

Safety Data Sheet

SDS # : B-2001

Developer-Black

Issuing Date 2003-05-08

Revision Date 2018-04-11

Version 1.01

Active

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

Product Identifier

Product Name

Developer for DocuPrint 75 MX, Nuvera 100 MX Digital Production System, Nuvera 120 MX Digital Production System, Nuvera 144 MX Digital Production System, Nuvera 100 MX Production System, Nuvera 120 MX Production System, Nuvera 144 MX Production System, Nuvera 200 MX Perfecting Production System, Nuvera 288 MX Perfecting Production System

Part no. 502S67377, 502S67305, 502S31859, 502S31727

Color Black
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

Chemical Name	CAS No.	Weight %	Classification (Reg. 1272/2008)	Hazard Statements
Steel powder	7439-89-6	>90	--	--
Polyester resin	39382-25-7	<10	--	--
Iron oxide	1317-61-9	<10	--	--
Carbon black	1333-86-4	<1	--	--
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

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

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

ACGIH TLV TWA	10 mg/m ³ (inhalable particles)
ACGIH TLV TWA	3 mg/m ³ (respirable dust)
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)

Component Information

Chemical Name	ACGIH TLV	OSHA PEL
Carbon black	TWA: 3 mg/m ³	TWA: 3.5 mg/m ³
Titanium dioxide	TWA: 10 mg/m ³	TWA: 15 mg/m ³

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

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		Autoignition temperature	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 (toner component)

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
Steel powder			30 g/kg (Rat)
Iron oxide			10000 mg/kg (Rat)
Carbon black		3 g/kg (Rabbit)	15400 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 TiO₂ 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 TiO₂, 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

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Steel powder		LC50= 13.6 mg/L Morone saxatilis 96 h		
Carbon black				EC50 > 5600 mg/L 24 h

Persistence and degradability

Not readily biodegradable

Bioaccumulative potential

Bioaccumulation is unlikely

Mobility in soil

Insoluble in water

Other adverse effects

Presents little or no hazard to the environment.

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

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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	2003-05-08
Revision Date	2018-04-11
Revision Note	Part number 502S31727 added

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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