

Safety Data Sheet

SDS # : B-0212

Developer-Black

Issuing Date 1981-07-28

Revision Date 2015-05-29

Version 1

Active

1. Product and Company Identification

Trade Name Developer for 2080, 4000, 4500

Part no. 005R00037, 005R00063, 005R00218

Color Black
Pure substance/preparation Preparation

Identified uses Xerographic printing

Manufactured by Xerox Corporation
 Rochester, NY 14644

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

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 |
|-----------------------|-----------------------------|--------------------------------|----------------------|

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

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

Aggravated medical conditions None under normal use conditions

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

3. Composition/Information on Ingredients

| Chemical Name | CAS-No | Weight % |
|--------------------------|------------|----------|
| Steel powder | 7439-89-6 | >90 |
| Acrylate/styrene polymer | 25214-28-2 | <5 |
| Styrene/acrylate polymer | 25213-39-2 | <5 |
| Polyvinylbutyral resin | 63148-65-2 | <1 |
| Carbon Black | 1333-86-4 | <1 |

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

Specific hazards arising from the chemical

Hazardous combustion products

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

Explosion Data

Sensitivity to Mechanical Impact
Sensitivity to Static Discharge

Not impact sensitive
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.

6. Accidental Release Measures

| | |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal Precautions | Avoid breathing dust |
| Environmental Precautions | No special environmental precautions required |
| 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 | 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

| | |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice Avoid dust accumulation in enclosed space 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 |

8. Exposure Controls/Personal Protection

Exposure guidelines

Product information

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|-----------------------------|--------------------------------------------|
| 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) |

Other Information

The results obtained from a Xerox sponsored Chronic Toner Inhalation Study demonstrated no lung changes in rats for the lowest (1 mg/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 (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 an EPA testing protocol.

Occupational Exposure Controls

Engineering measures None under normal use conditions

Personal Protective Equipment

Customer use / Cartridges and sealed bottles

| | |
|---------------------------------|------------------------------------------|
| 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

| | | | |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------|
| 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 |
| 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 | | |
| Decomposition temperature | Not determined | | |
| Specific gravity | ~ 1 (toner component) ~ 5 (carrier component) | | |

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 |

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| 11. Toxicological Information |
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The toxicity data noted below is based on the test results of similar reprographic materials.

Acute toxicity

Product information

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|-------------------------|---------------------------------------|
| 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) |

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|-------------------|-----------------|
| Eyes | No known effect |
| Skin | No known effect |
| Inhalation | No known effect |
| Ingestion | No known effect |

Chronic toxicity

Product information

| | |
|--------------------------------------|--------------------------------------------------------------------------------------|
| Chronic effects | 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 |
| Carcinogenicity | See "Other Information" in this section. |

| Chemical Name | IARC | NTP |
|---------------|------|-----|
| Carbon Black | 2B | |

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.

Other toxic effects

Product information

| | |
|-----------------------------|------------------------------------------|
| Sensitization | No sensitization responses were observed |
| Mutagenic effects | Not mutagenic in AMES Test |
| Target organ effects | None known |

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|------------------------------|----------------|
| Other adverse effects | None known |
| Aspiration Hazard | Not applicable |

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

OSHA Regulatory Status

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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.

TSCA

TSCA 12(b) 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 SDS contains all the information required by the CPR.

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| 16. Other Information |
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|----------------------|---------------------------------------------|
| Issuing Date | 1981-07-28 |
| Revision Date | 2015-05-29 |
| Revision Note | Updated for OSHA HazCom 2012 and WHMIS 2015 |

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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