



MATERIAL SAFETY DATA SHEET

According to US Regulation ANSI Z400.1-2004

Print date: 21-Jan-2010

1. PRODUCT AND COMPANY IDENTIFICATION

MSDS Number D0209315

Commercial Product Name Finish Quantum P-free

Formula Number: 1616-023

UPC Code(s) and Size:
Quantum 12ct---0 51700 81687 3
Quantum 20ct---0 51700 81688 0
Quantum 36ct---0 51700 81689 7
Quantum 48ct Club---0 51700 82488 5
Quantum 36+12 Wal-Mart---0 51700 83012 1
Quantum 20+10 Wal-Mart---0 51700 83010 7

Recommended / Intended Use: Detergent for use in domestic automatic dishwashers

Distributor: Reckitt Benckiser Inc.
Morris Corporate Center IV
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225
Telephone: +1 973 404 2600

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Emergency Telephone Number: 1-800-228-4722 (U.S.)
1-800-338-6167 (Canada)

Transportation Emergencies: 1-800-424-9300 (U.S. & Canada) CHEMTREC
Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

2. HAZARDS IDENTIFICATION
Emergency Overview

CAUTION!
HARMFUL IF SWALLOWED
EYE IRRITANT!
Avoid contact with skin and eyes.
DO NOT ingest.

KEEP OUT OF REACH OF CHILDREN
Contains: Sodium Carbonate, Oxygen based bleaching agents, Enzymes

3. COMPOSITION / INFORMATION ON INGREDIENTS
Contains: Sodium Carbonate
Oxygen based bleaching agents
Enzymes

Chemical Name	Proportion (% w/w)	ACGIH - Occupational Exposure Limits - TWAs	OSHA PEL
Sodium carbonate 497-19-8	15 - 30 %	-	-
Sodium percarbonate 15630-89-4	15 - 30 %	-	-
Trisodium citrate 68-04-2	5 - 10 %	-	-
Fatty Alcohol Alkoxylate 68937-66-6	1 - 5 %	-	-
Subtilisin 9014-01-1	0.1 - 1 %	0.00006 mg/m ³ Ceiling	0.00006 mg/m ³ STEL
Alpha Amylase 9000-90-2	< 0.1 %	-	-

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4. FIRST AID MEASURES

Inhalation	Move to fresh air. If symptoms persist, call a physician.
Skin Contact	If skin irritation persists, call a physician. Rinse immediately with plenty of water for at least 15 minutes.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion	DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Clean mouth with water and afterwards drink plenty of water. Consult a physician if necessary.
Notes to Physician	Treat symptomatically
Protection of First-aiders	Use personal protective equipment.
Aggravated Medical Conditions:	No information available.

5. FIRE-FIGHTING MEASURES

Flash point:	> 212°F / 100°C
Suitable Extinguishing Media:	The product is not flammable. All extinguishing media can be used.
Extinguishing media which must not be used for safety reasons:	No information available
Unusual hazards:	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.
Precautions for fire-fighting	Standard procedure for chemical fires.

NFPA:	Health Hazard: 2	Flammability: 0	Physical Hazard: 0
HMS:	Health Hazard: 2	Flammability: 0	Physical Hazard: 0 Personal Protection: B
Key:	(Also see Sections 3 & 8)		

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6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Avoid contact with the skin and the eyes.
Use personal protective equipment.
- Environmental Precautions:** Local authorities should be advised if significant spillages cannot be contained. Do not flush with water.
- Methods for Cleaning Up:** Clean-up methods - small spillage:
Take up mechanically and collect in suitable container for disposal.
Clean contaminated surface thoroughly.
Clean-up methods - large spillage:
Large spills should be diked, contained and collected for later disposal according to local, provincial, state or federal regulations.
- Methods for Containment:** Prevent further leakage or spillage if safe to do so

7. HANDLING AND STORAGE

- Handling:** Wear personal protective equipment
Ensure adequate ventilation
- Storage:** Keep tightly closed in a dry and cool place.
Keep in properly labeled containers.
Keep away from direct sunlight.
Keep at temperatures above 0 °C / 32 °F.
Keep at temperatures below 30 °C / 86 °F.
Protect from water.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL
Sodium carbonate 497-19-8		-
Sodium percarbonate 15630-89-4	-	-
Trisodium citrate 68-04-2	-	-
Fatty Alcohol Alkoxylate 68937-66-6	-	-
Subtilisin 9014-01-1	Ceiling: 0.00006 mg/m ³	0.00006 mg/m ³ STEL
Alpha Amylase 9000-90-2	-	-

