MATERIAL SAFETY DATA SHEET

SECTION I – MATERIAL IDENTIFICATION AND USE

Material Name Automatic Dishwashing Detergent Powder			
Manufacturer's Name Seventh Generation, Inc.		**Street Address** 60 Lake Street	
City Burlington	**State** VT	**Zip Code** 05401-5281	**EMERGENCY TELEPHONE NO.** 800-456-1191
Chemical Name NAP	**Chemical Family** NAP	**Chemical Formula** NAP	
Molecular Weight NAP	**Trade Name and Synonym** NAP	**Material Use** Household cleaning	

SECTION II –INGREDIENTS OF MATERIAL

WHMIS Class D2B

Ingredient Name	Concentration (%)	CAS Number or U.N. Number	Exposure Limits	Toxicity Data LD_{50}(oral, rat)
Sodium Carbonate	10-100	479-19-8	TLV 10 mg/m3	2,800 mg/kg
Water	1-10	7732-18-5	NAV	NAV
Sodium Sulphate	3-30	7757-82-6	NAV	Oral LD50 mouse 5,989 mg/kg
Sodium Chloride	3-30	7647-14-5	NAV	3,000 mg/kg
Citric Acid	3-30	77-92-9	NAV	NAV
Sodium Silicate	0.1-10	1344-09-8	NAV	NAV
Polymeric salt	0.1-10	68479-09-4	NAV	>5,000 mg/kg
Ethoxylated/Propoxylated Alcohol	0.5-5	N/A	NAV	NAV
Sodium Perborate Monohydrate	0.5-5	10332-33-9	NAV	(female) 890; (male) 1,300 mg/kg
Enzyme Protease	0.1-1	01/01/9014	TLV 0.00006 mg/m3	>2,000 mg/kg
Enzyme Amylase	0.1-1	9000-90-2	NAV	>2,000 mg/kg

SECTION III – PHYSICAL DATA FOR MATERIAL

Physical State [X] Solid [ ] Liquid	**Color and Appearance** White Granular Powder		**Odor Threshold Limit** NAV	**Specific Gravity** NAP
Vapor Pressure (mm) NAP	**Vapor Density (Air=1)** NAP	**Evaporation Rate** NAP	**Boiling Point** NAP	**Freezing Point** NAP
Solubility in Water Complete at 25C	**Percent Volatiles** < 5	**pH** 9.5-10.5	**Density (g/cc)** 1.02 +/- 0.1	**Coef. Of Oil/Water Distribution:** NAV

SECTION IV – FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammable? If yes, under what conditions? Yes [ ] No [X]			
Means of Extinction NAP			
Special Procedures NAP			
Flashpoint (°C) and Method NAP	**Upper Explosion Limit (% by Volume)** NAV	**Lower Explosion Limit (% by Volume)** NAV	
Auto Ignition Temperature (°C) NAV	**TDG Flammability Classification** NAP	**Hazardous Combustion Products** NAV	
Sensitivity to Impact Sensitivity to Chemical Impact	**Rate of Burning** NAP	**Explosive Power** NAP	**Sensitivity to Static Discharge** NAV

SECTION V – REACTIVITY DATA

Chemically Stable? If no, under what conditions? Yes [X] No [ ]
Incompatible with other substances? If yes, which ones? Yes [ ] No [X]
Reactivity, and under what conditions? Not reactive
Hazardous Decomposition Products NAP

SECTION VI – TOXICOLOGICAL PROPERTIES OF PRODUCT

Route of Entry
[X] Skin Contact [ ] Skin Absorption [X] Eye Contact [X]Inhalation, Acute [ ] Inhalation, Chronic [X] Ingestion

Effects of Acute Exposure to Product
Irritation to eyes and nose may occur at very high concentrations. If ingested call Physician immediately.

Effects of Chronic Exposure to Product
Prolonged and repeated exposure may cause eye and skin irritation.

LD_{50} of Product	Irritancy of Product	Exposure Limits of Product
NAV	May cause irritation to eyes and skin	NAV
LC_{50} of Product	Sensitization to Product	Synergistic Materials
NAV	NAV	NAV

Chronic Toxicities
[ ] Carcinogenic [ ] Reproductive Toxin [ ] Teratogenic [ ] Mutagenic

SECTION VII – PREVENTATIVE MEASURES

Personal Protective Equipment	Respiratory	Eye	Footwear
	3M 8233 Mask or equivalent	Safety Glasses	Boots, if necessary

Gloves	Other
Cloth gloves	Eye wash fountains are recommended

Clothing
Coveralls

Engineering Controls
Local exhaust ventilation

Leak and Spill Procedures
Small amounts should be flushed to sanitary sewers, if permitted by Local/Provincial Regulations

Waste Disposal
Landfill- Dispose according to appropriate regulations

Handling Procedures and Equipment
Avoid ingestion & inhalation, wear P.P.E. & avoid generating dust.

Storage Requirements
Store in a cool, dry place away from excessive heat. Store between 10-48C

Special Shipping Information
NAP

SECTION VIII – FIRST AID MEASURES

Skin
Avoid contact with skin and eyes.

Eyes
Wash eye with water immediately after contact for 15 minutes. Call a physician if irritation persists.

Inhalation
Move person to fresh air, if severe contact a physician.

Ingestion
Call a physician immediately.

General Advice
NAP

SECTION IX – 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
MSDS: General chemical references

Prepared by	Telephone Number	Date
Seventh Generation, Inc.	800-456-1191	27 March 2006