



Procter & Gamble
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MATERIAL SAFETY DATA SHEET

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SECTION I - PRODUCT IDENTIFICATION

Identity: Automatic Dishwashing Detergent Powder

Brands: CASCADE PURE RINSE OR COMPLETE POWDER

Hazard Rating: Health: **1** 4= EXTREME
Flammability: **0** 3= HIGH
Reactivity: **0** 2= MODERATE
1= SLIGHT

Emergency Telephone Number: 1-800-765-5516 or call Local Poison Control Center

SECTION II - COMPOSITION AND INGREDIENTS

Ingredients/Chemical Name: Complexed sodium phosphates and sodium carbonate, oxygen bleaching system and enzymes, nonionic wetting agents, sodium silicate, sodium sulfate, perfume and dye.

Under normal consumer use, this product would not constitute a hazardous product under OSHA Hazard Communication. With increased industrial exposure this mixture, when tested as a whole, is considered an inhalation hazard within the meaning of the OSHA Hazard Communication Standard.

Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200., and/or WHMIS under the HPA:

| <u>Chemical Name</u> | <u>Common Name</u> | <u>CAS No.</u> | <u>Recommended Limits</u> | <u>Composition Range</u> | <u>LD50 and/or LC50</u> |
|----------------------------|--------------------|----------------|---|--------------------------|-------------------------|
| Sodium carbonate | Soda ash | 497-19-8 | N/K | 15-40% | 1.9 g/kg (rats, oral) |
| Perboric acid, sodium salt | Sodium perborate | 7632-04-4 | N/K | 3-7% | >1.1 g/kg (rats, oral) |
| Silicic acid, sodium salt | Sodium silicate | 1344-09-8 | N/K | 3-7% | ~1.8 g/kg (rats, oral) |
| Amylase enzyme | Amylase | 9000-90-2 | N/K | < 0.1% | > 5 g/kg (rats, oral) |
| Subtilisin | Proteolytic enzyme | 9014-01-1 | ACGIH TLV: 0.00006 mg/m ³ | < 0.1% | > 5 g/kg (rats, oral) |
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SECTION III - HAZARDS IDENTIFICATION

Health Hazards (Acute and Chronic):

Ingestion: May cause transient gastrointestinal irritation.
Eye Contact: Contact may cause moderate irritation.
Skin: Mildly irritating to the skin.
Inhalation: Can cause mild respiratory irritation.

Signs and Symptoms of Exposure:

Ingestion: Ingestion of larger amounts leads to emesis.
Eye Contact: Stinging and burning of eyes can occur unless flushed immediately with water.
Skin: Mild irritation is possible with prolonged contact.
Inhalation: Dust irritation is possible.

SECTION IV - FIRST AID INFORMATION

Emergency and First Aid Procedures:

Ingestion: If swallowed, do NOT induce vomiting. Give a glassful of milk or water and call a poison control centre or physician immediately.
Eye Contact: Flush eyes with water for 15 minutes.
Skin: Rinse exposed area with water.
Inhalation: Leave dusty area.

Other: Consumer product packages have a caution statement:

Front Panel: CAUTION: HARMFUL IF SWALLOWED. MAY IRRITATE EYES OR SKIN.

Side Panel: CAUTION: Do not get in eyes. Do not get on skin or clothing. KEEP OUT OF REACH OF CHILDREN.
FIRST AID TREATMENT: Contains sodium carbonate, sodium silicate and enzymes. If swallowed, give a glassful of water or milk and call a Poison Control Center or doctor immediately. Do not induce vomiting. If in eyes, rinse with water for 15 minutes. If on skin, rinse well with water.

