

**1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY UNDERTAKING****1.1 PRODUCT IDENTIFIER**

Product name: Extra High Yield Toner Cartridge for Lexmark Compliant MS410/MS415/MS510/MS610/MX410/MX510/MX610  
Part number: LEXMS410LC

**1.2 IDENTIFIED USES AND USES ADVISED AGAINST**

For use in: This mixture is a toner used in copiers/printers.

**1.3 SUPPLIER DETAILS**

Supplier: Clover Technologies Group  
4200 Columbus Street.  
Ottawa, IL 61350  
United States  
Phone number: 815-431-8100  
Fax: 815-461-8583  
Contact Hours: 08:00AM-05:00PM CST

**1.4 EMERGENCY TELEPHONE NUMBERS**

Supplier: N/A

\* This document provides safety-related information about toner contained in print cartridge for use in laser printer

**2. HAZARDS IDENTIFICATION****2.1 INFORMATION and CLASSIFICATION**

Overview: Classification in accordance with paragraph (d) of 29 CFR 1910.1200: Combustible Dust. GHS Label Elements Signal Word(s): Warning. Hazard Statement(s): May form combustible dust concentrations in air. Precautionary Statement(s): General - Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.; Supplemental label elements - Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.

**2.2 LABEL ELEMENTS**

Applicable Pictograms:



Danger Indications: Label elements (Hazard, Signal words, Hazard statement and Precautionary statements): GHS - None required; OSHA Hazard Communication Standard 29 CFR 1910.1200 (Appendix C.4.30) - "Combustible Dust - Warning - May form combustible dust concentrations in air." "Keep away from all ignition sources including heat, sparks and flame. Keep container closed. Prevent dust accumulations to minimize explosion hazard." These label elements are not required if this mixture (toner) is in cartridges or sealed bottle.

Risk Phrases: N/A

Safety Phrases: N/A

**2.3 OTHER HAZARDS**

PBT or vPvB: N/A

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredients	CAS number	Weight %	OSHA PEL	ACGIH TLV	Other
Carbon Black	1333-86-4	≤10	TWA: 3.5 mg/m <sup>3</sup> 8 hours	TWA: 3 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction	NIOSH REL: TWA: 3.5 mg/m <sup>3</sup> 10 hours, TWA: 0.1 mg of PAHs/cm <sup>3</sup> 10 hours
Charge Control Agent	Proprietary	≤3			
Titanium Dioxide	13463-67-7	≤1	TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total Dust; TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total Dust	TWA: 10 mg/m <sup>3</sup> 8 hours	

The Full Text for all R-Phrases are Displayed in Section 16

**COMPOSITION COMMENTS**

The Data Shown is in accordance with the latest Directives.

This section provides composition information for the toner powder contained in specially designed container inside of the print cartridge.

**4. FIRST-AID MEASURES**

**4.1 FIRST AID MEASURES**

**4.1.1 FIRST AID INSTRUCTIONS BY RELEVANT ROUTES OF EXPOSURE**

- Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**4.1.2 ADDITIONAL FIRST AID INFORMATION**

- Additional first aid information: N/A
- Immediate Medical Attention Required: N/A

**4.2 SYMPTOMS AND EFFECTS**

- Acute Symptoms from Exposure: N/A
- Delayed Symptoms from Exposure: N/A

**4.3 IMMEDIATE SPECIAL TREATMENT OR EQUIPMENT REQUIRED**

Product: Extra High Yield Toner  
 Cartridge for Lexmark Compliant MS41  
 0/MS415/MS510/MS610/MX410/MX510/  
 MX610

Revision date: 06/06/2017



N/A

**5. FIRE-FIGHTING MEASURES****5.1 EXTINGUISHING MEDIA**

Recommended Extinguishing Media: Use dry chemical powder.  
Extinguishing Media Not to be Used: Do not use water jet.

**5.2 SPECIAL HAZARD**

Unusual Fire/Explosion Hazards: Fine dust clouds may form explosive mixtures with air.  
Extinguishing Media Not to be Used: N/A

**5.3 ADVICE FOR FIRE FIGHTERS**

Avoid inhalation of smoke. Wear protective clothing and wear self-contained breathing apparatus

**6. ACCIDENTAL RELEASE MEASURES****6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES****6.1.1 PRECAUTIONS FOR NON-EMERGENCY PERSONNEL**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**6.1.2 ADDITIONAL FIRST AID INFORMATION**

N/A

**6.1.3 PERSONAL PROTECTION**

Wear personal protective equipment as described in Section 8.

