

# **Material Safety Data Sheet**

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Manufacturer **Dell Computer Corporation** One Dell Way Round Rock, TX 78682 1-800-W W W-DELL Information

Emergency 1-800-551-8553

Product Name:

# Dell<sup>™</sup> 3110cn/3115cn Printer Cartridge High Capacity YELLOW Toner NF556

# 2. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Nature:

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Stylene/butylacrylate copolymer	70 - 80	
Polyolefin wax	1 – 10	
Yellow pigment	1 – 10	
Amorphous silica	5 – 15	
Titanium dioxide	< 5	

UN Hazard Class : None

UN Number : None

#### **3. HAZARDOUS IDENTIFICATION**

Physical and Chemical Hazard: **Environmental Effects:** 

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

# **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. •

### **5. FIRE-FIGHTING MEASURES**

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

### **6.ACCIDENTAL RELEASE MEASURES**

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.

# **7.HANDLING AND STRAGE**

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

# 8. EXPOSURE CONTROL /PERSONAL PROTECTION

Control Parameter ACGIH TLV (2009)	:	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 Equipmen	:: N	one 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.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

ellow Powder / Faint Odor		
ot applicable	Vaper Pressure:	Not applicable
ot applicable	Softening Point:	Not applicable
ot applicable	Initial Boiling Point:	Not applicable
egligible	Other Data:	None
	ot applicable ot applicable ot applicable	ot applicableVaper Pressure:ot applicableSoftening Point:ot applicableInitial Boiling Point:

# **10.STABILITY AND REACTIVITY**

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

# 11. TOXICOLOGICAL INFORMATION

Skin Corrosive	: None		
Skin Irritant (rabbit)	: Not an irritant <sup>1)</sup>	Eye Irritant (rabbit): Not an irritant <sup>1)</sup>	
Human Patch	: Not available		
Sensitization	: Skin (guinea-pig)	: Not a sensitizer	
Acute Toxicity	Swallowed LD50 (rat)	: $> 5000 \text{ mg/kg}^{11}$	(practically non-toxic)
	Skin LD50 (rabbit)	$: > 5000 \text{mg}/\text{kg}^{1}$	(practically non-toxic)
	Inhaled LC50 (rat)	$: > 4.1 \text{ mg/L/4hr}^{1}$	(practically non-toxic)

Chronic Toxicity : The results obtained from a supplyer sponsored, Chronic Toner Inhalation Study, demonstrated no lung change in rats for the lowest (1mg/m3) 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/m3) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m3) 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 supplyer toner, and would not be functionally suitable for Dell equipment.<sup>1)</sup>

Carcinogenicity : Not classified as "<u>Carcinogens</u><sup>ref.1</sup>".

Mutagenicity: Ames Assay: Negative

Reproduction and Development: Not classified as "Reproductive and Development chemicals ref.2".

1) This information is based on toxicity data for similar materials and ingredients.

### 12. ECOLOGICAL INFORMATION

Biodegradability	: Not available.		
Bioaccumulation	: Not available.		
Acute Toxicity	: 96hours LC 50	$:>500 mg/L^{1}$	(practically non-toxic)
-	48hourd EC50(daph	(practically non-toxic)	
Other Information	: None	- 0	

1) This information is based on toxicity data for similar materials and ingredients.

#### 13.DISPOSAL CONSIDERATION

Dispose off in accordance with federal, state and local regulations.

#### 14.TRANSPORT INFORMATION

Transport in accordance with federal, state, and local regulations.

#### 15.REGULATORY INFORMATION

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

#### **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 Rsearch on Cancer)

National Toxicology Program(NTP) Report on Carcinogens (NTP)

TLVs and BEIs (American Conference of Governmental Industrial Hygienists)

Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provision s relating to the classification, packing and labelling of dangerous substaces; 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 administratives provision s relating to the classification, packing and labelling of dangerous substaces; Annex 1 (EU)