

1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY UNDERTAKING

1.1 PRODUCT IDENTIFIER

Product name: Samsung CLT-K407S Black Toner Cartridge
 Part number: SASCLP320B

1.2 IDENTIFIED USES AND USES ADVISED AGAINST

For use in: This mixture is a toner used in Samsung CLP-325/3185 series printers/copiers

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: Acute health effects: Eye contact: Irritation may occur by mechanical abrasion, Skin contact: Minimal skin irritation may occur, Inhalation: Slight irritation of respiratory tract may occur with exposure to large amount of Toner dust, Ingestion: Ingestion is an unlikely route of entry under normal conditions of use. Fire and explosion hazard: This mixture, like most organic powders, can cause a dust explosion if particles form thick clouds.

2.2 LABEL ELEMENTS

Applicable Pictograms:



Danger Indications: Classification in accordance with Directive 1999/45/EEC: Mixture is not classified as dangerous according to Directive 1999/45/EC. Classification in accordance with Regulation (EC) No 1272/2008: Mixture is not classified as dangerous according to Regulation (EC) No 1272/2008. Labeling in accordance with Regulation (EC) No 1272/2008: Not applicable

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 copolymer	TRADE SECRET	<95			
Carbon black	215-609-9 / 1333-86-4	<10			
Charge Control agent	240-380-7 / 16283-36-6	<10			
Wax	TRADE SECRET	<10			
Amorphous Silica	231-545-4 / 7631-86-9	<5			
Titanium dioxide	236-675-5 / 13463-67-7	<5			

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

4.3 IMMEDIATE SPECIAL TREATMENT OR EQUIPMENT REQUIRED

N/A

5. FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Recommended Extinguishing Media: Carbon dioxide, Water, foam, dry chemical
Extinguishing Media Not to be Used: None known.

5.2 SPECIAL HAZARD

Unusual Fire/Explosion Hazards: Toner, like most organic powders, is capable of creating a dust explosion when particles are dispersed. Carbon monoxide and carbon dioxide are hazardous resulting gases.
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. Do not breathe dust.

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 and flammables. Vacuum or sweep the material into a sealed container. If a vacuum cleaner is used, it must be dust explosion-proof. Dispose of the material 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, 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 2). 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 powder
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:	1.0-1.5 (water = 1)
Auto-ignition temperature:	N/A

9.2 OTHER INFORMATION

FLAMMABILITY: Not flammable SOLUBILITY: Partially soluble in toluene and tetrahydrofuran. WATER SOLUBILITY: Negligible.

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:	According to our test results of this or similar mixture and the information provided by the suppliers about the substances contained in this mixture, seriously damaging effect is not expected when this mixture is treated in accordance with standard industrial practices and EU/national/regional/local requirements. Refer to Section 2 for potential health effects and Section 4 for first aid measures.
Acute Toxicity:	Oral: LD50 rat > 5,000 mg/kg (OECD 425), not harmful. (a similar product)
Skin Corrosion/Irritation:	N/A
Serious Eye Damage:	N/A
Inhalation:	N/A
Sensitization:	N/A
Mutagenicity:	Negative (AMES test)
Carcinogenicity:	No test data available. Information on toxicological effects: Carbon black is classified by the International Agency for Research on Cancer (IARC) as a Group 2B carcinogen (possibly carcinogenic to humans).
Reproductive Toxicity:	N/A
STOT - Single Exposure:	N/A
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:	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 the information provided by the suppliers about the substances contained in this mixture, this mixture is not expected to be harmful to ecology.
12.2 Degradability:	N/A
12.3 Bioaccumulation Potential:	N/A
12.4 Mobility in Soil:	N/A
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

- 14.1 **ID Number:** Not regulated as dangerous goods by IMDG, ADR, RID, or ICAO/IATA.
- 14.2 **Shipping Name:** Not regulated as dangerous goods by IMDG, ADR, RID, or ICAO/IATA.
- 14.3 **Hazard Class:** Not regulated as dangerous goods by IMDG, ADR, RID, or ICAO/IATA.
- 14.4 **Packing Group:** Not regulated as dangerous goods by IMDG, ADR, RID, or ICAO/IATA.
- 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:** All the substances in this mixture is listed or exempted in EINECS or ELINCS, and in TSCA. EU classification and labeling in accordance with EU Directives 1999/45/EC and 67/548/EEC: Symbol: None, Risk phrase: None This mixture complies with the requirements of the RoHS Directive 2002/95/EC and its amendment directives. Please refer to any other EU/national/regional/local measures that may be relevant.

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

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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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