

SAFETY DATA SHEET

According to EC Regulations 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010

Date of issue: 08/14/2015
Version number: 1.0

SECTION 1: IDENTIFICATION

1.1 Product identifier : Cyan Toner Cartridge

Product Description :	Part Number:
Dell Standard Capacity Cyan Toner Cartridge Dell High Capacity Cyan Toner Cartridge	T6412 K4973

Application: Dell 3000CN/3100CN

1.2 Relevant identified uses of the substance /mixture and uses advised against

Use(s) : Printer toner
Uses advised against None, although recommended for the above use only

1.3 Details of the supplier of the safety data Sheet

Name of supplier : Dell Inc.
Address : One Dell Way Round Rock, TX, USA 78682
Telephone : Information:1-800-W W W-DELL
Prepared by: Product Environmental Programs

1.4 Emergency telephone number : 1-800-551-8553

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture

This product is not classified as hazardous according to Regulation (EC) No 1272/2008. Safety Data Sheets do not have to be provided for non-hazardous products, however this information is provided as a courtesy to our customers in this format.

2.1.1 Classification according to Regulation (EC) No 1272/2008 (including amendments):

Not classified

2.1.2 Classification according to EC Directive 1999/45/EC (including amendments):

Not classified

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

Hazard pictogram(s) Not required
Signal word(s) Not required
Hazard statement(s) Not required
Precautionary statement(s) Not required

2.3 Other hazards None

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

EC Number	CAS Number	Name	Ingredients (% by wt.)	Classification according to Regulation (EC) No 1278/2008 (CLP)
Undisclosed	Undisclosed	Styrene/butylacrylate copolymer	60 - 70%	Not classified
Undisclosed	Undisclosed	Ferrite powder	10 - 20%	Not classified
Undisclosed	Undisclosed	Polyethylene	< 10%	Not classified
205-685-1	147-14-8	Blue pigment	< 10%	Not classified
231-545-4	7631-86-9	Amorphous silica	< 10%	Not classified
215-609-9	1333-86-4	Carbon Black	< 10%	Not classified
236-675-5	13463-67-7	Titanium oxide	< 1%	Not classified

No REACH registration numbers are provided either because the mixture contains pre-registered phase-in substances and the transition period for their registration according to Article 23 of REACH has not yet expired or because the annual tonnages do not require a REACH registration.

SECTION 4: FIRST-AID MEASURES

4.1 Description of first aid measures

Inhalation

Remove from exposure and provide fresh air. Rinse mouth with water.

Skin Contact

Wash with soap and water.

Eye Contact

Flush with a large amount of water for at least 15 minutes. Seek medical advice.

Ingestion

Rinse mouth with water. Give several glasses of water to drink and seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

No information available. No specific symptoms are predicted.

4.3 Indication of any immediate medical attention and special treatment needed

No special treatment needed. Treatment based on judgment of the doctor in response to symptoms of the patient.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Water spray, Foam, Dry chemicals. When in a machine, treat as an electrical fire.

Unsuitable Extinguishing Media

No information available.

5.2 Special hazards arising from the substance or mixture

None known.

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5.3	Advice for fire-fighters	Immediately remove flammable materials from the surroundings. Fight fire from the upwind position. Remove movable containers to a safe place immediately in case of fire in the vicinity. Do not allow non-authorized personnel to access around the fire. Extinguish quickly and completely using specified fire extinguisher. Wear heat-resistant protective clothing, protective gloves and respiratory protection when engaged in fire-fighting.
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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	Personal precautions, protective equipment and emergency measures	Avoid inhalation. If you spill a large volume of toner, wear proper protective equipment and collect them in closed container.
6.2	Environmental precautions	Prevent from entering into soil, waterways and ground water.
6.3	Methods and material for containment and cleaning up	Shut off ignition sources. For small spills, sweep up or soak up with damp cloth. (It may catch fire by electric sparks inside the
6.4	Reference for safe handling	See Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1	Precautions for safe handling	Technical measures: 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. Notice: Do not incinerate toner or a toner cartridge. Do not disassemble a cartridge. Safe handling advice: Do not incinerate toner or a toner cartridge. Do not disassemble a cartridge.
7.2	Conditions for safe storage, including any incompatibilities	Technical measures: None Conditions for safe storage: Keep in cool, dry and well-ventilated area. Keep out of reach of children

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	Control parameters	
8.1.1	Occupational exposure limits ACGIH TLV (2014):	No European Union occupational exposure limits. 10 mg/m ³ (Total) 3 mg/m ³ (Respirable)
8.1.2	Biological Limit Value:	None for the product.
8.1.3	PNECs and DNELs:	None available for the product.
8.2	Exposure controls	
8.2.1	Appropriate engineering controls	None for the product.
	Individual protection measures, such as personal protective equipment (PPE)	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.