**6.2 ENVIRONMENTAL PRECAUTIONS**

Regulatory Information: Keep product out of sewers and watercourses.

**6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANUP**

Spill or Leak Cleanup Procedures: Small spill: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Large spill: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 7. HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

Recommendations for Handling: No special precautions when used as intended. Keep containers closed, avoid creating dust. Keep away from ignition sources.

Advice on General Hygiene: Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the restroom, or applying cosmetics.

### 7.2 CONDITIONS FOR SAFE STORAGE

Avoid high temperatures, >100°F/32°C

### 7.3 SPECIFIC END USES

Printing devices

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 CONTROL PARAMETERS

The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release in order to maintain airborne concentrations of the product below OSHA PELs (See Section 3). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

### 8.2 EXPOSURE CONTROLS

#### Respiratory protection:

IMPROPER USE OF RESPIRATORS IS DANGEROUS. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134 and 1910.137) and, if necessary, wear a NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given work conditions, levels of airborne contamination, and sufficient levels of oxygen.

#### Eye/Face Protection:

Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

#### Hand/Skin Protection:

For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. WARNING! Air purifying respirators do not protect worker in oxygen deficient atmospheres.

#### Additional Protection:

N/A

#### Protective Clothing and Equipment:

Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear splash-proof chemical goggles and face shield when working with liquid, unless full face piece respiratory protection is worn.

#### Safety Stations:

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

#### Contaminated Equipment:

Separate contaminated work clothes from street clothes. Launder before reuse. Remove material from your shoes and clean personal protective equipment. Never take home contaminated clothing.

#### Comments:

Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the restroom, or applying cosmetics.

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 DETAIL INFORMATION**

Physical state:	APPEARANCE: Black Solid (Finely divided solid.)
Color:	Black
Odor:	Faint odor (Plastic.)
Odor threshold:	N/A
Boiling point:	N/A
Melting point:	N/A
Flash point:	N/A
Explosion limits:	N/A
Relative density:	N/A
Auto-ignition temperature:	N/A

**9.2 OTHER INFORMATION**

Insoluble in the following materials: cold water and hot water.

**10. CHEMICAL STABILITY AND REACTIVITY****10.1 Reactivity:**

**Reactivity Hazards:** None

**Data on Mixture Substances:** None

**10.2 Chemical Stability:** The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.

**10.3 Hazardous Polymerization:** Stable under conditions of normal use.

**10.4 Conditions to Avoid:** Keep away from heat, flame, sparks and other ignition sources.

**10.5 Incompatible Materials:** Strong oxidising materials

**10.6 Hazardous Decomposition:** Will not occur.

**11. INFORMATION ON TOXICOLOGICAL EFFECT**

<b>Mixtures:</b>	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 2.7%
<b>Acute Toxicity:</b>	Component Analysis - LD50/LC50: The components of this material have been reviewed in various sources and the following selected endpoints are published: Carbon Black, Oral LD50 Rat >15400 mg/kg; Titanium Dioxide, Oral LD50 Rat >5000 mg/kg; 733/766 Toner, Oral LD50 Rat >5000 mg/kg, LC50 Inhalation Dusts and Mists Rat >5000 mg/l, 4 hours
<b>Skin Corrosion/Irritation:</b>	N/A
<b>Serious Eye Damage:</b>	N/A
<b>Inhalation:</b>	N/A
<b>Sensitization:</b>	N/A
<b>Mutagenicity:</b>	Toner is negative (nonmutagenic) in the Ames assay.
<b>Carcinogenicity:</b>	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.
<b>Reproductive Toxicity:</b>	N/A
<b>STOT - Single Exposure:</b>	N/A
<b>STOT - Multiple Exposure:</b>	Carbon Black, Category 1, Route of Exposure: Not Determined; Target Organs: Lungs
<b>Ingestion:</b>	N/A
<b>Hazard Class Information:</b>	N/A
<b>Mixture on Market Data:</b>	N/A
<b>Symptoms:</b>	N/A
<b>Delayed/Immediate Effects:</b>	N/A
<b>Test Data on Mixture:</b>	N/A
<b>Not Meeting Classification:</b>	N/A
<b>Routes of Exposure:</b>	Routes of entry anticipated: Dermal, Inhalation.
<b>Interactive Effects:</b>	N/A
<b>Absence of Specific Data:</b>	N/A
<b>Mixture vs Substance Data:</b>	N/A

