Material Safety Data Sheet
FM066

Dell High Capacity Yellow Cartridge

Section 1 - Product and Company Identification

Laser Printer Family: Dell™ 2130cn/2135cn Printer
Product Description:
Dell High Capacity Yellow Cartridge

Information: 1-800-W W W-DELL

Emergency: 1-800-551-8553

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

Prepared By: Product Environmental Programs

Section 2 - Composition / Information on Ingredients

Chemical Nature:

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Styrene/acrylate copolymer	70 - 80	—
Polyolefin wax	< 10	—
Amorphous silica	< 10	7631-86-9
Yellow pigment	< 10	—
Titanium dioxide	< 1	13463-67-7

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.
Extingishing media	:	Water spray, Foam, Dry chemicals, CO_2

Section 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.

Section 7 - HANDLING AND STORAGE

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.

Section 8 - EXPOSURE CONTROL /PERSONAL PROTECTION

Control Parameter		
ACGIH TLV (2013)	:	10 mg/m^3 (Total) 3 mg/m^3 (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:	Yellow Powder / Faint Odor		
Boiling Point(OC):	Not applicable	Vaper Pressure:	Not applicable
Volatile (%):	Not applicable	Softening Point:	Not applicable
Specific Gravity(H_2O=1):	Not applicable	Initial Boiling Point:	Not applicable
Solubility in water:	Negligible	Other Data:	None

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
Eye Irritant (rabbit) : Not an irritant※1

Skin Sensitization (guinea-pig) : Not a sensitizer
Acute Toxicity Swallowed→LD50 (rat) : > 5000 mg/kg※1 (practically non-toxic)
Skin→LD50 (rabbit) : > 5000 mg/kg※1 (practically non-toxic)
Inhaled→LC50 (rat) : > 4.1mg/L/4hr1※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.※1

Carcinogenicity : Titanium dioxide is classified as Group 2B by IARC.In animal chronic inhalation study, rats only showed the incidence of lung tumors which is attributed to excessive burden on rat lung clearance mechanism (overloading).It is assumed that a designated use of this product should not cause such excessive burden on lung clearance mechanism.Epidemiological studies provide no clear evidence of elevated risks of lung tumors mortality or morbidity among the workers exposed to TiO2 dust.
All other ingredients are not classified as “Carcinogens [ref.1]”.

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.

Section 12 - ECOLOGICAL INFORMATION

Biodegradability : Not available
Bioaccumulation : Not available
Acute Toxicity : Fish 96hr LC50 (Oryzias latipes): >500mg/L※1 (practically non-toxic)
Daphnia 48hr EC50 (Daphnia magna): >100mg/L※1 (practically non-toxic)
Algae 72hr EC50 (Selenastrum capricornutum): >100mg/L※1 (practically non-toxic)
Other Information : None
※1 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 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 Heatth)

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