

10-26-95



### MATERIAL SAFETY DATA SHEET

<b>MSDS Number:</b>	196, REV E PITNEY BOWES, INC.	<b>Issued:</b>	June 4, 1998
		<b>Revised:</b>	September 28, 1999
<b>Product Name:</b>	Developer for Copiers DL250, DF250, DL355, DF355, DL450, and DL600	<b>Page:</b>	1 of 6

SECTION I - PRODUCT IDENTIFICATION	
<b>Product Name:</b>	Developer for Copiers DL250, DF250, DL355, DF355, DL450, DL600
<b>Reorder Numbers:</b>	371-4: DL250, DF250, DL355, DF355 372-4: DL450, DL600
<b>Manufacturer:</b>	Pitney Bowes, Inc.
<b>Division:</b>	Office Systems
<b>Address:</b>	Walter Wheeler Jr. Drive
<b>City:</b>	Stamford
<b>State:</b>	CT
<b>Zip:</b>	06926-0700
<b>For MSDS Copies</b>	203-365-7151
<b>Emergency/Chemtrec</b>	800-424-9300
<b>MSDS Prepared By:</b>	Chemical Review Committee
<b>Effective Date:</b>	September 28, 1999
<b>Print Date:</b>	09/26/01

SECTION II - HAZARDOUS INGREDIENTS			
INGREDIENT NAME	CAS NO.	%	EXPOSURE LIMITS
Developer powder (regulated as particulates not otherwise classified - PNOC)	Mixture	Proprietary	10 mg/m3, TLV-TWA (inhalable), 15 mg/m3 PEL-TWA (Total Dust)
Carbon Black	1333-86-4	Proprietary	3.5 mg/m3 TLV-TWA, 3.5 mg/m3 PEL-TWA

#### Additional Information

May Contain Non-Hazardous Ingredients: Styrene Acrylate Co-polymer, Ferrite

SECTION III - HAZARD IDENTIFICATION	
<b>Emergency Overview:</b>	Black powder with slight odor. High concentrations of dust suspended in air may present a dust explosion hazard. Inhalation of dust may cause minor respiratory irritation. Prolonged inhalation overexposure may result in lung damage.
<b>Relevant Routes of Exposure:</b>	Skin, eyes, inhalation
<b>Signs and Symptoms of Acute Overexposure:</b>	May cause mild eye irritation. No animal testing was performed with this specific product, however, based on animal testing with products of similar composition, this product is not a skin or eye irritant.
<b>Signs and Symptoms of Chronic Overexposure:</b>	Prolonged inhalation of dust in excess of the exposure limits (as with any nuisance dust) may result in lung damage. Overexposure to dust in the normal use of this product is not expected.



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### SECTION III - HAZARD IDENTIFICATION

**Medical Conditions Generally** None known

**Aggravated By Exposure:**

**Potential Health Effects:**

**Eyes:** May cause mild irritation.  
**Skin:** No adverse effects expected.  
**Ingestion:** No adverse effects expected. This product is not acutely toxic by ingestion.  
**Inhalation:** Could be a route of exposure, but unlikely under normal use. Inhalation of developer powder may cause mucous membrane and respiratory irritation. Prolonged and repeated overexposure may cause lung damage.

**Carcinogenicity:**

**NTP:** No  
**IARC:** In 1996 IARC re-evaluated carbon black as a group 2B carcinogen (possible human carcinogen). This classification is based on results of animal studies in which rats chronically exposed by inhalation to free carbon black at concentrations that resulted in particle overloading of the lung developed lung tumors. Studies performed in other animals have not demonstrated an association between exposure to carbon black and lung tumors. A two-year inhalation cancer bioassay using a typical toner preparation containing carbon black did not result in increased lung tumors in rats. Carbon black is a minor component of this total developer mixture. We believe that IARC's findings are not applicable to the typical uses and levels of exposure to toners or developers by our customers and service personnel.

**OSHA:** No  
**ACGIH:** No  
**OTHER:** No

### SECTION IV - FIRST AID MEASURES

**Eyes:** Do not rub eyes. Immediately flush with plenty of running cool to lukewarm water, holding eye lids open to assure thorough rinsing. Get medical attention if irritation persists or for foreign body in the eyes.  
**Skin:** Wash with soap and water.  
**Ingestion:** If swallowed, dilute with water. **DO NOT** induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get medical attention.  
**Inhalation:** Remove person to fresh air. Wash nostrils, rinse mouth. If irritation or pulmonary symptoms develop, consult a physician.

### SECTION V - FIRE FIGHTING PROCEDURES

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**SECTION V - FIRE FIGHTING PROCEDURES**
**Flammable Limits in Air (% by Volume):**

Not determined

**Flash Point:**

Not applicable

**Autoignition Temperature:**

Not determined

**Extinguishing Media:**

 Water spray, CO<sub>2</sub>, dry chemical powder, or appropriate foam.

**Fire Fighting Instructions:**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Do not use methods that may create a dust cloud, such as high pressure water.

**Unusual Fire and Explosion Hazards:**

Developer powder can form explosive mixtures with air at high concentrations.

**Known or Anticipated Hazardous Products of Combustion:**

Emits toxic fumes under fire conditions.

**SECTION VI - ACCIDENTAL RELEASE MEASURES**
**Accidental Release Measures:**

Carefully sweep material onto paper, or vacuum taking care not to generate airborne dust. Do not use vacuum if large amounts are released due to risk of dust explosion.

**Personal Precautions:**

Avoid inhalation of dust.

**Environmental Precautions:**

It is recommended to keep away from drains, surface and ground water.

**Methods for Cleanup:**

Sweep material onto paper, or vacuum small amounts.

**Large Spill:**

Not sold in large quantities.

