

## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/11/2018

Reviewed on 05/11/2018

### 1 Identification

• **Product Identifier**

• **Trade Name: Automatic Dishwasher Detergent Packs**

• **Relevant identified uses of the substance or mixture and uses advised against:** Household Product

• **Product Description:** Automatic dishwasher unit dose detergent powder within a water soluble film

• **Application of the substance / the mixture:**

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. This Safety Data Sheet (SDS) is provided to assist with proper use and safe handling of this product. Other applicable consumer product use and safety information can be found on the product label.

• **Details of the Supplier of the Safety Data Sheet:**

• **Manufacturer/Supplier:**

Greenology Products, Inc.  
8305 Falls of the Neuse Road, Suite 206  
Raleigh, NC 27615  
Phone: 919-518-0908  
Fax: 919-845-0084  
<http://www.greenshieldorganic.com/>

• **Emergency telephone number:** ChemTel 24 Hours 800-255-3924

### 2 Hazard(s) Identification

• **Classification of the substance or mixture:**



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.

• **Label elements:**

• **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

• **Hazard pictograms:**



GHS05

• **Signal word:** Danger

• **Hazard-determining components of labeling:**

Sodium percarbonate

• **Hazard statements:**

H318 Causes serious eye damage.

• **Precautionary statements:**

P280 Wear eye protection / face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor.

• **Unknown acute toxicity:**

This value refers to knowledge of known, established toxicological or ecotoxicological values.

• **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

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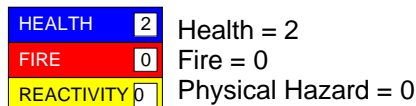
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**Trade Name: Automatic Dishwasher Detergent Packs**

· **NFPA ratings (scale 0 - 4)**



· **HMS-ratings (scale 0 - 4)**



· **Hazard(s) not otherwise classified (HNOC):** None known

**3 Composition/Information on Ingredients**

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with non-hazardous additions.

· **Dangerous Components:**

497-19-8	Sodium carbonate
	⚠ Eye Irrit. 2A, H319
15630-89-4	Sodium percarbonate
	⚠ Ox. Sol. 2, H272; Eye Dam. 1, H318; Acute Tox. 4, H302; STOT SE 3, H335

· **Additional information:**

The percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200.

**4 First-Aid Measures**

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Rinse with warm water.  
If skin irritation occurs, consult a doctor.
- **After eye contact:**  
Rinse opened eye for at least 15 minutes under running water.  
Seek medical treatment.
- **After swallowing:**  
Do not induce vomiting.  
Rinse out mouth and then drink plenty of water.  
Contact a physician or Poison Control Center immediately.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**  
No further relevant information available.

**5 Fire-Fighting Measures**

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information.
- **Special hazards arising from the substance or mixture:** No further relevant information available.

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### Trade Name: Automatic Dishwasher Detergent Packs

- **Advice for firefighters**
- **Special protective equipment for firefighters:**  
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:** Not required.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**  
Household Environment: Small spills and leaks may be cleaned up and disposed of in normal household trash.  
Industrial Environment: Material may become slippery when wet. Avoid generating and inhaling dust. Sweep up powder and dispose of according to regulations. Avoid releasing large amounts of material to the sewer system.
- **Reference to other sections:**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

• <b>PAC-1:</b>		
497-19-8	Sodium carbonate	7.6 mg/m <sup>3</sup>
144-55-8	Sodium Bicarbonate	13 mg/m <sup>3</sup>
• <b>PAC-2:</b>		
497-19-8	Sodium carbonate	83 mg/m <sup>3</sup>
144-55-8	Sodium Bicarbonate	140 mg/m <sup>3</sup>
• <b>PAC-3:</b>		
497-19-8	Sodium carbonate	500 mg/m <sup>3</sup>
144-55-8	Sodium Bicarbonate	840 mg/m <sup>3</sup>

### 7 Handling and Storage

- **Handling**
- **Precautions for safe handling:**  
Household Environment: Please follow the product label  
Industrial Setting: Wear protective equipment as detailed in section 8
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**  
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.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s):** No further relevant information available.

### 8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.

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- **Control parameters:**
- **Components with occupational exposure limits:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves:** Not applicable.
- **Penetration time of glove material:** Not applicable.
- **Eye protection:** Not necessary under normal conditions.

**9 Physical and Chemical Properties**

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form:** Solid
  - Color:** White with grey specks
- **Odour:** Slight
- **Odor threshold:** Not determined.
- **pH-value:** 10.5-11.0 (in solution)
- **Change in condition**
  - Melting point/Melting range:** Not determined.
  - Boiling point/Boiling range:** Not determined.
- **Flash point:** None
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** Not applicable
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower:** Not determined.
  - Upper:** Not determined.
- **Vapor pressure:** Not determined.
- **Density:**
  - Relative density:** Not determined.
  - Vapor density:** Not determined.
  - Evaporation rate:** Not determined.

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- **Solubility in / Miscibility with:**
  - Water:** Soluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not determined.
  - Kinematic:** Not determined.
- **Other information:** No further relevant information available.

**10 Stability and Reactivity**

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:**  
In a household environment, cleaning products should not be mixed with other household chemicals, unless specifically stated in the use directions.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological Information**

- **Information on toxicological effects:**
- **Acute toxicity:**

<b>LD/LC50 values that are relevant for classification:</b>		
<b>497-19-8 Sodium carbonate</b>		
Oral	LD50	4,090 mg/kg (Rat)
Inhalative	LC50/96 hours	300 mg/l (Fathead Minnow)
<b>15630-89-4 Sodium percarbonate</b>		
Oral	LD50	2,200 mg/kg (Mouse)
		2,400 mg/kg (Rat)

- **Primary irritant effect:**
- **On the skin:** Strong caustic effect on skin and mucous membranes.
- **On the eye:**  
Strong irritant with the danger of severe eye injury.  
Corrosive effect.  
Causes serious eye irritation.
- **Other information (about experimental toxicology):**  
LD50 Acute oral toxicity and Inhalative toxicity values reference published toxicological data.  
The raw material suppliers used by Greenology do not perform testing on animals. Greenology uses alternative, non-animal based methods and published toxicological data to determine the safety classification of our products and their ingredients.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

- **Carcinogenic categories:**

<b>IARC (International Agency for Research on Cancer):</b>
None of the ingredients are listed.

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<ul style="list-style-type: none"> <li>· <b>NTP (National Toxicology Program):</b></li> </ul>
None of the ingredients are listed.
<ul style="list-style-type: none"> <li>· <b>OSHA-Ca (Occupational Safety &amp; Health Administration):</b></li> </ul>
None of the ingredients are listed.

**12 Ecological Information**

<ul style="list-style-type: none"> <li>· <b>Toxicity:</b></li> </ul>
<ul style="list-style-type: none"> <li>· <b>Aquatic toxicity:</b></li> </ul>
<b>497-19-8 Sodium carbonate</b>
EC50 227 mg/l (Daphnia)
<ul style="list-style-type: none"> <li>· <b>Persistence and degradability:</b> No further relevant information available.</li> <li>· <b>Behavior in environmental systems:</b></li> <li>· <b>Bioaccumulative potential:</b> No further relevant information available.</li> <li>· <b>Mobility in soil:</b> No further relevant information available.</li> <li>· <b>Additional ecological information:</b></li> <li>· <b>General notes:</b> Not known to be hazardous to water.</li> <li>· <b>Results of PBT and vPvB assessment:</b></li> <li>· <b>PBT:</b> Not applicable.</li> <li>· <b>vPvB:</b> Not applicable.</li> <li>· <b>Other adverse effects:</b> No further relevant information available.</li> </ul>

**13 Disposal Considerations**

<ul style="list-style-type: none"> <li>· <b>Waste treatment methods</b></li> </ul>
<ul style="list-style-type: none"> <li>· <b>Recommendation:</b> Smaller quantities can be disposed of with household waste. Observe all federal, state and local environmental regulations when disposing of this material.</li> </ul>
<ul style="list-style-type: none"> <li>· <b>Uncleaned packagings</b></li> </ul>
<ul style="list-style-type: none"> <li>· <b>Recommendation:</b> Disposal must be made according to official regulations. Offer empty container for recycling. If recycling is not available, discard in trash.</li> </ul>

**14 Transport Information**

<ul style="list-style-type: none"> <li>· <b>UN-Number:</b></li> </ul>	Non-Regulated Material
<ul style="list-style-type: none"> <li>· <b>DOT, ADR/ADN, ADN, IMDG, IATA</b></li> </ul>	Non-Regulated Material
<ul style="list-style-type: none"> <li>· <b>UN proper shipping name:</b></li> </ul>	Non-Regulated Material
<ul style="list-style-type: none"> <li>· <b>DOT, ADR/ADN, ADN, IMDG, IATA</b></li> </ul>	Non-Regulated Material
<ul style="list-style-type: none"> <li>· <b>Transport hazard class(es):</b></li> </ul>	Non-Regulated Material
<ul style="list-style-type: none"> <li>· <b>DOT, ADR/ADN, ADN, IMDG, IATA</b></li> </ul>	Non-Regulated Material
<ul style="list-style-type: none"> <li>· <b>Class:</b></li> </ul>	Non-Regulated Material
<ul style="list-style-type: none"> <li>· <b>Packing group:</b></li> </ul>	Non-Regulated Material
<ul style="list-style-type: none"> <li>· <b>DOT, ADR/ADN, IMDG, IATA</b></li> </ul>	Non-Regulated Material
<ul style="list-style-type: none"> <li>· <b>Environmental hazards:</b></li> </ul>	Not applicable.
<ul style="list-style-type: none"> <li>· <b>Special precautions for user:</b></li> </ul>	Not applicable.
<ul style="list-style-type: none"> <li>· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</b></li> </ul>	Not applicable.
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	Non-Regulated Material

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**\* 15 Regulatory Information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

• **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

• **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

• **TSCA (Toxic Substances Control Act):**

497-19-8	Sodium carbonate
15630-89-4	Sodium percarbonate
144-55-8	Sodium Bicarbonate
9005-25-8	Starch

• **California Proposition 65:**

• **Chemicals known to cause cancer:**

None of the ingredients are listed.

• **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

• **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

• **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

• **New Jersey Right-to-Know List:**

None of the ingredients are listed.

• **New Jersey Special Hazardous Substance List:**

None of the ingredients are listed.

• **Pennsylvania Right-to-Know List:**

9005-25-8	Starch
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• **Pennsylvania Special Hazardous Substance List:**

None of the ingredients are listed.

• **Carcinogenic categories:**

• **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

• **TLV (Threshold Limit Value established by ACGIH):**

9005-25-8	Starch
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• **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

• **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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**Trade Name: Automatic Dishwasher Detergent Packs**

• **Hazard pictograms:**



GHS05

• **Signal word:** Danger

• **Hazard-determining components of labeling:**

Sodium percarbonate

• **Hazard statements:**

H318 Causes serious eye damage.

• **Precautionary statements:**

P280 Wear eye protection / face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor.

• **National regulations:**

None of the ingredients are listed.

• **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other Information**

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

Consumer Product Label Information

CAUTION:

CAUSES INJURY TO THE EYES

HARMFUL IF SWALLOWED

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: Place one pack in the main dispenser cup and close the dispenser door. Do not unwrap or puncture the pack. Do not handle pack with wet hands. Reseal package.

KEEP OUT OF REACH OF CHILDREN. CAUTION: CAUSES INJURY TO THE EYES. HARMFUL IF SWALLOWED. Avoid contact with eyes, mucous membranes and prolonged skin contact.

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 call a Poison Control Center or physician immediately. Do not induce vomiting.

• **Date of preparation / last revision:** 05/11/2018 / 11

• **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

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NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
NIOSH: National Institute for Occupational Safety and Health  
OSHA: Occupational Safety & Health Administration  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit  
Ox. Sol. 2: Oxidizing solids – Category 2  
Acute Tox. 4: Acute toxicity – Category 4  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

• **\* Data compared to the previous version altered.**

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