

1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY UNDERTAKING

1.1 **PRODUCT IDENTIFIER**

Product name: High Yield Toner Cartridge for Lexmark Compliant E360/E460/E462/X463/X464/X466
Part number: 24424497

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: 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. 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.

2.2 **LABEL ELEMENTS**

Applicable Pictograms:



Danger Indications: N/A

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
Polyester Resin	TRADE SECRET	65-85	None	None	NJTSRN 80100286-6001P
Iron Oxide	1317-61-9	7-13	None	None	
Carbon Black	1333-86-4	5-10	3.5 mg/m3 8 hours TWA	3.5 mg/m3 8 hours TWA	
Amorphous Silica (modified)	TRADE SECRET	1-3	None	None	NJTSRN 80100451-5015
Polymer Wax	TRADE SECRET	1-5	None	None	NJTSRN 80100451-5016
Titanium Dioxide	13463-67-7	0.1-1	15 mg/m3 8 hours TWA	10 mg/m3 8 hours TWA	
Charge Control Agent	TRADE SECRET	0.5-1.5	None	None	NJTSRN 80100451-5037

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:	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.
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.
Skin contact:	Wash with soap and water. Should irritation occur, seek medical attention.
Ingestion:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

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:	Aggravated conditions: Exposure to high airborne dust concentrations, including toner, may aggravate existing respiratory conditions.
Delayed Symptoms from Exposure:	N/A

4.3 IMMEDIATE SPECIAL TREATMENT OR EQUIPMENT REQUIRED

Notes to physician: No specific antidote.

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

Recommended Extinguishing Media: Carbon dioxide, water spray or fog, dry chemical or foam.
Extinguishing Media Not to be Used: N/A

5.2 SPECIAL HAZARD

Unusual Fire/Explosion 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. Hazardous combustion products: Carbon monoxide, carbon dioxide, unidentified organics.
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**

None required for intended use in printer.

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: 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. Disposal is subject to national, state, regional, or provincial regulations.

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:	PHYSICAL STATE: Solid (Toner Cartridge). APPEARANCE: Black.
Color:	Black
Odor:	Faint odor (Plastic.)
Odor threshold:	N/A
Boiling point:	N/A
Melting point:	Not determined.
Flash point:	Solid, not applicable.
Explosion limits:	N/A
Relative density:	N/A
Auto-ignition temperature:	N/A

9.2 OTHER INFORMATION

SOLUBILITY: Insoluble in 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

Mixtures:	Toner dust is a particulate not otherwise classified (PNOC) or regulated (PNOR).
Acute Toxicity:	Ingestion: Low acute oral toxicity. Exposure not probable with intended use. Acute toxicity oral rat LD50 (mg/kg): >5000.
Skin Corrosion/Irritation:	N/A
Serious Eye Damage:	N/A
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. Long term exposure to excessive concentrations of iron oxide-containing dusts has resulted in a condition identified as siderosis, a relatively benign pneumoconiosis, caused by deposition of iron oxide particles in the lung.
Sensitization:	N/A
Mutagenicity:	N/A
Carcinogenicity:	Classified 2B (Possible for humans.) by IARC [Carbon Black]. Classified 2B (Possible for humans.) by IARC [Titanium Dioxide].
Reproductive Toxicity:	N/A
STOT - Single Exposure:	Aggravating conditions: Exposure to high airborne dust concentrations, including toner, may aggravate existing respiratory conditions.
STOT - Multiple Exposure:	N/A
Ingestion:	N/A
Hazard Class Information:	N/A
Mixture on Market Data:	N/A
Symptoms:	N/A
Delayed/Immediate Effects:	N/A
Test Data on Mixture:	N/A
Not Meeting Classification:	N/A
Routes of Exposure:	Inhalation of dust, skin contact.
Interactive Effects:	N/A
Absence of Specific Data:	N/A
Mixture vs Substance Data:	N/A

12. ECOLOGICAL INFORMATION

12.1 Eco toxicity:	N/A
12.2 Degradability:	Not determined.
12.3 Bioaccumulation Potential:	N/A
12.4 Mobility in Soil:	Not determined.
12.5 PBT & vPvB Assessment:	N/A
12.6 Other Adverse Effects:	None known.

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

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|-----------------------------|---|
| 14.1 ID Number: | Not regulated by any transport mode. |
| 14.2 Shipping Name: | Not regulated by any transport mode. |
| 14.3 Hazard Class: | HMIS Classification: Health: 1* Flammability: 1 Reactivity: 0 |
| 14.4 Packing Group: | Not regulated by any transport mode. |
| 14.5 Environmental Hazards: | N/A |
| 14.6 User Precautions: | N/A |
| 14.7 Bulk Transport: | N/A |

15. REGULATORY INFORMATION

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|------------------------------|---|
| 15.1 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. |
|------------------------------|---|

EPA Regulatory Information: N/A

CERCLA Reportable Quantity: N/A

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| 15.2 Superfund Information: |
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Hazard Categories:

Immediate: N/A

Delayed: N/A

Fire: NFPA Rating: Health: 1 Flammability: 1
Reactivity: 0

Pressure: N/A

Reactivity: N/A

Section 302 - Extremely Hazardous: N/A

Section 311 - Hazardous: N/A

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| 15.3 State Regulations: | 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. |
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15.4 Other Regulatory Information: 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 Chemical 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

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: 11/13/2019



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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