

SAFETY DATA SHEET

SDS Number:	370, REV B PITNEY BOWES, INC.	Effective Date:	December 23, 2014
Product Name:	Pitney Bowes Toner Cartridges	Revised Date:	February 22, 2016
		Page:	2 of 7

P273	Avoid release to the environment.
P501	Dispose of container and contents to approved disposal site in accordance with all local and national regulations.

2.3 Other Hazards: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures:

Chemical Name	CAS#	EINECS#	GHS Classification Regulation (EC) No 1272/2008	%
Toner Powder	Mixture	Mixture	Not Applicable	83 - >98
Carbon Black	1333-86-4	215-609-9	Not Applicable	1 - 10
Titanium Dioxide	13463-67-7	236-675-5	Not Applicable	0 – 2.5
Zinc Metal Complex Dye	42405-40-3	403-360-0	Flam. Solid 1 (H228) Acute Tox. 4 (H302) Aquatic Acute. 1 (H400) Aquatic Chron. 1 (H410)	0 – <2.5

See Section 16 for further information on GHS Classification.

SECTION 4: FIRST AID MEASURES

4.1 Description of 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.

Inhalation: Remove to fresh air. Wash nostrils, rinse mouth. If irritation or pulmonary symptoms develop, consult a physician.

Ingestion: If swallowed, dilute with water. Do not induce vomiting unless directed to do so by a doctor or physician. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get medical attention if symptoms occur.

Notes to Physicians: Treat symptomatically.

4.2 Most Important symptoms and effects, both acute and delayed: Inhalation of dust may cause minor respiratory irritation. Prolonged inhalation overexposure may result in lung damage.

4.3 Indication of any immediate medical attention and special treatment needed:
Immediate medical treatment should not be required.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing Media:

Use water spray, dry chemical or foam to extinguish fire.

5.2 Special Hazards Arising from the Substance or Mixture

SAFETY DATA SHEET

SDS Number:	370, REV B PITNEY BOWES, INC.	Effective Date:	December 23, 2014
Product Name:	Pitney Bowes Toner Cartridges	Revised Date:	February 22, 2016
		Page:	3 of 7

Unusual Fire and Explosion Hazards: Toner powder can form explosive mixtures with air at high concentrations.

Hazardous Decomposition Products: May produce carbon, nitrogen and zinc oxides under fire conditions.

5.3 Advice for Fire-Fighters:

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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid inhalation of dust. Carefully sweep up material, or vacuum taking care not to generate airborne dust. Do not use vacuum if large amounts are released due to risk of dust explosion. Wipe up residual with a damp cloth.

6.2 Environmental Precautions:

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

6.3 Methods and Material for Containment and Cleaning Up:

Large Spill: Not sold in large quantities.

Small Spill: Sweep up, or vacuum small amounts of material.

6.4 Reference to Other Sections:

Refer to Section 8 for protective equipment and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Avoid inhalation of toner dust. Avoid direct contact with toner. Follow product label instructions.

7.2 Conditions for Safe Storage, Including any Incompatibilities:

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

7.3 Specific end use(s):

Copier Toner Cartridge

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Chemical Name	Exposure Limits
Toner powder (Regulated as respirable dust)	5 mg/m ³ (respirable fraction) TWA – France OEL 1.5 mg/m ³ (respirable fraction) TWA – Germany MAK 3 mg/m ³ (respirable fraction) TWA – Spain OEL 4 mg/m ³ (respirable fraction) TWA – UK WEL

SAFETY DATA SHEET

SDS Number:	370, REV B PITNEY BOWES, INC.	Effective Date:	December 23, 2014
Product Name:	Pitney Bowes Toner Cartridges	Revised Date:	February 22, 2016
		Page:	4 of 7

Carbon Black	3.5 mg/m ³ TWA, 7 mg/m ³ STEL- UK WEL 3.5 mg/m ³ TWA – Spain OEL 3.0 mg/m ³ TWA – Australia OEL
Titanium Dioxide	11 mg/m ³ TWA – France OEL (inhalable aerosol) 10 mg/m ³ TWA - UK WEL (inhalable aerosol) 4 mg/m ³ TWA - UK WEL (respirable aerosol) 10 mg/m ³ TWA – Spain OEL (inhalable aerosol)
Zinc Metal Complex Dye	None Established

8.2 Exposure Controls:

Engineering Controls: None required with normal use.

Respiratory Protection: Not required under normal use conditions.

Skin Protection: Not required under normal use conditions.

Eye Protection: Not required under normal use conditions.

