1. IDENTIFICATION

Product Name: Cascade Professional™ Automatic Dishwashing Detergent

Product Code(s): 7-80

Product ID: 99300379_PROF_NG

Product Type: Finished Product - Professional Use Only

Recommended Use: Dish Care

Restrictions on Use: Use only as directed on label.

Manufacturer: Procter & Gamble Professional
2 P&G Plaza
Cincinnati, Ohio 45202

Procter & Gamble Inc.
P.O. Box 355, Station A
Toronto, ON M5W 1C5

1-800-332-7787

E-mail Address: pgsds.im@pg.com

Emergency Telephone: Transportation (24 HR)
CHEMTREC - 1-800-424-9300
(U.S./Canada) or 1-703-527-3887
Mexico toll free in country: 800-681-9531

2. HAZARD IDENTIFICATION

This product is classified under 29CFR 1910.1200(d) and the Canadian Hazardous Products Regulation as follows:

Hazard Category
Acute toxicity - Oral: Category 4
Skin corrosion/irritation: Category 2
Eye Damage / Irritation: Category 2A

Signal Word: WARNING

Hazard Statements:
Causes serious eye irritation
Harmful if swallowed
Causes skin irritation

Hazard pictograms
3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients are listed according to 29CFR 1910.1200 Appendix D and the Canadian Hazardous Products Regulation

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Synonyms</th>
<th>Trade Secret</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>-</td>
<td>No</td>
<td>497-19-8</td>
<td>30 - 35</td>
</tr>
<tr>
<td>Silicic acid, sodium salt</td>
<td>-</td>
<td>No</td>
<td>1344-09-8</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Carbonic acid disodium salt, compd.</td>
<td>-</td>
<td>No</td>
<td>15630-89-4</td>
<td>0.5 - 1.5</td>
</tr>
<tr>
<td>with hydrogen peroxide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures for different exposure routes

Eye contact
Rinse with plenty of water. Get medical attention immediately if irritation persists.

Skin contact
Rinse with plenty of water. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth. Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.

Inhalation
Move to fresh air. If symptoms persist, call a physician.

Most important symptoms/effects, acute and delayed
None under normal use conditions.

Indication of immediate medical attention and special treatment needed, if necessary

Precautionary Statements - Prevention
Wash hands thoroughly after handling
Do not eat, drink or smoke when using this product

Precautionary Statements - 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
IF SWALLOWED:
Rinse with plenty of water
Drink 1 or 2 glasses of water
Call a POISON CENTER or doctor/physician if you feel unwell
IF ON SKIN:
Rinse with plenty of water
If skin irritation occurs, get medical advice/attention

Precautionary Statements - Storage
None

Precautionary Statements - Disposal
Dispose of contents/container in accordance with local regulation

Hazards not otherwise classified (HNOC)
None

Revision Date: 07-Apr-2015
5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Dry chemical, CO₂, alcohol-resistant foam or water spray.

Unsuitable Extinguishing Media
None.

Special hazard
None known.

Special protective equipment for fire-fighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Specific hazards arising from the chemical
None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Use personal protective equipment. Do not get in eyes, on skin, or on clothing.

Advice for emergency responders
Use personal protective equipment as required.

Methods and materials for containment and cleaning up

Methods for containment
Prevent dust cloud. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products
None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines
No exposure limits noted for ingredient(s).

Exposure controls

Engineering Measures
Distribution, Workplace and Household Settings:
Ensure adequate ventilation
Product Manufacturing Plant (needed at Product-Producing Plant ONLY):
Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction

Personal Protective Equipment

Eye Protection Distribution, Workplace and Household Settings:
No special protective equipment required

Hand Protection Distribution, Workplace and Household Settings:
For sensitive skin or prolonged use, wear gloves

Skin and Body Protection Distribution, Workplace and Household Settings:
No special protective equipment required

Respiratory Protection Distribution, Workplace and Household Settings:
No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):
In case of insufficient ventilation wear suitable respiratory equipment

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State @20°C</td>
<td>solid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>white powder</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Scented</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH value</td>
<td>11.3</td>
<td>(as 1% solution)</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
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<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
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<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>1.21</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Viscosity of Product</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>Products comply with US state and federal regulations for VOC content in consumer</td>
<td></td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity  None under normal use conditions.
Stability  Stable under normal conditions.
Hazardous polymerization  Hazardous polymerization does not occur.
Hazardous Reactions  None under normal processing.
Conditions to Avoid  None under normal processing.
Materials to avoid  None in particular.
Hazardous Decomposition Products  None under normal use.

11. TOXICOLOGICAL INFORMATION

Product Information
Information on likely routes of exposure

Inhalation  No known effect.
Skin contact  Irritating to skin.
Ingestion  May be harmful if swallowed.
Eye contact  Causes serious eye irritation.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity  May be harmful if swallowed.
Skin corrosion/irritation  Irritating to skin.
Serious eye damage/eye irritation  Causes serious eye irritation.
Skin sensitization  No known effect.
Respiratory sensitization  No known effect.
Germ cell mutagenicity  No known effect.
Neurological Effects  No known effect.
Reproductive toxicity  No known effect.
Developmental toxicity  No known effect.
Teratogenicity  No known effect.
STOT - single exposure  No known effect.
STOT - repeated exposure  No known effect.
Target Organ Effects  No known effect.
Aspiration hazard  No known effect.
Carcinogenicity  No known effect.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>2800 mg/kg bw (Guideline not indicated; rat)</td>
<td>&gt; 2000 mg/kg bw (EPA 16 CFR 1500.40; rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Silicic acid, sodium salt</td>
<td>1344-09-8</td>
<td>3400 mg/kg bw (Similar to OECD 401; standard acute method; rat)</td>
<td>&gt; 5000 mg/kg bw (Read across data on AgSil TM 25 Potassium silicate solution; rat)</td>
<td>&gt; 2.06 mg/L air (Read across data AgSil TM 25 Potassium silicate solution; EPA OPPTS 870.1300; standard acute method; rat)</td>
</tr>
<tr>
<td>Carbonic acid disodium salt, compd. with hydrogen peroxide</td>
<td>15630-89-4</td>
<td>893 mg/kg bw (U.S. EPA Office of Pesticides and Toxic Substances (1984) &quot;Acute Exposure Oral Toxicity&quot;; standard acute method; rat)</td>
<td>&gt; 2000 mg/kg bw (EPA Guideline; standard acute method; rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>
12. ECOLOGICAL INFORMATION

Ecotoxicity
The product is not expected to be hazardous to the environment.

Persistence and degradability
No information available.

Bioaccumulative potential
No information available.

Mobility
No information available.

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste from Residues / Unused Products
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Codes (non-household setting) 331

14. TRANSPORT INFORMATION

DOT
Not regulated

IMDG
Not regulated

IATA
Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)
California Proposition 65
This product is not subject to warning labeling under California Proposition 65.

U.S. State Regulations (RTK)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Massachusetts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfuric acid sodium salt (1:2)</td>
<td>7757-82-6</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfuric acid sodium salt (1:2)</td>
<td>7757-82-6</td>
<td>X</td>
</tr>
</tbody>
</table>

International Inventories

United States
All intentionally-added components of this product(s) are listed on the US TSCA Inventory.

Canada
This product is in compliance with CEPA for import by P&G.

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
CEPA - Canadian Environmental Protection Act

16. OTHER INFORMATION

HMIS Ratings
Health hazard 1
Flammability 0
Physical hazard 0

NFPA Ratings
Health hazard 1
Flammability 0
Instability 0

Issuing Date: 09-Jan-2015
Revision Date: 07-Apr-2015

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS