CLOVER IMAGING GROUP

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY UNDERTAKING

1.1 PRODUCT IDENTIFIER

Product name: Toner Cartridge for Canon GPR-43

Part number: CNMGPR43

1.2 IDENTIFIED USES AND USES ADVISED AGAINST

For use in: Laser Printers

1.3 SUPPLIER DETAILS

Supplier: Clover Imaging 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: 815-431-8100

* This document provides safety-related information about ink/toner, in various forms, for use in copiers/printers etc.

2. HAZARDS IDENTIFICATION

2.1 INFORMATION and CLASSIFICATION

Overview: Classification of the Substance or Mixture: Regulation (EC) No 1272/2008: Not classified as hazardous. Other Hazards: Dust Explosion: May form explosive dust-air mixture if dispersed. Irritation of respiratory tract: Slight irritation of respiratory tract may occur with exposure to large amount of toner dust. Skin Irritation: Minimal skin irritation may occur. Eye irritiation: Irritation may occur by mechanical abrasion.

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
Styrene Acrylate Copolymer	TRADE SECRET	40-60			
Iron Oxide	1317-61-9	35-55			EC NUMBER: 215-277-5
Wax	TRADE SECRET	1-10			
Amorphous Silica	7631-86-9	<5			EC Number: 231-545-4
Bis, (3,5-di-tert-butylsalicylato-O1-,O2-) zinc (Organozinc complex)	42405-40-3	.5-2			EC Number: 403-360-0. Flammable solid Cat 1 - H228. Acute toxicity Cat 4 - H302. Aquatic acute Cat. 1. Aquatic chronic Cat.1. - H400, H410.

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 specified substance/mixture.

4. FIRST-AID MEASURES

4.1 **FIRST AID MEASURES**

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

Inhalation:	Provide fresh air immediately. If symptoms occur, seek medical advice.
Eye contact:	Do not rub eyes. Immediately rinse with plenty of clean running water until particles are washed out. If irritation persists, seek medical advice.
Skin contact:	Wash out particles with plenty of water and soap. If irritation develops, seek medical advice.
Ingestion:	Clean mouth out with water. Drink several glasses of water. If sickness develops, seek medical advice.

4.1.2 **ADDITIONAL FIRST AID INFORMATION**

Additional first aid information:	N/A
Immediate Medical Attention Required:	Immediate medical attention may be required in the unlikely event of extreme inhalation, eye contact or unusual reaction due to physical idiosyncrasy of the person.

4.2 **SYMPTOMS AND EFFECTS**

Acute Symptoms from Exposure:	Exposure to excessive amounts of dust may cause physical irritation to respiratory tract.
Delayed Symptoms from Exposure:	Prolonged inhalation of excessive amounts of dust may damage lungs.

4.3 **IMMEDIATE SPECIAL TREATMENT OR EQUIPMENT REQUIRED**

Immediate medical attention may be required in an unlikely event of extreme inhalation, eye contact or unusual reaction due to physical idiosyncrasy of the person.

5. FIRE-FIGHTING MEASURES

5.1 **EXTINGUISHING MEDIA**

Recommended Extinguishing Media:	Carbon dioxide, water, foam, dry chemical.
Extinguishing Media Not to be Used:	High pressure media which could cause the formation of potentially explosible dust-air mixture.

5.2 **SPECIAL HAZARD**

Unusual Fire/Explosion Hazards:	Dust Explosion: This mixture, like most organic powders, is capable of creating an explosive dust when particles are dispersed in air. Hazardous Combustion Products: Carbon monoxide and carbon dioxide.
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**

Avoid dust formation. Remove ignition sources. Do not breath dust. Wear 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:	Eliminate sources of ignition including sparks and flammables. Non-sparking tools should be used. Shelter the released material (powder) from wind to avoid dust formation and scattering. Vacuum or sweep the material into a sealed container. If a vacuum cleaner is used, it must be dust explosion-proof. Dispose of materials in accordance with EU/national/regional/local requirements.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Recommendations for Handling:	No special precautions when used as intended. Keep containers closed. If toner, 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: Fine black powder. Mainly 5 to 15 micrometers.
Color:	Black
Odor:	None or slight plastic-like odor
Odor threshold:	N/A
Boiling point:	N/A
Melting point:	N/A
Flash point:	N/A
Explosion limits:	N/A
Relative density:	1.5-2.5 (H20=0)
Auto-ignition temperature:	N/A

9.2 **OTHER INFORMATION**

FLAMMABILITY: Not flammable by burning rate DOT/UN test N.1 (similar product). SOLUBILITY: Negligible in water. Partially soluble in some organic solvents such as Toluene and Tetrahydrofuran.

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 polymerization 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 oxidizing materials

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

11. INFORMATION ON TOXICOLOGICAL EFFECT

Mixtures:	N/A
Acute Toxicity:	No test data available.
Skin Corrosion/Irritation:	No test data available.
Serious Eye Damage:	No test data available.
Inhalation:	No test data available.
Sensitization:	No test data available.
Mutagenicity:	Ames test (Salmonella typhimurium, Escherichia coli) negative. (a similar product)
Carcinogenicity:	No test data available.
Reproductive Toxicity:	No test data available.
STOT - Single Exposure:	No test data available.
STOT - Multiple Exposure:	No test data available. Inhalation tests of a toner for two years showed no significant carcinogenicity. (Reference 1 - Test Data) In rats, chronic exposure to toner concentrations 4 mg/m3 and over lead to an accumulation of particles in the lung as well as to persistent inflammatory processes and slight to moderate fibrotic changes in the lungs of rats. In hamsters, these effects were only observed at significantly higher concentrations (> 20 mg/m3). The particle accumulation in the lung tissue of the experimental animals is attributed to a damage and overload of the lung clearance mechanisms and is called “lung overloading”. This is not an effect specific to toner dust but is generally observed when high concentrations of other, slightly soluble dusts are inhaled. The lowest-observable-effect-level (LOEL) was 4 mg/m3 and the no-observable-effect-level (NOEL) was 1 mg/m3 in rats. The NOEL was greater than 6 mg/m3 in hamsters. (Reference 2 - Test Data) Toner concentration under the normal use of this product is estimated to be less than 1 mg/m3.
Ingestion:	No test data available.
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:	N/A
Interactive Effects:	N/A
Absence of Specific Data:	N/A
Mixture vs Substance Data:	N/A

12. ECOLOGICAL INFORMATION

12.1	**Eco toxicity:**	According to our test results of this or similar mixture, and the information provided by the suppliers about the substances contained in this mixture, this mixture is not expected to be harmful to ecology. Acute toxicity to aquatic organisms (a similar product): 72-hour IC50 (for algae, Pseudokirchneriella subcapitata, OECD 201) > 1,000 mg/L, NOEC 490 mg/L; 48-hour EC50 (for Daphnia magna, OECD 202) > 1,000 mg/L, NOEC 1,000 mg/L; 96-hour LC50 (for fish, Pimephales promelas, OECD 203) > 1,000 mg/L, NOEC 1,000 mg/L.
12.2	**Degradability:**	No data available.
12.3	**Bioaccumulation Potential:**	No data available.
12.4	**Mobility in Soil:**	No data available.
12.5	**PBT & vPvB Assessment:**	This mixture does not contain any substances that are assessed to be a PBT or PVT under regulation (EC) No 1907/2006.
12.6	**Other Adverse Effects:**	No data available.

13. DISPOSAL CONSIDERATIONS

Disposal Information:
Dispose of product 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:
If toner, 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:**	This mixture is not a regulated material under ADR, RID, AND IMDG Code, ICAO/IATA (IATA Dangerous Goods Regulations) or the United States DOT
14.2	**Shipping Name:**	None assigned in accordance with the UN Model Regulations.
14.3	**Hazard Class:**	None assigned in accordance with the UN Model Regulations.
14.4	**Packing Group:**	None assigned in accordance with the UN Model Regulations.
14.5	**Environmental Hazards:**	Not classified as hazardous in accordance with the criteria of the UN Model Regulations. Not classified as a marine pollutant in accordance with the IMDG code.
14.6	**User Precautions:**	Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from excessive heat and sources of ignition such as sparks and open flames. Handle in an adequately ventilated area. Do not handle with strong oxidizers, which may vigorously oxidize organic materials in this mixture and cause a fire in an extreme case. Do not breath dust. Do not get in eyes or on skin. Wear personal protective equipment as recommended. Avoid spills. Do not release to drains. Do not eat, drink or smoke when handling this product. Wash hands after handling this product. Remove contaminated clothing and protective equipment before entering eating areas. Keep out of reach of children.
14.7	**Bulk Transport:**	Un Model Regulations: Recommendations on the TRANSPORT OF DANGEROUS GOODS issued by UN. MARPOL: The International Convention for the Prevention of Pollution from ships, 1973, as modified by the Protocol of 1978 relating to thereto. IBC Code: The International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).

15. REGULATORY INFORMATION

15.1 **Regulatory Information:** Safety, health and environmental regulations/legislation specific for the substance or mixture. EU Information: Directive 2011/65/EU (RoHS): This mixture complies with the RoHS Directive. US Information: TSCA: All the substances in this mixture are listed or exempted in accordance with TSCA.

EPA Regulatory Information: N/A

CERCLA Reportable Quantity: Not applicable to this mixture.

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: Not applicable to this mixture.

Section 311 - Hazardous: Immediate health hazard: No (All the ingredients of this product are bound within the mixture.) Chronic health hazard: No (All the ingredients of this product are bound within the mixture.) Sudden release of pressure hazard: No. Reactive hazard: No.

15.3 **State Regulations:** California Proposition 65: This product does not contain any chemicals listed by the State of California.

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: 08/25/2020

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: