

Material Safety Data Sheet

SDS # : A-1045

Print Cartridge -Black

Issuing Date 2008-03-10

Revision Date 2011-04-15

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Print Cartridge for Phaser 3600

Part No. 106R01369, 106R01370, 106R01371, 106R01372

Color Black
Pure substance/preparation Preparation

Identified uses Xerographic printing

Manufactured by: Xerox Corporation
 Rochester, NY 14644

Emergency telephone Safety Information (800)828-6571
 Health Emergency (585)422-2177
 Chemical Emergency only (Chemtrec) (800)424-9300
 or (703)527-3887 (collect outside the US or Canada)

2. HAZARDS IDENTIFICATION

Emergency Overview

The product contains no substances which, in the form utilized and at their given concentrations, are considered to be hazardous to health.

Color Black	Appearance Powder	Physical state Solid	Odor Faint
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Potential Health Effects

Principle Routes of Exposure Inhalation

Acute toxicity

Eyes	No known effect
Skin	No known effect
Inhalation	No known effect
Ingestion	No known effect

Chronic effects

Chronic toxicity No known effects under normal use conditions. Repeated or prolonged inhalation may cause irritation of the respiratory tract as can occur with the inhalation of any non-toxic dust. Minimum respiratory or eye irritation may occur as with exposure to large amounts of any non-toxic dust.

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

Aggravated Medical Conditions None under normal use conditions

Environmental hazard See Section 12 for additional Ecological Information

Risk Phrases None required

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Polyester resin	Proprietary	85-95
Carbon Black	1333-86-4	1-5
Wax	Proprietary	1-5
Titanium dioxide	13463-67-7	0.4355

4. 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
Notes to physician	Treat symptomatically
Protection of first-aiders	No special protective equipment required.

5. FIRE-FIGHTING MEASURES

Flammable properties	Not flammable. Will not readily ignite.
Flash point	Not applicable
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
Hazardous combustion products	Hazardous decomposition products due to incomplete combustion. Carbon oxides. Nitrogen oxides (NOx).
Explosion Data	
Sensitivity to Mechanical Impact	Not sensitive.
Sensitivity to Static Discharge	Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Specific hazards arising from the chemical

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

Protective Equipment and Precautions for Firefighters

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.

NFPA 704

Consumer use	Health Hazard 0	Flammability 1	Stability 0	Special hazard None
Bulk Packaging	Health Hazard 0	Flammability 3	Stability 0	Special hazard None

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid breathing dust.
Environmental Precautions	Refer to protective measures listed in Sections 7 and 8.
Methods for containment	Prevent dust cloud.
Methods for cleaning up	Prevent dust cloud. Sweep up or vacuum up spillage and collect in suitable container for disposal. Use non-sparking tools and equipment.
Other Information	See Section 12 for additional information

7. HANDLING AND STORAGE

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice Prevent dust cloud
Technical measures/Storage conditions	Keep container tightly closed in a dry and well-ventilated place Store at room temperature
Hygiene measures	None under normal use conditions
Industrial User	Do not eat, drink or smoke when using this product Wash hands before eating, drinking, chewing gum, using tobacco, or using toilet Wash hands before breaks and at the end of workday Provide regular cleaning of equipment, work area and clothing

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure guidelines

Product information

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

Other Information

The results obtained from a Xerox sponsored Chronic Toner Inhalation Study demonstrated no lung changes in rats for the lowest (1mg/m³) exposure level (the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of animals at the middle (4mg/m³) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16mg/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 an EPA testing protocol.

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Biological standards

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Occupational Exposure Controls

Engineering measures	None under normal use conditions.
Industrial use	Avoid dust formation Ensure all equipment is electrically grounded before beginning transfer operations Provide appropriate exhaust ventilation at places where dust is formed

Personal Protective Equipment

Consumer use	These recommendations apply to the product as supplied
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
Industrial use	In case of insufficient ventilation: Wear protective eyewear (goggles) Effective dust mask

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Flammability Limits in Air Not applicable

Explosive properties	Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard
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
Specific gravity	Not applicable

10. STABILITY AND REACTIVITY

Reactivity No dangerous reaction known under conditions of normal use

Stability Stable under normal conditions

Incompatible products None

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

Hazardous Decomposition Products None under normal use.

Hazardous polymerization Hazardous polymerization does not occur

Hazardous reactions None under normal processing.

11. TOXICOLOGICAL INFORMATION

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

Acute toxicity

Product information

Irritation No skin irritation No eye irritation

LD50 Oral: > 5 g/kg (rat)

LD50 Dermal: > 5 g/kg (rabbit)

LC50 Inhalation: > 5 mg/L (rat, 4 hr)

Chronic toxicity

Product information

Chronic effects No known effects under normal use conditions. Repeated or prolonged inhalation may cause irritation of the respiratory tract as can occur with the inhalation of any non- toxic dust. Minimum respiratory or eye irritation may occur as with exposure to large amounts of any non-toxic dust.

Carcinogenicity See "Other Information" in this section.

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

Other toxic effects

Product information

Sensitization No sensitization responses were observed

Mutagenic effects Not mutagenic in AMES Test

Target organ effects None known.

Other adverse effects None known.

Aspiration Hazard Not applicable

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Print Cartridge -Black**Other information**

The IARC (International Agency for Research on Cancer) has listed carbon black as "possibly carcinogenic to humans". The 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". The classification is based on studies in rats in which "lung particulate overload phenomenon" was observed. Based on the review of available study results, when this product is used as intended, Xerox has concluded that the presence of titanium dioxide does not present an increased risk of lung cancer or chronic respiratory disease

12. ECOLOGICAL INFORMATION**Ecotoxicity**

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**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

Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION**Note**

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

15. REGULATORY INFORMATION**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.

SARA 311/312 Hazard Categories**Acute Health Hazard**

No

Chronic Health Hazard

No

Fire Hazard

No

Sudden Release of Pressure Hazard

No

Reactive Hazard

No

Clean Water Act

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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.

TSCA

TSCA 12b does not apply to this product.

U.S. 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.

Chemical Name	CAS-No	California Prop. 65
Carbon Black	1333-86-4	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.

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Not subject to WHMIS classification

16. OTHER INFORMATION

Issuing Date 2008-03-10
Revision Date 2011-04-15
Revision Note (M)SDS sections updated.

Disclaimer

The information provided on this MSDS 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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