



# Dell Cyan Toner Cartridge

## Section 1 - Product and Company Identification

**Laser Printer Family:** Dell Laser Printer 3100cn

**Product Description:**  
Dell Cyan Toner Cartridge

**Information:** 1-800-W W W-DELL

**Manufacturer:** Dell Inc.  
One Dell Way  
Round Rock, TX, USA 78682

**Emergency:** 1-800-551-8553

**Prepared By:** Product Environmental Programs

## Section 2 - Composition / Information on Ingredients

Chemical Nature:

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Styrene/acrylate copolymer	60 – 70	
Mn-Mg-Sr ferrite powder	10 – 20	
Polyethylene	<10	
Blue pigment	<10	147-14-8
Amorphous silica	<10	7631-86-9
Carbon black	<10	1333-86-4

UN Hazard Class : None

UN Number : None

## Section 3 - HAZARDOUS IDENTIFICATION

Physical and Chemical Hazard: There are no significant hazards associated with this product.

Adverse Human Health Effects: There are no significant hazards associated with this product.

Environmental Effects: There are no significant hazards associated with this product.

## Section 4 - FIRST-AID MEASURES

Eye contact : Flush with a large amount of water for at least 15 minutes. Seek medical advice.  
Skin contact : Wash with soap and water.  
Inhalation : Remove from exposure and provide fresh air. Rinse mouth with water.  
Ingestion : Rinse mouth with water. Give several glasses of water to drink and seek medical advice.

## Section 5 - FIRE-FIGHTING MEASURES

Specified method : In case of fire use extinguishing media.  
When in a machine, treat as an electrical fire.  
Extinguishing media : Water spray, Foam, Dry chemicals, CO<sub>2</sub>

## Section 6 - ACCIDENTAL RELEASE MEASURES



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Shut off ignition sources. For small spills, sweep up or soak up with damp cloth.  
For large spills, wear proper protective equipment and collect them in closed container.  
Dispose off in accordance with federal, state and local regulations.

### **Section 7 - HANDLING AND STORAGE**

Handling : Do not incinerate toner or a toner cartridge. Do not disassemble a cartridge.  
Storage : Keep in cool, dry and well-ventilated area. Keep out of reach of children.

### **Section 8 - EXPOSURE CONTROL /PERSONAL PROTECTION**

Control Parameter  
ACGIH TLV (2010) : 10 mg/m<sup>3</sup> (Total)  
3 mg/m<sup>3</sup> (Respirable)  
Precautionary Mesured : None required when used as intended in Dell equipment.  
For use other than normal customer operating procedures(such as in bulk toner processing facilities), local exhaust ventilation may be required.  
Personal Protective Equipment : None required when used as intended in Dell equipment.  
For use other than normal customer operating procedures(such as in bulk toner processing facilities), protective glove, goggles and respirators may be required.

### **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Appearance/Odor:	Blue Powder / Faint Odor	Vaper Pressure:	Not applicable
Boiling Point(OC):	Not applicable	Softening Point:	Not applicable
Volatile (%):	Not applicable	Initial Boiling Point:	Not applicable
Specific Gravity(H <sub>2</sub> O=1):	Not applicable	Other Data:	None
Solubility in water:	Negligible		

### **Section 10 - STABILITY AND REACTIVITY**

Flash Point(OC)	:Not applicable	Auto-Ignition Temperature:	Not applicable
Explosion Limit	:Not applicable		
Flammability	:Not flammable under conditions of use		
Spontaneous Combustibility / Reactivity with water	:None		
Self-reactivity / Explosive	:None		
Dust Explosive	: Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.		
Stability and Reactivity	:Stable		
Other Data	:None		

### **Section 11 - TOXICOLOGICAL INFORMATION**

Skin Corrosive : Not a corrosive  
Skin Irritant (rabbit) : Not an irritant 1  
Eye Irritant (rabbit) : Not an irritant(based on toxicity data of the ingredients of print)



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Skin Sensitization (guinea-pig) : Not a sensitizer 1  
Acute Toxicity Swallowed LD50 (rat) : > 5000 mg/kg 1 (practically non-toxic)  
(based on toxicity data of the ingredients of print)  
Skin LD50 (rabbit) : > 5000 mg/kg 1 (practically non-toxic)  
(based on toxicity data of the ingredients of print)  
Inhaled LC50 (rat) : > 4.1mg/L/4hr1 1 (practically non-toxic)  
(based on toxicity data of the ingredients of print)

Chronic Toxicity : The results obtained from a supplier sponsored, Chronic Toner Inhalation Study, demonstrated no lung change in rats for the lowest (1mg/m<sup>3</sup>) exposure level (i.e. the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of the animals at the middle (4mg/m<sup>3</sup>) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m<sup>3</sup>) exposure level. These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to comply with EPA testing protocol. The test toner was ten times more respirable than commercially available supplier toner, and would not be functionally suitable for Dell equipment. <sup>1</sup>

Carcinogenicity : Carbon Black is classified as "Group 2B(possibly carcinogenic to humans)" by IARC. But we obtained the results from a Chronic Toner Inhalation Study, that commercially available supplier toner has no evidence of human carcinogens. Any other ingredient is not classified as "Carcinogens ref.1".

Mutagenicity: Ames Assay : Negative

Reproduction and Development : Not classified as "Reproductive and Development chemicals"<sup>ref.2,</sup>

<sup>1</sup> This information is based on toxicity data for similar materials and ingredients.

### **Section 12 - ECOLOGICAL INFORMATION**

Biodegradability : Not available  
Bioaccumulation : Not available  
Acute Toxicity : Fish 96hr LC50 (Oryzias latipes): >500mg/L 1 (practically non-toxic)  
(based on toxicity data of the ingredients of print)  
Daphnia 48hr EC50 (Daphnia magna): >100mg/L 1 (practically non-toxic)  
(based on toxicity data of the ingredients of print)  
Algae 72hr EC50 (Selenastrum capricornutum): Not available

Other Information : None

<sup>1</sup> This information is based on toxicity data for similar materials and ingredients.

### **Section 13 - DISPOSAL CONSIDERATION**

Dispose off in accordance with national and local regulations.

### **Section 14 - TRANSPORT INFORMATION**

Transport in accordance with national and local regulations.

### **Section 15 - REGULATORY INFORMATION**

Ensure this product in compliance with national requirements and ensure conformity to local regulations.

### **Section 16 - OTHER INFORMATION**

The above mentioned data correspond to our present state of knowledge and experience, but no warranty is made. Users should consider these data only as a supplement to other information and must make independent determination of the suitability and completeness of information from all sources to ensure proper use and disposal of the materials and safety and health of employees and customers.

#### References

- 1: IARC Monographs on the Evaluation Carcinogenic Risks to Humans (WHO.International Agency for Research on Cancer)  
National Toxicology Program(NTP) Report on Carcinogens (NTP)



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TLVs and BEIs (American Conference of Governmental Industrial Hygienists)

Council Directive 67/548/EEC on the approximation of the laws, regulations, and administrative provisions relating to the classification, packing and labelling of dangerous substances; Annex 1 (EU)

Journal of Occupational Health (Japan Society for Occupational Health)

- 2: Council Directive 67/548/EEC on the approximation of the laws, regulations, and administrative provisions relating to the classification, packing and labelling of dangerous substances; Annex 1 (EU)