**Small Spill:**

Sweep material onto paper or vacuum small amounts. Avoid generating airborne dust.

**SECTION VII - HANDLING AND STORAGE**
**Handling:**

Avoid inhalation of developer dust. Avoid direct contact with developer. Keep container closed when not in use.

**Storage:**

Store in a cool, dry, dark place. Keep container closed. Keep out of the reach of children.

**Other Precautions:**

Not required under normal use.

**SECTION VIII - EXPOSURE CONTROLS & PERSONAL PROTECTION**
**Engineering Controls:**

None required with normal use.

**Ventilation Requirements:**

General office ventilation.

**Personal Protective Equipment:**
**Eye/Face Protection:**

Not required under normal use.

**Skin Protection:**

Not required under normal use.

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**SECTION VIII - EXPOSURE CONTROLS & PERSONAL PROTECTION**

**Respiratory Protection:** Not required under normal use.  
**Other Protective Clothing or Equipment:** Not required under normal use.  
**Exposure Guidelines:** See Section II

**SECTION IX - PHYSICAL & CHEMICAL PROPERTIES**

**Appearance:** Black powder with slight odor  
**Boiling Point:** Not applicable  
**Color:** Black  
**Freezing Point:** No data  
**Melting Point:** No data  
**Octanol/Water Partition Coefficient:** No data  
**Odor:** Slight odor  
**Odor Threshold:** No data  
**Percent Volatile:** Not applicable  
**pH Value:** Not applicable  
**pH Concentration:** Not applicable  
**Physical State:** Powder  
**Reactivity in Water:** None  
**Solubility in Water:** Not soluble  
**Specific Gravity or Density (Water=1):** 2.5  
**Vapor Density:** Not applicable  
**Vapor Pressure:** Not applicable  
**Vapor Pressure Temperature:** Not applicable  
**Volatile Organic Compounds:** No data  
**Water/Oil Distribution Coefficient:** No data  
**Weight Per Gallon:** Not applicable

**SECTION X - STABILITY AND REACTIVITY**

**Stability:** Stable  
**Conditions to Avoid:** Avoid excessive heat and electrical discharge. Do not throw into fire.  
**Incompatibility With Other Materials:** Strong oxidizing materials  
**Hazardous Decomposition Products:** Combustion will produce carbon dioxide, carbon monoxide, unidentified compounds.  
**Hazardous Polymerization:** Will not occur  
**Conditions to Avoid:** Not applicable

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<b>SECTION XI - TOXICOLOGICAL INFORMATION</b>			
<b>VALUE</b>	<b>ANIMAL</b>	<b>ROUTES</b>	<b>COMPONENTS</b>
LC50: No data available	Not applicable	Inhalation	Product
LD50: No data available	Not applicable	Oral	Product
LD50: No data available	Not applicable	Dermal	Product

**Additional Information**

Negative in Ames tests

Note: No animal testing was performed with this specific product.

**SECTION XII - ECOLOGICAL INFORMATION**

**Ecological Information:** No data available

**SECTION XIII - DISPOSAL CONSIDERATIONS**

**Disposal Considerations:** Dispose in accordance with local, state, and federal regulations. Do not incinerate developer and developer containers. Dangerous sparks may cause burns or fires.

**SECTION XIV - TRANSPORT INFORMATION**
**U.S. DOT**

**Proper Shipping Name:** Not regulated  
**Hazard Class:** Not applicable  
**ID Number:** Not applicable  
**Packing Group:** Not applicable  
**Labels:** None  
**Special Provisions:** None  
**Packaging Exceptions:** Not applicable  
**Non-Bulk Packaging:** Not applicable  
**Bulk Packaging:** Not applicable  
**Air/Rail Limit:** None  
**Air Cargo Limit:** None  
**Vessel Stowage:** Not applicable  
**Other Stowage:** Not applicable  
**Reportable Quantity:** None

**AIR - ICAO OR IATA**

**Proper Shipping Name:** Not regulated  
**Hazard Class:** Not applicable  
**ID Number:** Not applicable  
**Risk:** Not applicable  
**Packing Group:** Not applicable  
**Hazard Labels:** None  
**Packing Instructions:** Not applicable  
**Air Passenger/Cargo Limit Per Package:** Not applicable



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### SECTION XIV - TRANSPORT INFORMATION

**Packing Instruction - Cargo:** Not applicable  
**Air Cargo Limit Per Package:** Not applicable  
**Special Provisions Code:** None

#### WATER - IMDG

**Proper Shipping Name:** Not regulated  
**Hazard Class:** Not applicable  
**ID Number:** Not applicable  
**Packing Group:** Not applicable  
**Risk:** Not applicable  
**Emergency Procedures Code:** Not applicable  
**Medical First Aid Guide Code:** Not applicable

### SECTION XV - REGULATORY INFORMATION

**U.S. Federal Regulations:** See below  
**State Regulations:** None applicable  
**International Regulations:** Canada: Not a controlled product. EU: Not a dangerous preparation.

#### SARA Hazards:

**Acute:** No  
**Chronic:** No  
**Reactive:** No  
**Fire:** No  
**Pressure:** No

#### *Additional Information*

This product does not contain chemical or chemical compounds listed in the following SARA Title III categories: Extremely Hazardous Substances (302), Toxic Chemical Release Reporting (313).

All the components of this product are listed in the EPA TSCA Inventory.

### SECTION XVI - OTHER INFORMATION

#### NFPA Codes:

**Health:** 1  
**Flammability:** 1  
**Reactivity:** 0  
**Other:** 0

#### HMIS Codes:

**Health:** 1  
**Flammability:** 1  
**Reactivity:** 0  
**Protection:**

**Other Information:** Keep out of reach of children