The Procter & Gamble Company
P&G Household Care
Fabric & Home Care Innovation Center
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MATERIAL SAFETY DATA SHEET

MSDS #: **RQ1107223** Issue Date: September, 2011
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SECTION I - PRODUCT IDENTIFICATION

Identity: **Automatic Dishwashing Detergent Powder Phosphate Free Finished Product**

Brands:

CASCADE with the Grease fighting Power of Dawn (Fresh, Lemon, Orachard Splash), CASCADE with Extra Bleach Action (Lemon), CASCADE Extra Action, CASCADE Stainfighter+ (Fresh)

CASCADE Complete (Fresh, Citrus Breeze), CASCADE with Bleach Hydroclean Action (Fresh Rapids), CASCADE Advanced Power (Fresh)

P&G Telephone Number: 800-765-5516 or call Local Poison Control Center or your physician.

SECTION II - HAZARDS IDENTIFICATION

Potential Health Hazards (Acute and Chronic): (See Section 11 for more information)

Ingestion: May cause vomiting if swallowed.

Eye Contact: Contact may cause mild, transient irritation.

Skin Contact: Prolonged/ repeated contact may cause irritation.

Inhalation: Can cause mild respiratory irritation.

Signs and Symptoms of Exposure:

Ingestion: May cause vomiting if swallowed.

Eye Contact: Contact may cause moderate, transient irritation, including redness.

Skin Contact: Contact may cause moderate, transient irritation, including dryness.

Inhalation: Repeated prolonged exposure may cause mild respiratory irritation.

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

Potential Environmental Effects: (See Section 12 for more information)

SECTION III - COMPOSITION AND INGREDIENTS

Ingredients/Chemical Name: 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:

Chemical Name	Common Name	CAS No.	Composition Range	LD50/LC50
Sodium carbonate	Soda ash	497-19-8	15-40%	1.9 g/kg (rats, oral)
Silicic acid, sodium salt	Sodium silicate	1344-09-8	1-5%	~1.8 g/kg (rats, oral)

Carbonic Acid Disodium Salt, Compound with Hydrogen Peroside	Sodium Percarbonate	15630-89-4	1-5%	~1 g/kg (rats, oral)

SECTION IV – FIRST AID INFORMATION

First Aid Procedures:

Ingestion: If swallowed, do NOT induce vomitingGive a glassful of milk or 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: Leave dusty area.

Note to Physician: (if applicable) Treat symptomatically

Other: Consumer product package has the following precautionary statement:

Front Panel: CAUTION: IRRITANT. 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 watera nd 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 (Method Used): N/A

Flammable Properties: Product is non flammable

Upper Flammable Limit: N/A

Lower Flammable Limit: N/A

Explosive Limits: UEL: N/A LEL: N/A

Auto-ignition Temperature: N/A

Hazardous Combustion Products: N/K

Explosion Data (Sensitivity to Mechanical Impact): N/A

Explosion Data (Sensitivity to Static Discharge): N/A

Extinguishing Media:

Suitable: CO_2, water or dry chemical may be used.

Unsuitable: N/K

Protection of Firefighters:

Specific Hazards Arising from the Material: N/K

Protective Equipment and Precautions for Firefighters: Normal fire-fighting gear.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal Precautions: None

Environmental Precautions: Disposal is to be performed in compliance with federal, state/provincial and local regulations. Product must be incinerated.

Methods for Containment: Try to prevent product from reaching waterway.

Methods for Cleanup: Minimize dust levels while collecting product (see "Inhalation" health effects). Dispose of by incineration.

Other Information: (if applicable)

SECTION VII – HANDLING AND STORAGE

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

Precautions To B e Taken in Storage: Store in a cool, dry place.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines: N/A

Engineering Controls: N/A

Personal Protective Equipment (PPE):

Eye/Face Protection: None required with normal use.

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

Respiratory Protection: None required with normal use.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance (color, physical form, shape): White granular agglomerate with speckles.

Odor: Perfumed

Odor Threshold: N/A

Physical State: solid

Vapor Pressure (mm Hg): N/A

Vapor Density (Air=1): N/A

Boiling Point: N/A

Partition Coefficient (n-octanol/water): N/A

Flash Point (Method Used): N/A

Solubility in Water: Nearly 100% at 20ºC.

Decomposition Temperature: N/K

Evaporation Rate (nBuOAc=1): N/K

Specific Gravity/Density: ~0.94-1.03 g/cc target density for Cascade Powders is 1.20 withlower and upper ranges being 1.10-1.30 g/cc

Melting/Freezing Point: N/K

Reserve Alkalinity: 9.39 – 10.93

pH (1% solution): Base powder (Extra Bleach Action, Extra Action, Stainfighter+) 10.94

Complete Powder: 10.95

Hydroclean Action: 9.4

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: N/K

Incompatible Materials: N/K

Hazardous Decomposition Products: N/K

Possibility of Hazardous Reactions: N/K

SECTION XI - TOXICOLOGICAL INFORMATION

Cascade Powders 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

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: Products covered by this MSDS, in their original form, when disposed as waste, are considered non hazardous waste according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state/provincial and federal regulations. Product must be incinerated.

Non Household Setting (federal): Minimize dust levels while collecting product (see "Inhalation" health effects). Dispose of by incineration.

Non Household Setting (Caluifornia): 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 not regulated for transportation.

For finished packaged product transported by ground (US DOT): – not regulated

For finished packaged product transported by sea (IMDG) – not regulated

For finished packaged product transported by air (IATA): – not regulated

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 does not contain any of the following: SARA 313/302/304/311/312

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:

Ingredient	CAS#	Level	States				CERCLA RQ
Sodium Sulfate	7757-82-6	40-70%	MA	PA			N/A
Sodium Percarbonate	15630-89-4	1-5%	NJ				N/A

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.

P&G Hazard Rating:	Health:	1	4=EXTREME
	Flammability:	0	3=HIGH
	Reactivity:	0	2=MODERATE
			1=SLIGHT
			0=NOT SIGNIFICANT

*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.