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This product is packaged for retail sale and intended for consumer use. The U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) does not apply to "consumer products" as defined by the U.S. Consumer Product Safety Act and Federal Hazardous Substances Act, including consumer products used in the workplace under typical duration and frequency of exposure as experienced by consumers when used for the intended purpose. This Safety Data Sheet (SDS) is provided as a courtesy to assist with proper use and safe handling. Applicable consumer product use and safety information is provided on the product label and is included for easy reference in Section 16 of this SDS. This SDS is designed to cover both U.S. and Canada. Differences between U.S. and Canadian requirements are noted where applicable.

Section 1: Identification of Product and Company

Product Name	Automatic Dishwasher Detergent (powder)		
	Sen (Ferrary)		
Synonyms	Dishwasher Detergent Powder		
Product Use	Automatic Dishwashing		
Restrictions on Use	Follow directions on the product label		
Manufacturer Name	Seventh Generation, Inc.		
Address	60 Lake Street, Burlington, VT 05401, USA		
Emergency Telephone Number U.S., Canada			
Monday -Friday 8 am - 5 pm ET (except holidays)	1-800-211-4279		
Outside these hours	1-800-255-3924 (ChemTel)		

Section 2: Hazards Identification

Classification		
I U.S.	This product is considered hazardous under the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).	
Canada	This product is considered hazardous under the WHMIS 2015.	

Hazard Category	
Eye Damage/Irritation	Category 2A

Signal Word	
WARNING	

Hazard Statement(s) Causes serious eye irritation

Hazard Pictogram(s)		
Exclamation mark	<u>(1)</u>	

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Precautionary Statement(s) - General - Consumer Products	
If medical advice is needed, have product container or label at hand.	

Keep out of reach of children. Read label before use.

Precautionary Statement(s) - Prevention

Wash hands thoroughly after handling. Wear eye protection.



Precautionary Statement(s) - Response

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Precautionary Statement(s) - Storage

None

Precautionary Statement(s) - Disposal

None

Hazards not otherwise identified

None known

Percent ingredients with unknown acute toxicity

0% of the product consists of ingredients of unknown acute oral toxicity. Refer to Section 3.

Section 3: Composition, Information on Ingredients

Regardless of hazard classification, Seventh Generation discloses all intentionally added ingredients and, if applicable incidental ingredients ≥1% on the consumer product label.

Ingredient	Function	CAS Number	Concentration ¹	LD50 ²
sodium chloride	processing aid	7647-14-5	30% - 100%	3000 mg/kg
sodium sulfate	processing aid	7757-82-6	10% - 30%	5989 mg/kg
sodium carbonate	cleaning agent	497-19-8	10% - 30%	4090 mg/kg
citric acid	water softener	77-92-9	10% - 30%	3000 mg/kg
sodium percarbonate	oxygen stain removal agent	15630-89-4	1% - 3%	1034 mg/kg
ppg-10-laureth-7	cleaning agent	68439-51-0	1% - 3%	>2000 mg/kg
sodium polyaspartate	anti-filming agent	34345-47-6	1% - 3%	>5000 mg/kg
sodium silicate	cleaning enhancer	1344-09-8	≤1%	1960 mg/kg
protease	enzyme soil remover	9014-01-1	≤1%	1800 mg/kg
amylase	enzyme soil remover	9000-90-2	≤1%	>2000 mg/kg

 $^{^{\}rm 1}$ Where ranges are shown, the exact concentration has been withheld as a trade secret.

Section 4: First Aid Measures

IFve Contact	Promptly flush with large amounts of water for at least 15 minutes. Contact a physician if redness or irritation persists.	
Skin Contact Rinse with water. Remove contaminated clothing and shoes.		
Ilngestion	Do not induce vomiting. Drink 4-8 ounces of water or milk immediately. Contact a poison control center or physician.	
Inhalation	While inhalation of product dust is unlikely, move to fresh air away from dust.	
Notes to Physician	Treat symptomatically.	
Most important symptoms and effects	Acute exposure may result in eye irritation.	

Section 5: Fire Fighting Measures

Suitable Extinguishing Media	As appropriate for surrounding fire. Use water, dry chemical, carbon dioxide or foam.

² LD50 Acute oral toxicity (rat) – This is a value provided by the raw material supplier or scientific literature. It is not a value generated by Seventh Generation by testing using rats. Seventh Generation uses alternative, non-animal based methods and scientific literature to determine the safety classification of our products and their ingredients.



