



SAFETY DATA SHEET

SDS Number:	277, REV A PITNEY BOWES, INC.	Effective Date: Revised Date:	April 20, 2007
Product Name:	Pitney Bowes Duster	Page:	1 of 6

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name:	Pitney Bowes Duster	
Reorder Number:	903-K, CK0-2, CK0-3	
Manufacturer:	Pitney Bowes Inc.	
Address:	1 Elmcroft Road, Stamford, CT 06926-0700	
For SDS Copies:	www.pb.com (go to search)	North America: 800-243-7824 <i>International:</i> 00 44 1279 449479
Emergency/Chemtrec:	800-424-9300 <i>North America</i>	00-1-703-527-3887 <i>International</i> (collect call)
MSDS Prepared By:	Chemical Review Board	
WHMIS Reviewed	April 20, 2007	

SECTION 2 – HAZARDS IDENTIFICATION

Emergency Overview:	Colorless gas with a faint ethereal odor. Non-flammable material. Contents under pressure. Heated can may rupture. May cause eye and skin irritation. Liquid may freeze tissues. Overexposure may cause dizziness and loss of concentration. At higher levels, CNS depression and cardiac arrhythmia may result from exposure. High concentrations of vapor may reduce oxygen available for breathing. May decompose on contact with flames or very hot metal surfaces to produce toxic and corrosive materials.
EU Preparation Classification (1999/45/EC):	Not classified as dangerous.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS NO./EINECS NO.	%	EC SUBSTANCE CLASSIFICATION (67/548/EEC)
1,1,1,2-Tetrafluoroethane (HFC-134a)	811-97-2 / 1212-377-0	100	None

See Section 16 for full text of EC Classification and R Phrases

SECTION 4 – FIRST AID MEASURES

Eyes:	Immediately flush eyes with plenty of water for at least 20 minutes, holding eyelids open to assure thorough rinsing. For frostbite, water should be lukewarm, not hot. Get medical attention if irritation persists.
Skin:	Promptly flush skin with water until all the chemical is removed. If irritation develops or persists, get medical attention. If there is evidence of frostbite, bathe (do not rub) with lukewarm (not hot) water and get immediate medical attention.
Ingestion:	Ingestion is unlikely with this product, however if it occurs, DO NOT

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SECTION 4 – FIRST AID MEASURES

	induce vomiting. If conscious, give 2 glasses of water. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.
Inhalation:	If symptoms occur, remove person to fresh air. If irritation or pulmonary symptoms develop, consult a physician.
Notes To Physician:	Because of possible disturbances of cardiac rhythm, catecholamine drugs such as adrenaline or epinephrine should be used with special caution only in situations of emergency life support. Treatment of overexposure should be directed at the control of symptoms and the clinical conditions.

SECTION 5 – FIRE FIGHTING PROCEDURES

Extinguishing Media:	Use any media that is appropriate for the surrounding fire.
Fire Fighting Instructions:	Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored. Cool fire exposed containers with water. Protect against bursting cans.
Unusual Fire and Explosion Hazards:	This material is not flammable at ambient temperatures and atmospheric pressure. However, this material will become combustible when mixed with air under pressure and exposed to strong ignition sources. Contact with certain reactive metals may result in the formation of explosive or exothermic reactions under specific conditions (e.g. very high temperatures and/or appropriate pressures).
Known or Anticipated Hazardous Products of Combustion:	May produce hydrochloric and hydrofluoric acid and possibly carbonyl halides.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Accidental Release Measures:	Wear appropriate personal protective equipment. Ventilate the area and eliminate ignition sources and electric arcs.
Personal Precautions:	Avoid contact with eyes.
Environmental Precautions:	Avoid release to the environment.
Methods for Cleanup:	
Large Spill:	Evacuate unprotected personnel. Protected personnel should remove ignition sources and shut off leak, if without risk, and provide ventilation. Unprotected personnel should not return until the air has been tested and determined safe, including low-lying areas.
Small Spill:	Allow gas to dissipate in a well-ventilated area.

SECTION 7 – HANDLING AND STORAGE

Handling:	Avoid contact with eyes and skin. Avoid breathing vapors and mists. Use with adequate ventilation. Keep away from heat sources, electric arcs and sources of ultra-violet light. Contents under pressure. Do not drop, puncture or incinerate container.
Storage:	Store in a cool, well ventilated area at temperatures below 120°F. Do not store in direct sunlight. Keep out of the reach of children.
Other Precautions:	None required.

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SECTION 8 - EXPOSURE CONTROLS & PERSONAL PROTECTION

Occupational Exposure Limits:	
1,1,1,2-Tetrafluoroethane (HFC-134a) United States	1000 ppm TWA AIHA WEEL
United Kingdom	1000 ppm TWA UK WEL
Engineering Controls:	None required with normal use.
Ventilation Requirements:	General office ventilation is adequate under normal use conditions.
Personal Protective Equipment:	
Eye/Face Protection:	Wear safety glasses or goggles.
Skin Protection:	None required under normal use conditions.
Respiratory Protection:	If ventilation is insufficient, wear suitable supplied air respiratory protection. Respirator selection and use must comply with all applicable regulations.
Other Protective Clothing or Equipment:	None required under normal use conditions.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless gas.
Boiling Point:	-15.1°F (-26.2°C)
Freezing Point:	-149.8°F (-101°C)
Octanol/Water Partition Coefficient:	1.06
Odor:	Faint ethereal
Odor Threshold:	Not available
Percent Volatile:	100%
pH Value:	Neutral
Physical State:	Gas
Reactivity in Water:	None
Solubility in Water:	Negligible
Specific Gravity or Density (Water=1):	1.22
Vapor Density:	3.5 (air=1)
Vapor Pressure:	85.8 psi @ 70°F (21°C)
Volatile Organic Compounds:	0%
Flammable Limits in Air (% by Volume):	Not Applicable
Flash Point:	None
Autoignition Temperature:	>750°F (399°C)

