartridges are involved.
NFPA Rating:	Health: 1 Flammability: 1 Reactivity: 0
HMIS Classification:	Health: 1 Flammability: 1 Reactivity: 0

Section 6 - Accidental Release Measures

Personal Precautionary Measures:	None required for intended use in printer.
Environmental Precautionary:	Disposal is subject to national, state, regional, or provincial regulations.
Procedure for Cleaning/ Absorption:	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.

Section 7 - Handling and Storage

Handling:	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.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:	None required. Use in a well ventilated area.
Respiratory Protection:	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.

Section 9 - Physical and Chemical Properties

Physical State: Solid powder
Color: Black
Odor: Faint plastic-like odor
Specific Gravity: Not determined
Solubility in Water: Insoluble

Freezing Point/Range (°C): Not applicable
Melting Point/Range: Not determined
Vapor Density (Air=1): Not applicable
% Volatiles: Not determined
Evaporation Rate: Not applicable

Section 10 - Stability and Reactivity

Chemical Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to Avoid: High temperatures and flame

Materials to Avoid: Strong oxidizers

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, unidentified organics

Additional Guidelines: None

Section 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, a minor component 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 carbon black. Toner is not listed by IARC, NTP, or OSHA.

Aggravated Conditions: Exposure to high airborne dust concentrations, including toner, may aggravate existing respiratory conditions.

Carcinogenicity Comment: Neither this product nor any of its components present above 0.1% are listed by IARC, NTP, or OSHA as known carcinogens.

Section 12 - Ecological Information

Mobility: Not determined

Bioaccumulative: Not determined

Persistence: Not determined

Other Information: None

Section 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.

Section 14 - Transport Information

DOT Status:	Not classified as a hazardous material or substance under US DOT.		
DOT Shipping Name:	Not applicable	**DOT Reportable Quantity:**	Not applicable
Hazard Class:	Not applicable	**DOT Packing Group:**	Not applicable

Section 15 - Regulatory Information

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 Proposition 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.

DSL (Canada): All ingredients are listed on the Canadian Domestic Substances List (DSL), have been registered on the Non-Domestic Substances List (NDSL), or are exempt.

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.

ECL (Korea): All ingredients are listed on the Korean Existing Chemicals List (ECL), have been registered, or are exempt.

WHMIS Hazard Class (Canada): Not a WHMIS controlled product.

Section 16 - Other Information

The following has been revised since the last issue of this MSDS: No significant revisions to health and safety information.

Additional Information: None

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

*****END OF MSDS*****