

Safety Data Sheet

SDS #: B-20057

Developer - Black

Issuing Date 2021-04-29

Revision Date 2021-07-13

Version 3.01

Active

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

Product Identifier

Product Name

Developer for Nuvera 100 MX Digital Production System, Nuvera 100 MX Production System, Nuvera 120 MX Digital Production System, Nuvera 120 MX Production System, Nuvera 144 MX Digital Production System, Nuvera 144 MX Production System, Nuvera 157 MX Digital Production System, Nuvera 200 MX Perfecting Production System, Nuvera 288 MX Perfecting Production System, Nuvera 314 MX Digital Production System

Part no. 502S67377, 502S31859

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
 Webster, NY 14580

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

For the most current document <https://safetysheets.business.xerox.com>

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

This product contains no hazardous ingredients that meet the threshold for classification of the 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

Not a PBT according to REACH Annex XIII
 May form explosible dust-air mixture if dispersed

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	--	--
Silica (Surface Treated)	68909-20-6	<1	Acute tox (inhal) 2 STOT RE 2	H330 H373
Titanium dioxide	13463-67-7	<0.1	Carc 2	H351

"--" indicates no classification or hazard statements apply.

Full text of H- statements: see section 16

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

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)

Advice 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. Wear self-contained breathing apparatus and protective suit

Other information

Flammability	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

Although toner is not an aquatic toxin, microplastics may be a physical hazard to aquatic life and should not be allowed to enter drains, sewers, or waterways

Methods and material for containment and cleaning up

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

Reference to other sections

See section 12 for additional ecological information
See Section 13 for additional information

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
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Hygiene measures	None under normal use conditions
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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/m³ (inhalable particles)
ACGIH TLV TWA 3 mg/m³ (respirable dust)
OSHA PEL TWA 15 mg/m³ (total dust)
OSHA PEL TWA 5 mg/m³ (respirable dust)
Xerox Exposure Limit 2.5 mg/m³ (total dust)
Xerox Exposure Limit 0.4 mg/m³ (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)

Eye/Face protection No special protective equipment required
Hand protection No special protective equipment required
Skin and body protection No special protective equipment required
Respiratory protection No special protective equipment required.
Thermal hazards None under normal processing

Environmental Exposure Controls

Environmental Exposure Controls Keep out of drains, sewers, ditches and waterways

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Powder	Odor	Faint
Physical state	Solid	Odor threshold	Not applicable
Color	Black	pH	Not applicable

Flash point Not applicable

Melting / Freezing Point Not applicable

Boiling point/range Not applicable

Softening point 49 - 60 °C / 120 - 140 °F

Evaporation rate Not applicable

Flammability Not flammable. Will not readily ignite.

Flammability Limits in Air Not applicable

Vapor pressure Not applicable

Vapor density Not applicable

Specific gravity	4-5
Water solubility	Negligible
Partition coefficient	Not applicable
Autoignition temperature	Not applicable
Decomposition temperature	Not determined
Viscosity	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
Oxidizing properties	Not applicable

Other information

None

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

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 This product does not contain any known or suspected reproductive hazards
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. Epidemiological studies do not suggest a carcinogenic effect 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

Information on other hazards

Endocrine disrupting properties No information available

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
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

Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)

Endocrine disrupting properties

This product does not contain any known or suspected endocrine disruptors

Other adverse effects

Although toner is not an aquatic toxin, microplastics may be a physical hazard to aquatic life and should not be allowed to enter drains, sewers, or waterways.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

- Waste Disposal Methods** Can be landfilled or incinerated, when in compliance with local regulations. If incineration is to be carried out, care must be exercised to prevent dust clouds forming.

- Contaminated packaging** No special precautions are needed in handling this material

- Other information** Although toner is not an aquatic toxin, microplastics may be a physical hazard to aquatic life and should not be allowed to enter drains, sewers, or waterways.

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.

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 2021-04-29
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Revision Note Initial Release

Full text of H-Statements referred to under sections 2 and 3

- H330 - Fatal if inhaled
- H351 - Suspected of causing cancer
- H373 - May cause damage to organs through prolonged or repeated exposure

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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