SECTION 10 – STABILITY AND REACTIVITY

Stability:	Stable
Incompatibility With Other Materials:	Do not mix with oxygen or air above atmospheric pressure. Any source of high temperature, such as lighted cigarettes, flames, hot spots, welding may yield toxic and/or corrosive decomposition products. Freshly abraded aluminum surfaces (may cause strong exothermic

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SECTION 10 – STABILITY AND REACTIVITY

	reaction). Chemically active metals: potassium, calcium, powdered aluminum, magnesium, and zinc.
Hazardous Decomposition Products:	May produce hydrochloric and hydrofluoric acid and possibly carbonyl halides.
Hazardous Polymerization:	Will not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

Relevant Routes of Exposure:		Skin contact, inhalation, ingestion, eyes	
<u>Potential Health Effects:</u>			
Eyes:		Liquid contact can cause irritation, which may be severe. Mist may irritate.	
Skin:		Irritation or dermatitis could result from a defatting action on tissue. Liquid contact could cause frostbite.	
Ingestion:		Although ingestion is unlikely, discomfort in the gastrointestinal tract would result from rapid evaporation (boiling) of the material, and consequent evolution of gas. In addition, some of the effects of inhalation would be expected. Necrosis from freezing of tissue could occur.	
Inhalation:		This material has low acute toxicity in animals. When oxygen levels in air are reduced to 12-14% by displacement, symptoms of asphyxiation, loss of coordination, increased pulse rate and deeper respiration will occur. At high levels, cardiac arrhythmia may occur. Very high concentrations may reduce oxygen levels in the air resulting in asphyxiation.	
Medical Conditions Generally Aggravated By Exposure:		Pre-existing skin and heart disorders may be aggravated by prolonged exposure to this product.	
<u>Carcinogenicity:</u>			
NTP:		No	
IARC:		No	
OSHA:		No	
ACGIH:		No	
EU:		No	
OTHER:		No	
Acute Toxicity Data		No animal testing has been conducted on this product as sold. The data reported below is the available data for the product components obtained from the published literature.	
VALUE	ANIMAL	ROUTES	COMPONENTS
LC50: >500,000 ppm/4 hr	Rat	Inhalation	1,1,1,2-Tetrafluoroethane
Cardiac Sensitization Threshold: 80,000 ppm	Dog	Inhalation	1,1,1,2-Tetrafluoroethane
Teratogenic NOEL: 40,000 ppm	Rat and Rabbit	Inhalation	1,1,1,2-Tetrafluoroethane

SECTION 12 - ECOLOGICAL INFORMATION

Ecological Information:	Degradability (BOD): This product is a gas at room temperature, therefore, it is unlikely to remain in water..
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SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Considerations:	Dispose in accordance with local, state or provincial and federal or national regulations. Do not puncture or incinerate containers.
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SECTION 14 - TRANSPORT INFORMATION

<u>U.S. DOT</u>	
Proper Shipping Name:	Consumer Commodity, ORM-D, DOT-SP 10232 Note: Must have a copy of the DOT-SP-10232 with each shipment.
<u>AIR - ICAO OR IATA</u>	
Proper Shipping Name:	1,1,1,2-Tetrafluoroethane
Hazard Class:	2.2
ID Number:	UN3159
Packing Group:	Not applicable
Hazard Labels:	Non-Flammable Gas
Packing Instructions:	200
Special Provisions Code:	None
<u>WATER - IMDG</u>	
Proper Shipping Name:	1,1,1,2-Tetrafluoroethane
Hazard Class:	2.2
ID Number:	UN3159
Packing Group:	Not applicable
Hazard Labels:	Non-Flammable Gas

SECTION 15 - REGULATORY INFORMATION

EU Regulations:	EU: All the components are listed on the EINECS inventory.
EU Labeling:	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Canadian Regulations:	CEPA: All of the components are listed on the Canadian DSL. WHMIS: Class A, Compressed Gas; Class D, Division 2, Subdivision B, Toxic material causing other chronic effects.
Japanese Regulations:	All of the components are listed on the METI inventory.
Australian Regulations:	All of the components are listed in the AICS inventory.
Korean Regulations:	All of the components are listed on the Korean KECL inventory.
Philippine Regulations:	All of the components are listed in the Philippine PICCS inventory.
China Regulations:	All of the components are listed on the Inventory of Existing Chemical Substances in China.
US Federal Regulations:	This product contains chemical or chemical compounds listed in the following SARA Title III categories: Extremely Hazardous Substances (302): None Toxic Chemical Release Reporting (313): None SARA 311/312 Hazards: Acute Health, Pressure TSCA: All the components of this product are listed in the EPA TSCA Inventory.

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SECTION 15 - REGULATORY INFORMATION

US State Regulations:	This product does not contain any chemicals subject to California Proposition 65.
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SECTION 16 - OTHER INFORMATION

<u>NFPA Codes:</u>	
Health:	2
Flammability:	1
Reactivity:	0
<u>HMIS Codes:</u>	
Health:	1
Flammability:	1
Reactivity:	0
Protection:	
EU Classes and Risk Phrases for Reference (See Sections 2 and 3):	None
Other Information:	Keep out of reach of children.