MATERIAL SAFETY DATA SHEET

SECTION I: PRODUCT IDENTIFICATION AND USE

Product Name: Automatic Dishwashing Detergent Powder

Manufacturer’s Name: Seventh Generation Detergent, Inc.  
Address: 60 Lake Street, Burlington, VT 05401-5281

Emergency Telephone Number: 800-456-1191  
Product Use: Automatic Dishwashing

SECTION II: HEALTH HAZARD DATA

Emergency Overview: Harmful if swallowed. Contact with eyes may cause irritation. May cause irritation of respiratory tract.

Potential Health Effects:

- Eyes: Ocular Irritant
- Skin: Non-Irritant
- Inhalation: Unknown
- Ingestion: Toxic

SECTION III: PRODUCT INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Concentration (%)</th>
<th>CAS Number</th>
<th>Exposure Limits</th>
<th>Toxicity Data LD₅₀(oral, rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate</td>
<td>10-100</td>
<td>497-19-8</td>
<td>NAV</td>
<td>4,090 mg/kg</td>
</tr>
<tr>
<td>Sodium Sulfate</td>
<td>3-30</td>
<td>7757-82-6</td>
<td>NAV</td>
<td>5,989 mg/kg</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>3-30</td>
<td>7647-14-5</td>
<td>NAV</td>
<td>3,000 mg/kg</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>3-30</td>
<td>77-92-9</td>
<td>NAV</td>
<td>3,000 mg/kg</td>
</tr>
<tr>
<td>Sodium Silicate</td>
<td>1-10</td>
<td>1344-09-8</td>
<td>NAV</td>
<td>1,500-3,200 mg/kg</td>
</tr>
<tr>
<td>Polyspartic Acid</td>
<td>1-10</td>
<td>53320-86-8</td>
<td>NAV</td>
<td>&gt;2,000 mg/kg</td>
</tr>
<tr>
<td>PPG-10-Laureth-7</td>
<td>1-10</td>
<td>68439-51-0</td>
<td>NAV</td>
<td>&gt;2,000 mg/kg</td>
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<tr>
<td>Sodium Percarbonate</td>
<td>1-10</td>
<td>15630-89-4</td>
<td>NAV</td>
<td>2,400 mg/kg</td>
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<tr>
<td>Protease</td>
<td>0.1-1</td>
<td>9014-01-1</td>
<td>NAV</td>
<td>&gt;2,000 mg/kg</td>
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<tr>
<td>Amylase</td>
<td>0.1-1</td>
<td>9000-90-2</td>
<td>NAV</td>
<td>&gt;2,000 mg/kg</td>
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</tbody>
</table>

SECTION IV: FIRST AID MEASURES

First Aid Procedures:

- Eyes: Flush eyes with water immediately after contact. Call a physician if irritation persists.
- Skin: Not Applicable
- Inhalation: Leave the dusty area and seek fresh air exposure. Call a physician if irritation persists.
- Ingestion: Drink 4-8 ounces of water or milk immediately. If prolonged nausea or pain occurs call a doctor.

SECTION V: FIRE FIGHTING MEASURES

Flash Point (°C) and Method: Not Applicable

Extinguishing Media: Not Applicable

Special Procedures: None

SECTION VI: ACCIDENTAL RELEASE MEASURES

Spill and Leak Precautions: Wet the spill and clean up with a paper towel.

SECTION VII: HANDLING, DISPOSAL & STORAGE

Handling Procedures and Equipment: Avoid contact with eyes.

Waste Disposal: Any disposal practice must be in compliance with local, state, and federal laws and regulations.

Storage Procedures: KEEP OUT OF REACH OF CHILDREN & PETS. Store in a cool, dry place away from excess heat.

Personal Protective Equipment: Not Applicable

Engineering Controls: Not Applicable

SECTION VIII: PHYSICAL & CHEMICAL PROPERTIES

Physical State: Solid

Color & Appearance: White Granular Powder

pH: 9.5-10.5

Specific Gravity: Not Applicable

Solubility in Water: Miscible

Percent Volatiles: ≤0.5%
**Automatic Dishwashing Detergent Powder**

**Density (g/cc):** 0.95-1.05

**Odor Threshold Limit:** Not Applicable

**SECTION IX: STABILITY & REACTIVITY**

<table>
<thead>
<tr>
<th>Chemical Stability:</th>
<th>Stable</th>
<th>Unstable under the following conditions:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Incompatible Materials:</th>
<th>None Known</th>
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</thead>
<tbody>
<tr>
<td><strong>Hazardous Decomposition Products:</strong></td>
<td>None Known</td>
</tr>
<tr>
<td><strong>Possibility of Hazardous Reactions:</strong></td>
<td>None Known</td>
</tr>
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</table>

**SECTION X: TOXICOLOGICAL INFORMATION**

**Route(s) of Entry:**
- ☒ Skin Contact
- ☐ Skin Absorption
- ☒ Eye Contact
- ☒ Inhalation, Acute
- ☐ Inhalation, Chronic
- ☒ Ingestion

**Effects of Acute Exposure to Product:** Acute exposure may irritate the respiratory tract; however no permanent damage is expected.

**Effects of Chronic Exposure to Product:** Not Applicable

**LD₅₀ of Product:** <5,000 mg/kg

**Chronic Toxicities:**
- ☐ Carcinogenic
- ☐ Reproductive Toxin
- ☐ Teratogenic
- ☐ Mutagenic
- ☒ None

**SECTION XI: ECOLOGICAL INFORMATION**

**Ecotoxicity: LC₅₀ of Product:** <100 mg/L

**Environmental Fate:** This product is biodegradable.

**SECTION XII: PREPARATION INFORMATION**

**Additional Information:** The information in this MSDS relates only to the specific material designated herein and does not relate to use in combination with any other material or any process.

**Sources Used:** General MSDS chemical references

<table>
<thead>
<tr>
<th>Prepared by</th>
<th>Telephone Number</th>
<th>Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seventh Generation, Inc.</td>
<td>800-456-1191</td>
<td>March 1, 2010</td>
</tr>
</tbody>
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