MATERIAL SAFETY DATA SHEET

Identity: Automatic Dishwashing Detergent Gel
Brands:
CASCADE BASE (PURE RINSE) GEL: Lemon, Fresh, Orchard Splash, Summertime Showers, Orange, Baking Soda Fresh Scents and Cascade with Extra Bleach Action.
CASCADE BASE (PURE RINSE) GEL with the Power of Clorox: Lemon Scent.

P&G Telephone Number: 800-765-5516
or call Local Poison Control Center or your physician.
Emergency (24 hour) Telephone Number: CHEMTREC 1-800-424-9300

SECTION II - HAZARDS IDENTIFICATION

Potential Health Hazards (Acute and Chronic): (See Section 11 for more information)
Ingestion: Harmful if swallowed or put in mouth. Esophageal irritation possible with exposure to more than one mouthful. Do not induce emesis or further irritation may result from re-exposure.
Eye Contact: Contact may cause irritation.
Skin Contact: Irritating to skin.
Inhalation: None.

Signs and Symptoms of Exposure:
Ingestion: Irritation of the mouth and gastrointestinal tract, with nausea, vomiting, and diarrhea. Substantial ingestions may produce hematemesis and possibly moderate to severe gastrointestinal irritation. Esophageal stricture formation is not expected.
Eye Contact: May cause stinging, tearing, itching, swelling, and/or redness of the eyes.
Skin Contact: May result in transient skin irritation (redness, swelling) upon prolonged contact with undiluted material.
Inhalation: None known.

Medical Conditions Generally Known to be Aggravated by Exposure: None known.

Potential Environmental Effects: (See Section 12 for more information)
Cascade Gel All Scents (0% Sodium Tripolyphosphate)

Ingredients/Chemical Name: Water softeners (carbonate salts), cleaning agent (chlorine bleach), dishware, flatware and dishwasher protection agent (sodium silicate), water thickening agent, buffering agent, stabilizing agent, colorant and perfume.

This mixture, when tested as a whole, is considered an eye and skin irritant within the meaning of the OSHA Hazard Communication Standard.

Cascade Gel falls under Class D, Division 2, Subdivision B (eye or skin irritant) under the Hazardous Products Act. Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200. and/or WHMIS under the HPA:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS No.</th>
<th>Composition Range</th>
<th>LD50/LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbonic acid, sodium salt</td>
<td>Sodium Carbonate</td>
<td>497-19-8</td>
<td>3-7%</td>
<td>1.9 g/kg</td>
</tr>
<tr>
<td>Silicic Acid, Sodium salt</td>
<td>Sodium Silicate</td>
<td>1344-09-8</td>
<td>7-13%</td>
<td>~ 1 g/kg</td>
</tr>
<tr>
<td>Hypochlorous acid, sodium salt</td>
<td>Bleach</td>
<td>7681-52-9</td>
<td>0.5-1.5%</td>
<td>8.91 g/kg</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>Caustic soda</td>
<td>1310-73-2</td>
<td>0.5-1.5%</td>
<td>500 mg/kg (10% solution)</td>
</tr>
</tbody>
</table>

SECTION IV – FIRST AID INFORMATION

First Aid Procedures:

Ingestion: If swallowed, do NOT induce vomiting. Give a glassful of water and call a poison control centre or physician immediately.

Eye Contact: Flush eyes with water for 15 minutes. If irritation persists, seek medical attention.

Skin Contact: Rinse exposed area with water. If irritation persists, seek medical attention.

Inhalation: Move exposed individual to fresh air.

Note to Physician: (if applicable) Treat symptomatically

Other:

Cascade Gel All Scents (0% Sodium Tripolyphosphate):

Consumer product package has the following precautionary statement: CAUTION: IRRITANT. HARMFUL IF SWALLOWED OR PUT IN MOUTH. MAY IRRITATE EYES OR SKIN. KEEP OUT OF REACH OF CHILDREN. DANGEROUS FUMES FORM WHEN MIXED WITH OTHER PRODUCTS. Do not mix with dishwashing liquids, ammonia, or other cleaning products. Do not get in eyes. Do not get on skin or clothing. Do not breathe fumes. KEEP OUT OF REACH OF CHILDREN. Do not let young children use bottle or touch product in dishwasher. Not for hand dishwashing. Do not reuse bottle. Screw on protective cap tightly after use.

FIRST AID TREATMENT: Contains sodium carbonate, sodium hydroxide, sodium silicate and chlorine bleach. If swallowed or gets in mouth, rinse mouth, give a glassful of water or milk and call a Poison Control Center or doctor immediately. Do not induce vomiting. If in eyes, rinse will with water for 15 minutes. If on skin, rinse well with water.

SECTION V - FIRE FIGHTING INFORMATION

Flash Point (Method Used): > 200°F / >93°C PM Closed Cup

Flammable Properties: Product is non flammable.

Upper Flammable Limit: N/A

Lower Flammable Limit: N/A

Explosive Limits: UEL: N/K LEL: N/K

Auto-ignition Temperature: N/K

Hazardous Combustion Products: Dangerous hypochlorous acid and irritating chloramine gas are released.
Explosion Data (Sensitivity to Mechanical Impact): N/A
Explosion Data (Sensitivity to Static Discharge): N/A

Extinguishing Media:
Suitable: CO₂, water and/or dry chemical
Unsuitable: N/K

Protection of Firefighters:
Specific Hazards Arising from the Material: Acids and ammonia. Contact with aluminium or iron-containing compounds may release hydrogen gas.
Protective Equipment and Precautions for Firefighters: Normal fire fighting gear.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Prior to exposure, cover any exposed skin and eyes. Peel off and wash any clothing that becomes wet with the product.
Environmental Precautions: Products covered by this MSDS, in their original form, when disposed as waste, are corrosive hazardous waste, D002, according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state/provincial and federal regulations.
Methods for Containment: Contain the spill. Try to prevent from reaching waterway or sewer. Cascade Gel is a RCRA corrosive hazardous waste, D002, because of its high pH.
Methods for Cleanup: Do not landfill. Hazardous waste treatment to reduce pH is necessary prior to disposal.
Other Information: (if applicable)

SECTION VII – HANDLING AND STORAGE

Precautions To Be Taken in Handling: None
Precautions To Be Taken in Storage: None

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:
Sodium Hypochlorite (CAS# 7681-52-9) WEEL STEL (15 min.) is: 2 mg/m3
Sodium Hydroxide (CAS# 1310-73-2) OSHA Z-1 PEL is: 2 mg/m3

Engineering Controls:
Personal Protective Equipment (PPE): Cover clothes as spills will bleach your clothing.
Eye/Face Protection: For splash protection use chemical goggles. Eye wash fountain is desirable.
Skin Protection: Protective gloves (rubber, neoprene) should be used for any direct contact.
Respiratory Protection: None required with normal use.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance (color, physical form, shape): Creamy white or yellow thick, viscous gel.
Odor: Products are perfumed.
Odor Threshold: N/K
Physical State: Liquid gel at 20ºC.
Vapor Pressure (mm Hg): N/K
Vapor Density (Air=1): N/K
Boiling Point: N/K
Partition Coefficient (n-octanol/water): N/K
Flash Point (Method Used): > 200 ºF / >93ºC PM Closed Cup
Solubility in Water: Miscible with water. Contains small amounts of insoluble, colloidal size particles.
Decomposition Temperature: N/K
Evaporation Rate (nBuOAc=1): N/K
Specific Gravity/Density: 1.21 - 1.35 g/ml
Melting/Freezing Point: N/K
Reserve Alkalinity: ~3.0 – 5.6 (to pH 9.0)
pH: (1% solution): 10.5 – 11.5
pH: (neat): 12.5
| **Volatile Organic Compound (VOC):** | Not applicable - Product not regulated for VOC Content at State or Federal level. |
## SECTION X - STABILITY AND REACTIVITY

**Chemical Stability:** Stable

**Conditions to Avoid:** Acids and ammonia. Contact with aluminum or iron-containing compounds may release hydrogen gas.

**Incompatible Materials:** Acids, ammonia, aluminum and iron-containing compounds.

**Hazardous Decomposition Products:** Dangerous hypochlorous acid and irritating chloramine gas are released.

**Possibility of Hazardous Reactions:** Contact with aluminum or iron-containing compounds may release hydrogen gas.

## SECTION XI - TOXICOLOGICAL INFORMATION

Irritating to eye and skin after prolonged, direct contact.

LD50: estimated acute oral LD50 (rats) >2g/kg

ED50: Not necessarily strongly emetic.

**Chronic Effects:** No chronic health effects reported.

**Target Organs:** No target organs reported.

**Carcinogenicity:**
- NTP: No
- IARC: No

## SECTION XII - ECOLOGICAL INFORMATION

Under normal and foreseeable uses, there are no concerns for aquatic organisms exposed to product ingredients at the anticipated environmental concentrations. Relevant environmental data have been reviewed and these indicate that the product is compatible with down-the-drain disposal routes, including municipal wastewater treatment processes and septic tank systems. This product is intended for dispersive use and should not be disposed of directly into the environment.

## SECTION XIII - DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Disposal is to be performed in compliance with federal, state/provincial and local regulations. Products covered by this MSDS, in their original form, when disposed as waste, are corrosive hazardous waste, D002, according to Federal RCRA regulations (40 CFR 261).

**Non Household Setting (federal):** Do not landfill. Hazardous waste treatment to reduce pH is necessary prior to disposal.

**Non Household Setting (California):** Waste Code 561

**Household Use:** Product used in household may be disposed of in refuse or in sewer.

## SECTION XIV - TRANSPORT INFORMATION

**Transportation Information** – Products covered by this MSDS, in their original form, are regulated for transportation.

For finished packaged product transported by ground (US DOT): UN3266, Corrosive liquid, basic, inorganic, n.o.s. (sodium hypochlorite, sodium hydroxide), 8, PG III, Ltd Qty. [May be shipped as a Consumer Commodity ORM-D through 12/31/2013]

For finished packaged product transported by sea (IMDG): UN3266, Corrosive liquid, basic, inorganic, n.o.s. (sodium hypochlorite, sodium hydroxide), 8, PG III, Ltd Qty.

For finished packaged product transported by air (IATA): **DO NOT SHIP.** Finished product packaging does not meet air transport requirements.
SECTION XV - REGULATORY INFORMATION

UNITED STATES - FEDERAL
All intentionally-added components of this product are listed on the US TSCA Inventory.
EPA Registration Number: Not Applicable

SARA chemicals: This product contains the following SARA 313/302/304/311/312 chemicals:

**SARA 311: Cascade Gel All Scents:**
- Sodium Tripolyphosphate (CAS# 7758-29-4) (10-30%)
- Sodium Hypochlorite (CAS# 7681-52-9) (5-10%)
- Sodium Hydroxide (CAS# 1310-73-2) (1-5%)

**Cascade Gel All Scents (0% Sodium Tripolyphosphate):**
- Sodium Hypochlorite (CAS# 7681-52-9) (5-10%)
- Sodium Hydroxide (CAS# 1310-73-2) (1-5%)

**STATES:**
This product is not subject to warning labeling under California Proposition 65.
California Registration Number: Not Applicable.

**State Right-to-Know and CERCLA:**
The following ingredients present in the finished product are listed on state right-to-know lists or state worker exposure lists:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS#</th>
<th>Level</th>
<th>States</th>
<th>CERCLA RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cascade Gel (All Scents):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Tripolyphosphate</td>
<td>7758-29-4</td>
<td>10-30%</td>
<td>IL MA NJ PA</td>
<td>5000 lbs</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>0.5-1.5%</td>
<td>IL MA NJ PA</td>
<td>1000 lbs</td>
</tr>
<tr>
<td>Sodium Hypochlorite</td>
<td>7681-52-9</td>
<td>5-10%</td>
<td>IL MA NJ PA</td>
<td>100 lbs</td>
</tr>
<tr>
<td><strong>Cascade Gel Phosphate Free (All Scents):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>0.5-1.5%</td>
<td>IL MA NJ PA</td>
<td>1000 lbs</td>
</tr>
<tr>
<td>Sodium Hypochlorite</td>
<td>7681-52-9</td>
<td>5-10%</td>
<td>IL MA NJ PA</td>
<td>100 lbs</td>
</tr>
<tr>
<td>Sodium Sulfate</td>
<td>7757-82-6</td>
<td>5-10%</td>
<td>MA     PA</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Canada**
All ingredients are CEPA approved for import to Canada by Procter & Gamble. This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and this MSDS contains all information required by the Controlled Products Regulations.
### SECTION XVI - OTHER INFORMATION

Perfumes contained within the products covered by this MSDS comply with appropriate IFRA guidance.

<table>
<thead>
<tr>
<th>P&amp;G Hazard Rating:</th>
<th>Health:</th>
<th>2</th>
<th>4=EXTREME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flammability:</td>
<td>0</td>
<td>3=HIGH</td>
</tr>
<tr>
<td></td>
<td>Reactivity:</td>
<td>2</td>
<td>2=MODERATE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1=SLIGHT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0=NOT SIGNIFICANT</td>
</tr>
</tbody>
</table>

*N/A. - Not Applicable

*N/K. - Not Known

Data supplied is for use only in connection with occupational safety and health.

**DISCLAIMER:** This MSDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company’s knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations.

This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. Procter & Gamble assumed no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.