



1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY UNDERTAKING

1.1 PRODUCT IDENTIFIER

Product name: Dell C2660 High Yield Black Toner Cartridge

Part number: DELL2660B

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

2. HAZARDS IDENTIFICATION

2.1 INFORMATION and CLASSIFICATION

Overview: Classification of the Substance or mixture: None, according to Directive 1999/45/EC. Label elements:

None, according to Directive 1999/45/EC. Other hazards: Risk of dust-explosion if finely dispersed in air

with an ignition source.

2.2 **LABEL ELEMENTS**

Applicable Pictograms:

NO PICTOGRAM

Danger Indications: N/A
Risk Phrases: N/A
Safety Phrases: N/A

2.3 OTHER HAZARDS

PBT or vPvB: N/A

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



3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS number	Weight %	OSHA PEL	ACGIH TLV	Other
Saturated Polyester Resin	TRADE SECRET	60-70		Not established	REACH Registration: Pre- Registered. EU Symbol/R-Phrase: None.
Vinyl Resin (non- chlorinated)	TRADE SECRET	10-20		Not established	REACH Registration: Pre- Registered. EU Symbol/R-Phrase: None.
Silica	68909-20-6/ 67762-90-7	3-7		10 mg/m3 (Total dust, 3 mg/m3 for respirable part)	REACH Registration: Pre- Registered. EU Symbol/R-Phrase: None.
Carbon Black	1333-86-4	2-6		3.5 mg/m3 (TWA)	REACH Registration: Pre- Registered. EU Symbol/R-Phrase: None.
Wax	TRADE SECRET	2-6		Not established	REACH Registration: Pre- Registered. EU Symbol/R-Phrase: None.
Titanium Dioxide	13463-67-7	1-4		10 mg/m3 (Total dust, 3 mg/m3 for respirable part)	REACH Registration: Pre- Registered. EU Symbol/R-Phrase: None.
			TWA: 15 mg/m3 (Inhalable fraction), 5 mg/m3 (Respirable fraction)	(Respirable	DFG(MAK): 4 mg/m3 (Inhalable fraction), 1.5 mg/m3 (Respirable fraction)

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: Move to fresh air and gargle with water. If accompanied with breathing difficulty, take first aid

measures such as artificial respiration and call a physician immediately.

Eye contact: Do not rub. Flush with large amount of water until particles are removed. Seek medical advice.

Skin contact: Wash with soap and water.

Ingestion: Rinse mouth. Seek medical advice.

4.1.2 ADDITIONAL FIRST AID INFORMATION

Additional first aid information: N/A
Immediate Medical Attention Required: None.

4.2 **SYMPTOMS AND EFFECTS**

Acute Symptoms from Exposure: Inhalation of excessive amounts of dust may cause physical irritation to respiratory

system.

Delayed Symptoms from Exposure: N/A

4.3 IMMEDIATE SPECIAL TREATMENT OR EQUIPMENT REQUIRED

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None.

5. FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Recommended Extinguishing Media: Water, CO2, Dry Chemicals

Extinguishing Media Not to be Used: N/A

5.2 **SPECIAL HAZARD**

Unusual Fire/Explosion Hazards: Can form explosive dust-air mixture if finely dispersed in air.

Extinguishing Media Not to be Used: N/A

5.3 ADVICE FOR FIRE FIGHTERS

Avoid inhalation of smoke. Wear protective cloting an 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 breathing dust. Dust-proof masks should be worn when working.

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: For containment: Keep in air-tight container. For cleaning up: Sweep the spilled powder

slowly. Clean the remainder with wet cloth, wet paper, or vacuum cleaner. Vacuum cleaner

must be equipped with dust proof filter and must be explosion-proof.

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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 splashproof 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.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 **DETAIL INFORMATION**

Physical state: APPEARANCE: Black powder

Color: Black

Odor: Slight odor.

Odor threshold: N/A

Boiling point: N/A

Melting point: App. 120°C (Flow temperature)

Flash point: N/A
Explosion limits: N/A
Relative density: 1.1-1.3
Auto-ignition temperature: N/A

9.2 OTHER INFORMATION

FLAMMABILITY: Not flammable (according to Directive 92/69/EEC). SOLUBILITY: Insoluble to water, partially soluble to Toluene and Xylene. DECOMPOSITION TEMPERATURE: >200°C. EXPLOSIVE PROPERTIES: Can form explosive dust-air mixtures when finely dispersed in air.

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.

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11. INFORMATION ON TOXICOLOGICAL EFFECT

Mixtures: *data from toner with similar composition. **according to Directive 67/548/EEC.

Acute Toxicity: Inhalation: LC50; inh-rat>1.45 mg/L/4 hours*, not harmful. (maximum achievable concentration).

Ingestion: LD50 > 2000 mg/kg*, not harmful.

Skin Corrosion/Irritation: Not classified as irritant* ** **Serious Eye Damage:** Not classified as irritant* **

Inhalation: N/A

Sensitization: Not classified as a sensitizer* **

Mutagenicity: Ames test negative

Carcinogenicity: Carbon Black, contained in this toner, is classified as "group 2B" (possibly carcinogenic to humans)

by IARC. However, long-term inhalation tests on rats using a toner preparation containing Carbon

Black did not show any carcinogenic effects.

Reproductive Toxicity: N/A **STOT - Single Exposure:** N/A

STOT - Multiple Exposure: In a study of rats exposed to a toner containing Carbon Black, a mild degree of lung fibrosis was

observed in groups exposed to the high concentration (16 mg/m3) and mid-concentration (4 mg/m3), but no pulmonary change was reported in the group exposed to the low concentration (1

mg/m3). In normal conditions of use (in electro-photographic apparatus), the maximum concentration of toner released is significantly lower than 1 mg/m3, and will have no chronic effects to human health. In cases where this product is used in bulk for purpose such as filling, cleaning, etc. of the apparatus, exposure should be controlled with care according to Sections 7

and 8.

Ingestion: N/A

Hazard Class Information: N/A
Mixture on Market Data: N/A
Symptoms: N/A
Delayed/Immediate Effects: 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: N/A

12.2 **Degradability:** N/A

12.3 Bioaccumulation Potential: N/A

12.4 **Mobility in Soil:** N/A

12.5 **PBT & vPvB Assessment:** This preparation does not contain any substance that are assessed to be PBT or vPvB.

12.6 Other Adverse Effects: N/A

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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:** None

14.2 **Shipping Name:** None

14.3 Hazard Class: None

14.4 **Packing Group:** None

14.5 **Environmental Hazards:** Not classified as environmentally hazardous under UN Model Regulations and marine pollutant

under IMDG Code.

14.6 **User Precautions:** Handling such as exposure to water, rolling, falling, or giving shock to the container may result

in breakage of the inner bag and result in scattering of the mixture. Avoid direct sunlight and

hot places. (See also: Section 7)

14.7 **Bulk Transport:** Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: None.

15. REGULATORY INFORMATION

15.1 **Regulatory Information:** Safety, health and environmental regulations/legislation specific for the substance or

mixture: Information on the label (according to 1999/45/EC): Not Required.

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: Chemical safety assessment: No chemical safety assessment has been carried out for this

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preparation by the supplier.

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

07/02/2015 **Creation Date of this SDS:**

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Key to Abbreviations and Acronyms used in this sheet:

ACGIH = American Conference of Governmental Industrial	NIOSH = National Institute for Occupational Safety and Health		
Hygienists			
CERCLA = Comprehensive Environmental Response Compensation	OSHA = Occupational Health and Safety Administration		
and Liability Act			
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		

DISCLAIMER

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