



The Procter & Gamble Company
P&G Household Care
Fabric & Home Care Innovation Center
5299 Spring Grove Avenue
Cincinnati, OH 45217-1087

MATERIAL SAFETY DATA SHEET

MSDS #: RQ0811825
Supersedes: RQ0808615

Issue Date: October, 2008
Issue Date: May, 2008

SECTION I - PRODUCT IDENTIFICATION

Identity: Automatic Dishwashing Detergent

Finished Product

Brands: CASCADE COMPLETE GEL and CASCADE ADVANCED POWER GEL (Fresh Scent, Lemon Burst Scent, Citrus Breeze Scent, Cascade Complete with Bleach Hydroclean Action (Fresh Rapids Scent) and Cascade Advanced Power)

P&G Telephone Number: 1-800-765-5516 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 transient gastrointestinal irritation. May cause vomiting if swallowed.

Eye Contact: Contact may cause mild irritation.

Skin Contact: Mildly irritating to the skin.

Inhalation: None.

Signs and Symptoms of Exposure:

Ingestion: May cause vomiting if swallowed.

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.

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

SECTION III - COMPOSITION AND INGREDIENTS

Ingredients include phosphate salts and enzymes.

Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200.

<u>Chemical Name</u>	<u>Common Name</u>	<u>CAS No.</u>	<u>Composition</u> <u>Range</u>	<u>LD50/LC50</u>
Boric Acid	Boric Acid	10043-35-3	1-5%	5.1 g/kg (rats, oral)

SECTION IV - FIRST AID INFORMATION**First Aid Procedures:**

Ingestion: Give milk or water and call a physician or poison control center.

Eye Contact: Flush eyes thoroughly with water.

Skin Contact: Rinse exposed area with water.

Inhalation: Move exposed individual to fresh air.

Note to Physician: (if applicable) Treat symptomatically.

Other: Consumer product package has the following precautionary statement: CAUTION: KEEP OUT OF REACH OF CHILDREN. Don't let young children use bottle or touch product in dishwasher. Close protective cap tightly after use. Not for hand dishwashing. Don't reuse bottle.

In case of skin or eye contact, rinse with water. If swallowed or gets in mouth, rinse mouth, drink a glassful of water to dilute and call a Poison Control Center or physician.

SECTION V - FIRE FIGHTING INFORMATION

Flash Point (Method Used): >200°F/93.33°C PM CC

Flammable Properties: Product is not 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/A

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: None

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: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE/PROVINCIAL AND LOCAL REGULATIONS. Do not send liquids to a landfill. Incinerate all product.

Methods for Containment: Prevent spills from reaching a waterway. Sorbents may be used.

Methods for Cleanup: Do not send liquids to a landfill. Incinerate all product.

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:**

Boric Acid (CAS# 10043-05-5) ACGIH TLV: The 8 hour exposure limit is 2 mg/m³

Engineering Controls: N/A

Personal Protective Equipment (PPE):

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): Colored gel with speckles.

Odor: Perfumed.

Odor Threshold: N/A

Physical State: Liquid/Gel

Vapor Pressure (mm Hg): N/A

Vapor Density (Air=1): N/A

Boiling Point: N/A

Partition Coefficient (n-octanol/water):

Volatile Organic Compound (VOC): Not applicable - Product not regulated for VOC Content at State or Federal level.

Flash Point (Method Used): >200°F/ 93.33°C PM CC

Solubility in Water: Miscible in water.

Decomposition Temperature: N/A

Evaporation Rate (nBuOAc=1): N/A

Specific Gravity/Density: 1.26 (g/cc)

Melting/Freezing Point: N/A

Reserve Alkalinity: N/A

pH (1% solution): 8.5

SECTION X - STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: None

Incompatible Materials: Acids

Hazardous Decomposition Products: None

Possibility of Hazardous Reactions: None

SECTION XI - TOXICOLOGICAL INFORMATION

Irritating to eye and skin after prolonged, direct contact. Cascade Complete Gel/Cascade Advanced Power Gel is expected to exhibit a generally low order of acute toxicity. It may be irritant to mucous membrane and the gastrointestinal tract, but it is not known to be corrosive. Estimated Acute Oral LD₅₀ > 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 and federal regulations.

Non Household Setting (federal): Do not send liquids to a landfill. Incinerate all product.

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

SARA 311: Sodium Tripolyphosphate (CAS# 7758-29-4) (10-30%)

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 Tripolyphosphate	7758-29-4	10-30%	IL	MA	NJ	PA		5000 lbs
Boric Acid	1303-86-2	1-5%	IL	MA	NJ	PA	RI	N/A

SECTION XVI - OTHER INFORMATION

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

P&G Hazard Rating:	Health: 2	4=EXTREME
	Flammability: 0	3=HIGH
	Reactivity: 1	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.



The Procter & Gamble Company
 P&G Household Care
 Fabric & Home Care Innovation Center
 5299 Spring Grove Avenue
 Cincinnati, OH 45217-1087

MATERIAL SAFETY DATA SHEET

MSDS #: RQ0808066 (Base)/ RQ0810404 (Complete)
 Supersedes: RQ0806396 (Base)/ RQ0808051 (Complete)

Issue Date: April 2008 / July 2008
 Issue Date: April 2008 / May 2008

SECTION I - PRODUCT IDENTIFICATION	
Identity: Automatic Dishwashing Detergent Powder	Finished Product
Brands:	
CASCADE POWDER and CASCADE EXTRA ACTION POWDER (Fresh Scent, Lemon Scent, Orchard Splash Scent, Cascade Powder with Extra Bleach Action (Lemon Scent) and Cascade Extra Action Powder)	
CASCADE COMPLETE POWDER and CASCADE ADVANCED POWER POWDER (Fresh Scent, Citrus Breeze & Lemon Burst Scent, Cascade Complete Powder with Bleach Hydroclean Action (Fresh Rapids Scent) and Cascade Advanced Power Powder)	
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: 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>Composition Range</u>	<u>LD50/LC50</u>
Sodium carbonate	Soda ash	497-19-8	15-40%	1.9 g/kg (rats, oral)
Silicic acid, sodium salt	Sodium silicate	1344-09-8	7-13%	~1.8 g/kg (rats, oral)

Carbonic Acid Disodium
Salt, Compound with
Hydrogen Peroxide

Sodium Percarbonate 15630-89-4 4-7%

~1 g/kg (rats, oral)

SECTION IV - FIRST AID INFORMATION

First Aid Procedures:

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

Eye Contact: Flush eyes with water for 15 minutes.

Skin Contact: Rinse exposed area with water.

Inhalation: Leave dusty area.

Note to Physician: (if applicable)

Other: Consumer product package has the following precautionary 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 (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: CO₂, 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 Be 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.

Flash Point (Method Used): N/A

Odor: Perfumed

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

Odor Threshold: N/A

Decomposition Temperature: N/K

Physical State: solid

Evaporation Rate (nBuOAc=1): N/K

Vapor Pressure (mm Hg): N/A

Specific Gravity/Density: ~0.94-1.03 g/cc

Vapor Density (Air=1): N/A

Melting/Freezing Point: N/K

Boiling Point: N/A

Reserve Alkalinity: 10.8 (to pH 9.5)

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

pH (1% solution): ~11.0

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

SARA 311 Sodium Tripolyphosphate (CAS# 7758-29-4) (10-30%)

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 Tripolyphosphate	7758-29-4	10-30%	IL	MA	NJ	PA	5000 lbs
Sodium Sulfate	7757-82-6	15-40%	MA	PA			N/A
Sodium Percarbonate	15630-89-4	3-7%	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.