**12. ECOLOGICAL INFORMATION**

12.1 <b>Eco toxicity:</b>	Carbon Black, Acute EC50 37.563 mg/l Fresh water, Daphnia - Daphnia magna Neonate, 48 hours; Titanium Dioxide, Acute LC50 3 mg/l Fresh water, Crustaceans - Ceriodaphnia dubia - Neonate, 48 hours, Acute LC50 6.5 mg/l Fresh water, Daphnia - Daphnia pulex Neonate, 48 hours, Acute LC50 >1000000 µg/l Marine water, Fish - Fundulus heteroclitus, 96 hours; 733/766 Toner; Acute EC50 >1000 mg/l, Daphnia, 24 hours, Acute EC50 >1000 mg/l, Daphnia, 48 hours
12.2 <b>Degradability:</b>	N/A
12.3 <b>Bioaccumulation Potential:</b>	Charge Control Agent, LogP 1.32, Low Potential
12.4 <b>Mobility in Soil:</b>	N/A
12.5 <b>PBT &amp; vPvB Assessment:</b>	N/A
12.6 <b>Other Adverse Effects:</b>	N/A

**13. DISPOSAL CONSIDERATIONS****Disposal Information:**

Dispose as a solid waste in accordance with local authority regulations.  
Empty container retains product residue.

**Physical/Chemical Properties that affect Treatment:**

Symbol: This product is not classified as dangerous

Risk Phrases: This product is not classified according to the federal, state and local environmental regulations.

**Waste Treatment Information:**

Do not shred toner cartridge, unless dust-explosion prevention measures are taken. Finely dispersed particles may form explosive mixtures in air. Dispose of in compliance with federal, state, and local regulations.

**Personal Protection Required:**

N/A

**14. TRANSPORT INFORMATION**

14.1 ID Number:	N/A
14.2 Shipping Name:	N/A
14.3 Hazard Class:	N/A
14.4 Packing Group:	N/A
14.5 Environmental Hazards:	N/A
14.6 User Precautions:	N/A
14.7 Bulk Transport:	N/A

**15. REGULATORY INFORMATION**

15.1 **Regulatory Information:** TSCA: All the substances in this mixture are listed or exempted in accordance with TSCA.

**EPA Regulatory Information:** N/A

**CERCLA Reportable Quantity:** N/A

15.2 **Superfund Information:**

**Hazard Categories:**

**Immediate:** N/A

**Delayed:** N/A

**Fire:** N/A

**Pressure:** N/A

**Reactivity:** N/A

**Section 302 - Extremely Hazardous:** N/A

**Section 311 - Hazardous:** N/A

15.3 **State Regulations:** N/A

15.4 **Other Regulatory Information:** N/A

**16. OTHER INFORMATION**

**General Comments:** This information is based on our current knowledge. It should not therefore be construed as guaranteeing specific properties of the products as described or their suitability for a particular application

**Creation Date of this SDS:** 06/07/2017





# SAFETY DATA SHEET

**Key to Abbreviations and Acronyms used in this sheet:**

ACGIH = American Conference of Governmental Industrial Hygienists	NIOSH = National Institute for Occupational Safety and Health
CERCLA = Comprehensive Environmental Response Compensation and Liability Act	OSHA = Occupational Health and Safety Administration
CLP = Classification, Labeling, and Packaging	PEL = Permissible Exposure Limit
DSD = Dangerous Substances Directive	SCBA = Self Contained Breathing Apparatus
EPA = Environmental Protection Agency	STOT = Specific Target Organ Toxicity
GHS = Globally Harmonized System	TLV = Threshold Limit Value
N/A = Not Applicable	UK = United Kingdom
NFPA = National Fire Protection Association	UN = United Nations

**Ref:****DISCLAIMER**

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