SECTION V - FIRE FIGHTING INFORMATION

Flash Point: N/A **Explosive Limits:** LEL: N/A
Method Used: N/A UEL: N/A
Extinguishing Media: N/K
Special Fire Fighting Procedures: None.
Unusual Fire Hazards: None known.
Stability Unstable: Conditions to Avoid: None known.
Stable:
Incompatibility (Materials to Avoid): None known.
Hazardous Decomposition/By Products: None known.
Hazardous Polymerization: May Occur: Conditions to Avoid: None known.
Will Not Occur:

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal Precautions: None.

Environmental Precautions: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE/PROVINCIAL AND LOCAL REGULATIONS. Household solutions may be disposed of in sewer.

Steps To Be Taken in Case Material is Released or Spilled: Minimize dust levels while collecting product (see "Inhalation" health effects). Dispose of according to local regulations.

SECTION VII - HANDLING AND STORAGE

Precautions To Be Taken in Handling and Storing: ■ Keep product dry to maintain free-flowing granules.

Other Precautions: None.

SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION

This section only applies to the product when used in an industrial setting.

Respiratory Protection (Specify Type): None required with normal use.

Ventilation: *Local Exhaust:* None required with normal use.

Special: None.

Mechanical (General): General dilution ventilation is acceptable.

Other: None.

Eye Protection: None required.

Protective Gloves: Protective gloves (rubber, neoprene) should be used for prolonged direct contact.

Other Protective Equipment: None required.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (°F): N/K

Specific Gravity (H₂O=1): ~0.94-1.03 g/cc

Vapor Pressure (mm Hg): N/K

Percent Volatile by Volume (%): ~60-65%

Vapor Density (Air=1): N/K

Evaporation Rate (nBuOAc=1): N/K

Odor Threshold: N/K

Freezing Point: N/K

Coefficient of Water/Oil Distribution: N/K

pH (1% solution): ~11.0

Viscosity: N/K

Reserve Alkalinity: 10.8 (to pH 9.5)

Scooped Density: N/K

Solubility in Water: Nearly 100% at 20°C.

Appearance and Odor: White granular agglomerate with blue speckles. Product is perfumed.

Physical State: Solid.

SECTION X - STABILITY AND REACTIVITY

Possible Hazardous Reactions/Conditions: None known.
Conditions to Avoid: None known.
Materials to Avoid: None known.
Hazardous Decomposition Products: None known.
Other Recommendations: None.

SECTION XI - TOXICOLOGICAL INFORMATION

Cascade Pure Rinse and Complete Powders are expected to exhibit a generally low order of acute toxicity. It may be irritating to mucous membranes and the gastrointestinal tract, but it is not known to be corrosive. It is expected to be emetic. Estimated Acute Oral LD50 (rat): > 2 g/kg

SECTION XII - ECOLOGICAL INFORMATION

This product is safe for septic tanks and would not pose an ecological threat unless high concentrations were released into the environment.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE/PROVINCIAL AND LOCAL REGULATIONS. Dry product waste can be landfilled if local restrictions allow.

SECTION XIV - TRANSPORT INFORMATION

The finished, packaged product is not hazardous under DOT.

SECTION XV - ADDITIONAL REGULATORY INFORMATION

All components are listed on the US TSCA Inventory.

No components of Cascade Pure Rinse or Complete Powder are subject to California Proposition 65.

| <u>Chemical Name</u> | <u>CAS#</u> | <u>CERCLA RQ(LBS)</u> |
|-------------------------|-------------|-----------------------|
| Sodium Tripolyphosphate | 7758-29-4 | 5000 lbs |
| Zinc Salts | Mixture | 1000 lbs |

EPCRA (SARA Title III) Section 313 Toxic Chemical: Zinc Salts 1.0% De Minimis Concentration

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 Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

SECTION XVI - OTHER INFORMATION

****N/A. - Not Applicable**

****N/K. - Not Known**

The submission of this MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health.

The information contained herein has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific material designated herein, and does not relate to the use in combination with any other material or any other process. Procter & Gamble assumed no responsibility for injury to the recipient or third persons, for any damage to any property resulting from misuse of the controlled product.