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Eye/face protection	Glasses with side protection or goggles. Wear appropriate protective eyeglasses or chemical safety goggles, EN166: 2002 as minimum standard.
Skin protection (Hand protection/ Other)	Protective gloves. EN374 as minimum standard. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions.
Respiratory protection	Use approved respirators, EN149 as minimum standard. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Skin and body protection	Protective boots and apron.
Hygiene measures	Wash hands thoroughly after handling.
8.2.3 Environmental Exposure Controls	Follow best practice for site management and disposal of waste.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Powder
Color	Blue
Odor	Faint odor
Odor threshold (ppm)	No data available
pH (Value)	
Melting point / freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point (°C)	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density (Air=1)	No data available
Relative Density	No data available
Solubility(ies)	Insoluble
Partition coefficient (n-Octanol/water)	No data available
Auto ignition temperature	No data available
Decomposition temperature (°C)	No data available
Viscosity (mPa. s)	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2 Other information No other information.

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SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	None
10.2	Chemical stability	Stable
10.3	Possibility of hazardous reactions	None
10.4	Conditions to avoid	None
10.5	Incompatible materials	None
10.6	Hazardous decomposition products	No data available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

The toxicity data noted below is based on test results of this materials or similar materials.

Acute toxicity

Ingestion

LD50(rat): >5000 mg/kg (practically non-toxic)(based on toxicity data of the ingredients of print)

Inhalation

LC50(rat): >4.1 mg/L/4hr (practically non-toxic)(based on toxicity data of the ingredients of print)

Dermal

LD50: >5000 mg/kg (practically non-toxic)(based on toxicity data of the ingredients of print)

Skin corrosion/irritation

Not an irritant (rabbit)

Serious eye damage/irritation

Not an irritant (rabbit) (based on toxicity data of the ingredients of print)

Respiratory or skin sensitization

Not a skin sensitizer (rabbit)

mutagenicity

Ames Assay: Negative

Carcinogenicity

Carbon Black is classified as "Group 2B (possibly carcinogenic to humans)" by The International Agency for Research on Cancer (IARC). But we obtained the results from a Chronic Toner Inhalation Study, that commercially available supplier toner has no evidence of human carcinogens.

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".

Reproductive toxicity

Not classified as Reproductive and Development chemicals ref.2.

STOT - single exposure

No data available.

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STOT - repeated exposure

The results obtained from a supplier 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 supplier toner, and would not be functionally suitable for DELL equipment.*1

Aspiration hazard

Not applicable

Target Organs:

No data available.

Information on the likely routes of exposure:

Inhalation, Skin, Eye, Ingestion

Potential Health Effects

Inhalation

Acute (Immediate):

No data available

Chronic (Delayed):

No data available

Skin

Acute (Immediate):

No data available

Chronic (Delayed):

No data available

Eye

Acute (Immediate):

No data available

Chronic (Delayed):

No data available

Ingestion

Acute (Immediate):

No data available

Chronic (Delayed):

No data available

Symptoms related to the physical, chemical and toxicological characteristics:

No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

The toxicity data noted below is based on test results of this materials or similar materials.

Acute Toxicity

Fish 96hr LC50 (*Oryzias latipes*): > solubility in test water (less than 500 mg/L : practically non-toxic) (based on toxicity data of the ingredients of print).

Daphnia 48hr EC50 (*Daphnia magna*): > solubility in test water (less than 100 mg/L : practically non-toxic) (based on toxicity data of the ingredients of print).

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.6 Other adverse effects

No data available

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods

- | | | |
|--------|---------------------------------------|---|
| 13.1.1 | Residual wastes | Dispose of in accordance with national and local regulations. |
| 13.1.2 | Contaminated containers and packaging | Dispose of in accordance with national and local regulations. |

SECTION 14: TRANSPORT INFORMATION

Transport in accordance with national, and local regulations.

DOT Status : Not classified as a hazardous material or substance under US DOT.

International Shipping : ADR/RID/IMDG/IATA Classes :not regulated.

- | | | |
|------|---|----------------|
| 14.1 | UN number | Not regulated |
| 14.2 | UN Proper Shipping Name | None |
| 14.3 | Transport hazard class(es) | None |
| 14.4 | Packing Group | None |
| 14.5 | Environmental hazards | None |
| 14.6 | Special precautions for user | None |
| 14.7 | Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable |

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the product EU regulations

This safety datasheet complies with the requirements of EC Regulations 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010.

Authorisations: Not applicable

Restrictions on use: Not applicable

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

SECTION 16: OTHER INFORMATION

Date of preparation of SDS: 14 August 2015

Methods of evaluation:

The mixture was classified using data available for the mixture and data available for the neat substances with the application of relevant concentration limits, in accordance with Regulation (EC) No 1272/2008.

References:

ECHA Guidance on the compilation of safety data sheets. Version 2.1. February 2014.

GESTIS-database on hazardous substances

Regulation (EC) No. 1907/2006 of The European Parliament and of The Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

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- 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)
 - TLVs and BEIs (American Conference of Governmental Industrial Hygienists)
 - REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 ANNEX VI on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006)
 - Journal of Occupational Health (Japan Society for Occupational Health)
- 2 : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Abbreviations:

DNEL: Derived no-effect level

PBT: Persistent, bioaccumulative and toxic

PNEC: Predicted no-effect concentration

vPvB: Very persistent and very bioaccumulative.

CAS Registry Number(R) is a Registered Trademark of the American Chemical Society.

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.