

# Safety Data Sheet

SDS # : A-10272

## Toner - Black, Cyan, Magenta, Yellow

Issuing Date 2018-01-10

Revision Date 2018-01-15

Version 1

**Active**

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product Identifier**

**Product Name**

Toner for HP Color LaserJet M451 Extended Yield

**Part no.**

006R03545, 006R03546, 006R03547, 006R03548

**Color**

Black, Cyan, Magenta, Yellow

**Pure substance/mixture**

Mixture

**Relevant identified uses of the substance or mixture and uses advised against**

**Recommended Use** Xerographic printing

**Details of the supplier of the safety data sheet**

**Manufactured by** Xerox Corporation  
Rochester, NY 14644

**For further information, please contact**

**Contact person** Manager, Environment, Health, Safety & Sustainability

**E-mail address** askxerox@xerox.com

**Emergency telephone** Safety Information US: (800) 275-9376  
Chemical Emergency only (Chemtrec) (800) 424-9300

2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

**Customer use / Cartridges and sealed bottles**

**OSHA Hazard Classification**

This product is an article which contains a mixture / preparation in powder form. Safety information is given for exposure to the article as sold and used by the customer. Intended use of the product is not expected to result in exposure to the mixture / preparation based on the packaging and method of dispensing.

While this material is not considered hazardous by the OSHA hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information for the safe handling and proper use of the product. This SDS should be retained and made available to employees and other users of this product.

**Label elements**

**Signal Word** None

**Hazard Statements** None required

**Precautionary Statements**      None required

**Other hazards**

No hazard expected under normal conditions of use

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Mixtures**

This formulation represents multiple colors and the component list includes multiple pigments. The actual toner formulation for each color will differ only in the pigment used.

Chemical Name	CAS No.	Weight %	Classification (Reg. 1272/2008)	Hazard Statements
Styrene acrylate copolymer	Proprietary	70-90	--	--
Wax	Proprietary	5-15	--	--
Cyan pigment	Proprietary	0-10	--	--
Carbon black	1333-86-4	0-10	--	--
Magenta pigment	Proprietary	0-10	--	--
Yellow pigment	Proprietary	0-10	--	--
Amorphous silica	7631-86-9	<5	--	--
Titanium dioxide	13463-67-7	<1	--	--

**4. FIRST AID MEASURES**

**Description of first-aid measures**

**General advice**      For external use only. When symptoms persist or in all cases of doubt seek medical advice. Show this material safety data sheet to the doctor in attendance.

**Eye contact**      Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes

**Skin contact**      Wash skin with soap and water

**Inhalation**      Move to fresh air

**Ingestion**      Rinse mouth with water and afterwards drink plenty of water or milk

**Most important symptoms and effects, both acute and delayed**

**Acute toxicity**

**Eyes**      No known effect

**Skin**      No known effect

**Inhalation**      No known effect

**Ingestion**      No known effect

**Chronic toxicity**      No known effects under normal use conditions

**Main symptoms**      **Overexposure may cause:**  
mild respiratory irritation similar to nuisance dust.

**Aggravated Medical Conditions**      None under normal use conditions

**Indication of immediate medical attention and special treatment needed**

**Protection of first-aiders**      No special protective equipment required

**Notes to physician**      Treat symptomatically

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media**

**Suitable extinguishing media**      Use water spray or fog; do not use straight streams, Foam

**Unsuitable extinguishing media**      Do not use a solid water stream as it may scatter and spread fire

**Special hazards arising from the substance or mixture**

Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard

**Hazardous combustion products**

Hazardous decomposition products due to incomplete combustion, Carbon oxides, Nitrogen oxides (NOx)

**Special protective actions for fire-fighters**

In the event of fire and/or explosion do not breathe fumes. Wear fire/flame resistant/retardant clothing. Use self-contained pressure-demand breathing apparatus if needed to prevent exposure to smoke or airborne toxins.

**Other information**

**Flammable properties** Not flammable. Will not readily ignite.  
**Flash point** Not applicable

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Avoid breathing dust

**Environmental precautions**

No special environmental precautions required

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent dust cloud  
**Methods for cleaning up** Use a vacuum cleaner to remove excess, then wash with COLD water. Hot water fuses the toner making it difficult to remove.

**Reference to other sections**

The environmental impact of this product has not been fully investigated  
 However, this preparation is not expected to present significant adverse environmental effects.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice  
 Avoid dust accumulation in enclosed space  
 Prevent dust cloud

**Hygiene measures** None under normal use conditions

**Conditions for safe storage, including any incompatibilities**

**Technical measures and storage conditions** Keep container tightly closed in a dry and well-ventilated place  
 Store at room temperature

**Incompatible products** None

**Specific end uses**

Xerographic printing

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Limits**

<b>ACGIH TLV TWA</b>	10 mg/m <sup>3</sup> (inhalable particles)
<b>ACGIH TLV TWA</b>	3 mg/m <sup>3</sup> (respirable dust)
<b>OSHA PEL TWA</b>	15 mg/m <sup>3</sup> (total dust)
<b>OSHA PEL TWA</b>	5 mg/m <sup>3</sup> (respirable dust)
<b>Xerox Exposure Limit</b>	2.5 mg/m <sup>3</sup> (total dust)
<b>Xerox Exposure Limit</b>	0.4 mg/m <sup>3</sup> (respirable dust)

**Component Information**

Chemical Name	ACGIH TLV	OSHA PEL
Wax	TWA: 2 mg/m <sup>3</sup>	
Cyan pigment	TWA: 1 mg/m <sup>3</sup>	
Carbon black	TWA: 3 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup>
Titanium dioxide	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup>

**Exposure controls**

**Engineering measures**                      None under normal use conditions

**Individual protection measures, such as personal protective equipment (PPE)**

**Respiratory protection**                      No special protective equipment required.  
**Eye/Face protection**                        No special protective equipment required  
**Skin and body protection**                    No special protective equipment required  
**Hand protection**                                No special protective equipment required

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Appearance</b>	Powder	<b>Odor</b>	Faint
<b>Odor threshold</b>	Not applicable	<b>Physical state</b>	Solid
<b>pH</b>	Not applicable	<b>Color</b>	Black, Cyan, Magenta, Yellow
<b>Flash point</b>	Not applicable	<b>Boiling point/range</b>	Not applicable
<b>Softening point</b>	49 - 60 °C / 120 - 140 °F	<b>Autoignition temperature</b>	Not applicable

**Flammability Limits in Air**                      Not applicable

**Vapor pressure**                                      Not applicable  
**Vapor density**                                        Not applicable  
**Water solubility**                                    Negligible  
**Viscosity**    Not applicable  
**Partition coefficient**                                Not applicable  
**Evaporation rate**                                    Not applicable  
**Melting point/range**                                Not determined  
**Freezing point**                                        Not applicable  
**Decomposition temperature**                      Not determined  
**Specific gravity**                                        ~ 1

**Other information**

**Explosive properties**                              Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard

**10. STABILITY AND REACTIVITY**

**Reactivity**

No dangerous reaction known under conditions of normal use

**Chemical stability**

Stable under normal conditions

**Possibility of hazardous reactions**

**Hazardous reactions** None under normal processing  
**Hazardous polymerization** Hazardous polymerization does not occur

**Conditions to avoid**

Prevent dust cloud, Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard

**Incompatible materials to avoid**

None

**Hazardous decomposition products**

None under normal use

**11. TOXICOLOGICAL INFORMATION**

*The toxicity data noted below is based on the test results of similar reprographic materials.*

**Information on toxicological effects**

**Acute toxicity**

**Product Information**

**Irritation** No skin irritation, No eye irritation  
**Oral LD50** > 5 g/kg (rat)  
**Dermal LD50** > 5 g/kg (rabbit)  
**LC50 Inhalation** > 5 mg/L (rat, 4 hr)

**Component Information**

Chemical Name	LC50 Inhalation	Dermal LD50	Oral LD50
Wax		3600 mg/kg ( Rabbit )	5000 mg/kg ( Rat )
Cyan pigment			10000 mg/kg ( Rat )
Carbon black		3 g/kg ( Rabbit )	15400 mg/kg ( Rat )
Amorphous silica	>2.2 mg/L ( Rat ) 1 h	>2000 mg/kg ( Rabbit )	>5000 mg/kg ( Rat )
Titanium dioxide			10000 mg/kg ( Rat )

**Chronic toxicity**

**Sensitization** No sensitization responses were observed  
**Neurological Effects** No information available  
**Target organ effects** None known

**CMR Effects**

**Mutagenic effects** Not mutagenic in AMES Test  
**Reproductive toxicity** No information available  
**Carcinogenicity** See "Other Information" in this section.

Chemical Name	NTP	IARC
Carbon black		2B
Titanium dioxide		2B

**Other information**

The IARC (International Agency for Research on Cancer) has listed carbon black as "possibly carcinogenic to humans". However, Xerox has concluded that the presence of carbon black in this mixture does not present a health hazard. The IARC classification is based on studies evaluating pure, "free" carbon black. In contrast, toner is a formulation composed of specially prepared polymer and a small amount of carbon black (or other pigment). In the process of making toner, the small amount of carbon black becomes encapsulated within a matrix. Xerox has performed extensive testing of toner, including a chronic bioassay (test for potential carcinogenicity). Exposure to toner did not produce evidence of cancer in exposed animals. The results were submitted to regulatory agencies and published extensively.

The IARC (International Agency for Research on Cancer) has listed titanium dioxide as “possibly carcinogenic to humans”. However, Xerox has concluded that the presence of titanium dioxide in this mixture does not present a health hazard. The IARC classification is based on studies in rats using high concentrations of pure, unbound TiO<sub>2</sub> particles of respirable size. The Titanium Dioxide Industry REACH Consortium has concluded that these effects were species-specific, attributable to lung overload and not specific to TiO<sub>2</sub>, i.e. similar effects would also be seen for other low solubility dusts. Toxicological and epidemiological studies do not suggest a carcinogenic effects in humans. In addition, the titanium dioxide in this mixture is encapsulated in a matrix or bound to the surface of the toner.

**Other toxic effects**

**Aspiration Hazard** Not applicable  
**Other adverse effects** None known

12. ECOLOGICAL INFORMATION

**Toxicity**

On available data, the mixture / preparation is not harmful to aquatic life

**Component Information**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Carbon black				EC50 > 5600 mg/L 24 h
Amorphous silica	440 mg/L EC50 72 h (Pseudokirchneriella subcapitata)	LC50= 5000 mg/L Brachydanio rerio 96 h		EC50 = 7600 mg/L 48 h

**Persistence and degradability**

Not readily biodegradable

**Bioaccumulative potential**

Bioaccumulation is unlikely

**Mobility in soil**

Insoluble in water

**Component Information**

Chemical Name	log Pow
Cyan pigment	6.6

**Other adverse effects**

The environmental impact of this product has not been fully investigated. However, this preparation is not expected to present significant adverse environmental effects.

13. DISPOSAL CONSIDERATIONS

**Disposal considerations**

**Waste Disposal Methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging**

No special precautions are needed in handling this material

14. TRANSPORT INFORMATION

This material is not subject to regulation as a hazardous material for shipping

15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**OSHA Regulatory Status**

This product is an article which contains a mixture / preparation in powder form. Safety information is given for exposure to the article as sold and used by the customer. Intended use of the product is not expected to result in exposure to the mixture / preparation based on the packaging and method of dispensing.

While this material is not considered hazardous by the OSHA hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information for the safe handling and proper use of the product. This SDS should be retained and made available to employees and other users of this product.

**Canada**

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR), and the SDS contains all the information required by the HPR.

**International Inventories**

TSCA	Complies
DSL/NDSL	Complies

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**Clean Water Act**

This product is not regulated as a pollutant pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product is not regulated as a hazardous air pollutant (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**

Carbon black is regulated under California Proposition 65 only if in the form of "airborne, unbound particles of respirable size". Toner products do not contain carbon black in the form of "airborne, unbound particles of respirable size". Therefore, the requirements of Proposition 65 do not apply to this product.

Titanium dioxide is regulated under California Proposition 65 only if a product results in exposure in the form of "airborne, unbound particles of respirable size". Toner products do not result in exposure to titanium dioxide in the form of "airborne, unbound particles of respirable size". Therefore, the requirements of Proposition 65 do not apply to this product.

Chemical Name	CAS No.	California Prop. 65
Carbon black	1333-86-4	Carcinogen
Titanium dioxide	13463-67-7	Carcinogen

**U.S. State Right-to-Know Regulations**

Although this product contains substances included in some U.S. State Right-to-Know regulations, the particles are bound in a unique matrix and, therefore, the product does not pose any specific hazard.

16. OTHER INFORMATION

Issuing Date	2018-01-10
Revision Date	2018-01-15
Revision Note	Initial Release

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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