Other: Not required for normal use conditions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties:

Appearance: Black	Vapor Density: Not applicable
Odor: Slight or no odor.	Specific Gravity: Not determined
Odor Threshold: Not determined	Water Solubility: Negligible
pH: Not applicable	Octanol/Water Partition Coefficient: Not available
Melting Point/Freezing Point: 212-302°F (100-150°C)	Autoignition Temperature: Not applicable
Boiling Point and Range: Not applicable	Decomposition Temperature: Not determined
Flash Point: None	Viscosity: Not applicable
Evaporation Rate: Not applicable	Explosion Properties: Toner powder can form explosive mixtures with air at high concentrations.
Flammable Limits: LEL: Not determined UEL: Not determined	Flammability (Solid, Gas): Non-Flammable solid. Based on testing.
Oxidizing Properties: Not determined	Vapor Pressure: Not applicable
VOC: Not available	

9.2 Other Information:

None

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

Not reactive under normal conditions of use.

10.2 Chemical Stability:

Stable.

10.3 Possibility of Hazardous Reactions:

SAFETY DATA SHEET

SDS Number:	370, REV B PITNEY BOWES, INC.	Effective Date:	December 23, 2014
Product Name:	Pitney Bowes Toner Cartridges	Revised Date:	February 22, 2016
		Page:	5 of 7

None known

10.4 Conditions to Avoid:

Avoid excessive heat.

10.5 Incompatible Materials:

Avoid contact with strong oxidizing agents.

10.6 Hazardous Decomposition Products:

Thermal decomposition may produce carbon, zinc and nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Eyes: May cause minimal 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 toner powder may cause mucous membrane and respiratory irritation. Prolonged and repeated overexposure may cause lung damage.

Acute Toxicity Values:

Carbon Black:	LD50 Oral Rat > 15,400 mg/kg LD50 Skin Rabbit > 3,000mg/kg
Titanium Dioxide:	LD50 Oral Rat > 10,000 mg/kg LD50 Skin Rabbit > 10,000 mg/kg
Zinc Metal Complex Dye:	LD50 Oral Rat 1,800 mg/kg

Irritation: May cause mild eye irritation.

Corrosivity: This is not a corrosive product.

Sensitization: This product is not expected to cause sensitization. None of the components are respiratory or skin sensitizers.

Specific Target Organ Toxicity:

Single Exposure: None known.

Repeat Exposure: In a study in rats of chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16 mg/m³) exposure group. A minimal to mild degree of lung fibrosis was observed in 22% of the rats in the middle (4 mg/m³) exposure group. No pulmonary change was reported in the lowest (1 mg/m³) exposure group, the most relevant level to potential human exposures.

Carcinogen Status: IARC (International Agency for Research on Cancer) has classified carbon black and titanium dioxide as group 2B carcinogens (possible human carcinogen). None of the other components of this product at greater than 0.1% are classified as carcinogens by IARC or the EU CLP.

SAFETY DATA SHEET

SDS Number:	370, REV B PITNEY BOWES, INC.	Effective Date:	December 23, 2014
Product Name:	Pitney Bowes Toner Cartridges	Revised Date:	February 22, 2016
		Page:	6 of 7

Germ Cell Mutagenicity: This product is not expected to be a mutagen.

Toxicity for Reproduction: This product is not a reproductive hazard.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Zinc Metal Complex Dye: EC50: Daphnia Magna: 0.73 mg/L/48 hr.
EC50: Desmodesmus subspicatus: 0.64 mg/L/72 hr.

12.2 Persistence and Degradability:

Zinc Metal Complex Dye: Not readily biodegradable

12.3 Bioaccumulative Potential:

No data available for product.

12.4 Mobility in Soil:

No data available for product.

12.5 Results of PBT and vPvB Assessment:

Not required.

12.6 Other Adverse Effects:

None.

SECTION 13: DISPOSAL INFORMATION

13.1 Waste Treatment Methods

Dispose in accordance with local, state or provincial and federal or national regulations.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
EU ADR/RID	None	Not regulated for transport	None	None	No
IATA:	None	Not regulated for transport	None	None	No
IMDG	None	Not regulated for transport	None	None	No

14.6 Special Precautions for User:

None

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:

Not applicable

SAFETY DATA SHEET

SDS Number:	370, REV B PITNEY BOWES, INC.	Effective Date:	December 23, 2014
Product Name:	Pitney Bowes Toner Cartridges	Revised Date:	February 22, 2016
		Page:	7 of 7

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

INTERNATIONAL REGULATIONS

German WGK: Not determined.

15.2 Chemical Safety Assessment:
Not required

SECTION 16: OTHER INFORMATION

GHS Phrases for Reference (See Section 2 and 3):

H228 Flammable solid.

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Acute Tox. 4 - Acute Toxicity Category 4

Aquatic Acute. 1 - Aquatic Acute Toxicity Category 1

Aquatic Chron. 1 - Aquatic Chronic Toxicity Category 1

Flam. Solid 1 – Flammable Solid Category 1

SDS Prepared By: Chemical Review Board
Date Revised: February 22, 2016

Revision Summary: Update and change Section 15. Remove EU & WHMIS Statements.

Previous Revision: December 23, 2014