Section 1 - Chemical Product and Company Identification

Product/Chemical Name: BOOKKEEPER DEACIDIFICATION DISPERSION

General Use: Preservation of paper and paper products

Manufacturer: Preservation Technologies, L.P., 111 Thomson Park Drive, Cranberry Twp., PA 16066, Phone (724) 779-2111, Fax (724) 779-9808 (24 hours M-F), (emergency: (724) 779-2111 or 1-800-416-2665

Section 2 - Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>%wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfluoro Compounds</td>
<td>86508-42-1</td>
<td>&gt;99%</td>
</tr>
<tr>
<td>Magnesium Oxide</td>
<td>1309-48-4</td>
<td>&lt;0.5%</td>
</tr>
<tr>
<td>Surfactant (proprietary)</td>
<td></td>
<td>&lt;0.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH REL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
<td>TWA</td>
<td>STEL</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

If Product Is In Aerosol Can: Store below 120°F, out of sunlight and away from heat sources. Do not puncture or incinerate. Avoid contact with skin and eyes. Vapor may be harmful. Misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Potential Health Effects

Acute Effects: Not expected to present a hazard when used with good industrial hygiene practices.

Inhalation: Health effects from inhalation are not expected unless product is over heated and decomposition occurs.

Eye: Contact with the eyes during product use is not expected to result in significant irritation.

Skin: Contact with the skin during product use is not expected to result in significant irritation.

Ingestion: Ingestion is not a likely route of exposure to this product.

Carcinogenity: IARC, NTP, and OSHA do not list BOOKKEEPER DEACIDIFICATION DISPERSION as a carcinogen.

Medical Conditions Aggravated by Long-Term Exposure: None known.

Chronic Effects: None known.

Section 4 - First Aid Measures

Inhalation: If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

Eye Contact: Immediately flush eyes with large amounts of clean water for at least 15 minutes. Call a physician.

Skin Contact: Wash affected area with soap and water.

Ingestion: No need for first aid is anticipated.
Section 5 - Fire-Fighting Measures

Flash Point: None
Flash Point Method: Not applicable
Burning Rate: None
Autoignition Temperature: Nonflammable
LEL: Nonflammable
UEL: Nonflammable
Flammability Classification: Nonflammable
Extinguishing Media: Nonflammable
Unusual Fire or Explosion Hazards: Exposure to extreme heat can give rise to thermal decomposition.
Hazardous Combustion Products: Hydrogen fluoride, perfluoroisobutylene
Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill/Leak Procedures:
Small Spills: Observe precautions from other sections of this MSDS. Cover spill with inorganic absorbent and place in approved container.
Large Spills
Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.
Cleanup: Material is not a USA EPA hazardous waste. Dispose of in compliance with local, state, and federal regulations.

Section 7 - Handling and Storage

Handling Precautions: No unusual precautions required.
Storage Requirements: Store under normal warehouse conditions away from heat. Keep containers tightly closed.
Regulatory Requirements: None

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:
Ventilation: Local exhaust - for applications at or above the boiling point, use local exhaust ventilation with minimum capture velocity of 50 linear feet/minute.
Respiratory Protection: None when used at ordinary room temperatures with sufficient local exhaust ventilation to maintain airborne concentrations at recognized health and safety levels. As good industrial hygiene practice avoid prolonged breathing of vapors. If material is at or above boiling point, thermal decomposition products may be present. In this case, an OSHA approved air supplied respirator should be used.

Protective Clothing/Equipment: Protective gloves, boots, or aprons are not required at ordinary temperatures. Wear protective eyeglasses or chemical safety goggles, per OSHA eye regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.
Safety Stations: Make emergency eyewash stations, and washing facilities available in work area.
Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse.
Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.
Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance and Odor: Odorless, colorless, turbid liquid
Vapor Pressure: 45 mm Hg approx. at 68°F (20 °C)
Vapor Density (Air=1): 12 approx.
Density: 1.7 g/ml @25°C
Specific Gravity (H₂O=1, at 4 °C): 1.7
pH: Not applicable

Water Solubility: Insoluble
Boiling Point: 80-110°C
Freezing/Melting Point: -90°C approx.
Viscosity: 0.7 centipoise @20°C approx.
Refractive Index: Not applicable
Surface Tension: Not available
Volatile Organics (voc): Exempt 0 g/l
Evaporation Rate: >1.0 (BuOAc=1)

Section 10 - Stability and Reactivity

Stability: BOOKKEEPER DEACIDIFICATION DISPERSION is stable at room temperature in closed containers under normal storage and handling conditions.
Polymerization: Hazardous polymerization cannot occur.
Chemical Incompatibilities - Conditions to Avoid: Finely divided metals, alkali and alkaline earth metals.
Hazardous Decomposition Products: Thermal oxidative decomposition of BOOKKEEPER DEACIDIFICATION DISPERSION can produce hydrogen fluoride and perfluorooisobutylene.

Section 11 - Toxicological Information

Toxicity Data:
Based on manufacturer’s reports

Eye Effects: Minimally irritating
Skin Effects: Minimally irritating
Oral: Practically non toxic
Inhalation: Health effects from inhalation are not expected unless product is overheated and decomposition occurs

Chronic Effects: None known
Carcinogenicity: None known
Mutagenicity: Cannot be adequately tested by Ames Test
Teratogenicity: None known

Section 12 - Ecological Information

The following from manufacturer’s reports

Ecotoxicity: Fathead minnow (pimephales promelas) 96-hr LL50: >1000mg/l
Water flea (daphnia magna) 48 -hr EL50: >1000mg/l
Environmental Degradation: Chemical Oxygen Demand (COD): .0005 g/g 20-day Biochemical Oxygen Demand (BOD20): .00016 g/g
Soil Absorption/Mobility: No Information

Section 13 - Disposal Considerations

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations. As a disposal alternate, incinerate in the presence of a combustible material in an industrial or commercial facility capable of handling halogenated waste. Reclamation of product is recommended if feasible.
Container Cleaning and Disposal: Not regulated
Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Transportation Information:  
Aerosol Cans: Ship Name: Consumer Comm
Cans: DOT HM181  Hazard Class: ORM-D
This product is not regulated - all transportation modes - unless product is in aerosol cans

Section 15 - Regulatory Information

EPA Regulations:
RCRA Hazardous Waste Number: Not listed (40 CFR 261.33) Not USEPA hazardous
RCRA Hazardous Waste Classification (40 CFR 261.77): Not classified
EOCRA HAZARD CLASS: FIRE HAZARD: No; PRESSURE: No; REACTIVITY: No; ACUTE: No
SARA 311/312 Codes:
SARA Toxic Chemical (40 CFR 372.65): Not listed
SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ)

OSHA Regulations:
Air Contaminant (20 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

Section 16 - Other Information

Prepared By: Robert Gaydos
Revision Notes:
Changes in Sections 3, 5, 7, 9 in revision of 2-7-05

Additional Hazard Rating Systems:

Disclaimer: The information in this Material Safety Data Sheet (MSDS) is believed to be correct and the best currently available to us. However, PTLP makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.