Unsuitable Extinguishing Media Not available.	
Specific Hazards arising from the chemical mixture	Not available.
Hazardous Combustion Products	Not available.
IProtective Equipment and Precautions for Firefighters	Fire fighters should wear full protective clothing and self contained breathing apparatus as for
	surrounding fire.

Section 6: Accidental Release Measures

Personal Precautions		
Industrial Setting Wear appropriate personal protective equipment (refer to Section 8).		
Environmental Precautions	Avoid entry into lakes, streams, ponds or public waterways.	
Methods for Containment and Cleaning Up		
Household Setting	Small spills and leaks may be cleaned up and disposed of in normal household trash.	
	Before attempting clean up, refer to hazard data given. Material may be slippery if spilled and wet. Prevent spill from entering a waterway. Stop spill at source and contain material. Transfer powder to container for recovery or disposal. Dispose liquid in accordance with all applicable local, state, and federal regulations. Small amounts may be flushed to sewer.	

Section 7: Handling and Storage

Safe Handling		
Household Setting	Use as directed on product label.	
Industrial Setting	Wear appropriate personal protective equipment (refer to section 8).	
ISafe Storage	KEEP OUT OF REACH OF CHILDREN AND PETS. Store in original container in a cool, dry place and keep container closed when not in use.	
Storage Incompatibilities None known.		

Section 8: Exposure Controls, Personal Protection

Exposure Limits	None known.	
Engineering Controls	Not applicable.	
Personal Protective Equipment (PPE)		
Household Setting	No special precautions necessary as long as product is used as directed.	
Industrial Setting		
Respiratory Protection	None required under normal conditions. General ventilation required.	
Eye Protection	Goggles or other protective eye wear may be worn for protection.	
Skin Protection	Gloves may be worn for protection.	
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.	

Section 9: Physical and Chemical Properties

Physical State	Solid (powder).	Solid (powder).	
Color	White to light yellow	White to light yellow	
Clarity	Solid	Solid	
Odor	Unfragranced. Characteristic of the ingredients	Unfragranced. Characteristic of the ingredients	
Odor Threshold	Not available.	Not available.	
pH (1% aqueous dilution)	9.4 - 10.0		
Melting Point	Not available.		
Flammability	Not flammable.	Not flammable.	
Upper Explosive Limit (UEL)	Not applicable.		
Lower Explosive Limit (LEL)	Not applicable		



Vapor Pressure (mmHg)	Not available.
Vapor Density (Air = 1)	Not available.
Solubility in Water	Soluble
Auto-Ignition Temperature	Not available.
Decomposition Temperature	Not available.
Bulk Density	Not available.
VOC (weight %)	Not available.

Section 10: Stability and Reactivity

Reactivity	None known.	
Chemical Stability	Stable.	
Possibility of Hazardous Reactions	None known.	
Conditions to Avoid	None known.	
Incompatible Materials		
Household Setting	In general, cleaning products should not be mixed with other household chemicals, unless specifically provided for in the use directions.	
Industrial Setting	Strong oxidizers or reducing agents, strong acids or strong bases.	
Hazardous Decomposition Products	None known.	

Section 11: Toxicological Information

Potential Route(s) of Exposure	Eyes. Skin. Ingestion. Inhalation.
Effects of Acute Exposure	
Oral Toxicity	LD50 >3000 mg/kg, calculated based on ingredients.
Dermal Toxicity	Not available.
Inhalation Toxicity	Not available.
Eye Contact	Moderate Irritant, based on ingredients.
Skin Contact	Non-Irritant, based on Human Repeat Insult Patch Test (HRIPT).
Component Information	Refer to section 3 for ingredient LD50 (acute oral).
Effects of Chronic Exposure	Not expected to have chronic health effects.
Sensitization	Does not indicate a potential for allergic contact sensitization, based on Human Repeat Insult Patch Test (HRIPT).
Carcinogenicity	Not expected to have chronic health effects.
NTP	No Ingredients Listed
IARC	No Ingredients Listed
OSHA	No Ingredients Listed
Reproductive Effects	Not expected to have chronic health effects.
Teratogenicity	Not expected to have chronic health effects.
Mutagenicity	Not expected to have chronic health effects.
Target Organ Effects	Not expected to have chronic health effects.

Section 12: Ecological Information

Ecotoxicity	Not available.	
Persistence and Degradability	Non inorganic components are biodegradable.	
Bioaccumulative Potential	Not applicable.	
Mobility in Soil	Not available.	
Environmental Fate	No adverse effects expected.	

Section 13: Disposal Considerations

Product Waste	Any disposal must be in compliance with applicable local, state, provincial and federal laws and
	regulations.



Household Setting	Product residues in the container may be discarded in trash. When used as directed, the product is septic-safe.	
Industrial Setting	When disposed as waste in its original form, this product is not considered hazardous waste under Federal regulations, however regulations may vary by state or province and may designate it as hazardous waste. Check with your local waste and waste water authorities. We are aware of the following state waste classifications:	
California Hazardous Waste Code	561	
Connecticut Hazardous Waste Code	CT05	
Washington Hazardous Waste Code	WT02	
Empty Packaging	Offer empty container for recycling. If recycling is not available, discard in trash.	

Section 14: Transport Information

U.S. DOT	Not regulated.	
U.S. States	See U.S. DOT for finished product classification for transport.	
I Waste	Regulated in some states if the product is disposed of in its original form as waste by commercial users/handlers. Refer to Section 13. for applicable state waste codes.	
Canadian TDG (Surface Transport)	Not regulated.	
IMDG (Marine Transport)	Not regulated.	
IATA (Air Transport)	Not regulated.	

Section 15: Regulatory Information

u.s.		
Toxic Substances Control Act (TSCA)	This product complies with the inventory requirements of the U.S. Toxic Substances Control Act (TSCA).	
California Prop 65	This product is not subject to the labeling requirements of California's Proposition 65.	
California Air Resources Board (CARB)	Not applicable.	
Canada		
Domestic Substances List (DSL)	This product complies with the inventory requirements under Canada's Domestic Substances List (DSL).	
Right to Know	Regardless of hazard classification, Seventh Generation discloses all intentionally added ingredients and, if applicable incidental ingredients ≥1% on the product label. Please refer to Section 3. of this SDS for ingredient listing.	

Section 16: Other Information

Hazardous Materials Identification System (HMIS) Rating	HEALTH	2
Legend: 4-Severe, 3-Serious, 2-Moderate, 1-Slight, 0-Minimal	FLAMMABILITY	1
	PHYSICAL HAZARDS	0
	PERSONAL PROTECTION	A

National Fire Protection Association (NFPA) Rating	Not determined
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Consumer Product Label Information



CAUTION:

HARMFUL IF SWALLOWED

EYE IRRITANT

HOW TO USE

LOAD DISHWASHER: Make sure items are dishwasher safe. Load items with soiled surfaces facing the center and keep taller items away from the center. Silver, aluminum, and stainless steel should be washed in separate loads to avoid discoloration.

ADD DETERGENT: Fill main dispenser cup according to machine directions and close the dispenser door.

Close between uses. Store in a cool, dry place.

KEEP OUT OF REACH OF CHILDREN. CAUTION: EYE IRRITANT. HARMFUL IF SWALLOWED. Avoid contact with eyes. FIRST AID TREATMENT: For product contents see ingredient list. CONTACT WITH EYES: Flush immediately with water for at least 15 minutes and consult a physician. IF SWALLOWED: Drink plenty of water and consult a physician.

Prepared by	Seventh Generation Inc.
Issuing Date	22 April 2016
Revision Date	22 April 2016
Revision Note	Revised Sections 2. and 16.

Please note: This product is manufactured and marketed for consumer use and should be used as directed on the product label for the intended purpose. Seventh Generation warrants that this product conforms to our standard specification when released to the market and when used according to directions. To the best of our knowledge, the information contained herein is accurate. However, we do not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any product is the sole responsibility of the user. All products may present unknown hazards and should be used with requisite caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Other abbreviations used in this document:

DOT – (U.S.) Department of Transportation

EPA – (U.S.) Environmental Protection Agency

IARC - International Agency for Research on Cancer

NTP - (U.S. Department of Health and Human Services) National Toxicology Program

OSHA – (U.S.) Occupational Safety and Health Administration

TDG – (Canadian) Transport of Dangerous Goods

WHMIS - (Canadian) Workplace Hazardous Materials Information System

End of Safety Data Sheet