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- Engineering Controls:** For occupational exposures, ensure adequate ventilation.
- Environmental exposure controls** Local authorities should be advised if significant spillages cannot be contained
- Personal Protective Equipment**
- Respiratory Protection:** None required under normal usage.
- Eye/Face Protection:** Tightly fitting safety goggles
- Hand Protection:** PVC disposable gloves.
- Skin and Body Protection:** Usual safety precautions while handling the product will provide adequate protection against injury or irritation. Follow product label instructions.
- Hygiene Measures:** Avoid contact with skin, eyes and clothing.



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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid. Liquid.
Appearance:	Tablet (17.8 - 18.2 g)
Colour:	White Red Blue
Odour:	Characteristic.
pH	10.3 (10 %)
Alkaline Reserve [g NaOH/100g]	2.0
Flash Point:	> 100°C / > 212°F
Flammability Limits in Air:	No information available
Autoignition Temperature:	No information available.
Specific Gravity / Density [g/mL]:	No data available.
Vapour Pressure:	Not determined.
Solubility:	soluble in water (300g/L).
- upper:	no data availabel.
- lower:	no data availabel.

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Conditions to Avoid:	Extremes of temperature and direct sunlight. Temperatures below 0 °C / 32 °F above 40 °C / 104 °F Protect against water
Materials to Avoid:	Do not mix with bleach or other household chemicals.
Hazardous Decomposition Products:	Oxides of carbon and unknown organic compounds.
Polymerization:	None under normal processing. Hazardous polymerization does not occur.

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11. TOXICOLOGICAL INFORMATION
PRODUCT TOXICITY DATA

LD₅₀ Oral: >2000 mg/kg (rat) estimated
LD₅₀ Dermal: >2000 mg/kg (rat) estimated
LC₅₀ Inhalation (Dust): >5 mg/m³ (dust) estimated
LC₅₀ Inhalation (Vapor): >20 ml/m³ (vapor) estimated

ACUTE EFFECTS::

Eye Irritation Irritating to eyes.
Skin Irritation None expected during normal conditions of use.
Inhalation None expected during normal conditions of use.
Ingestion Health injuries are not known or expected under normal use.
Sensitization Not expected to be a skin sensitiser.

Specific Effects

Carcinogenic Effects: Not listed as carcinogenic by OSHA, NTP or IARC.
Mutagenic Effects No information available.
Reproductive Toxicity: No information available.
Additional Toxicity Information: Information is based on available component data and toxicity result of similar products.

COMPONENT TOXICITY DATA

Chemical Name	CAS-No	LD50 Oral - with units - Rat - mg/kg	LD50 Dermal - With Units - Rat/Rabbit - mg/kg	LC50 Inhalation - With units - Rat/Rabbit
Sodium carbonate	497-19-8	4090 mg/kg (Rat)		
Sodium percarbonate	15630-89-4	1034 mg/kg (Rat)		
Subtilisin	9014-01-1	3700 mg/kg (Rat)		
Alpha Amylase	9000-90-2	> 7500 mg/kg (Rat)		

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12. ECOLOGICAL INFORMATION**PRODUCT TOXICITY DATA****Ecotoxicity effects****Aquatic toxicity:** No information available**COMPONENT TOXICITY DATA***Sodium carbonate*

497-19-8 (15 - 30 %)

Freshwater Algae EC50 = 242 mg/L 120 h**Freshwater Fish** LC50 = 300 mg/L *Lepomis macrochirus* 96 h**Water Flea** EC50 = 265 mg/L 48 h*Sodium percarbonate*

15630-89-4 (15 - 30 %)

Freshwater Algae h EC50 240 70 mg/L*Trisodium citrate*

68-04-2 (5 - 10 %)

Freshwater Algae h EC50 96 1800 - 3200 mg/L**Other Information****Ozone depletion potential; ODP;** No information available.
(R-11 = 1)**Global Warming Potential (GWP):** No information available.**Additional Ecological Information:** Information given is based on data on the components and the ecotoxicology of similar products.**13. DISPOSAL CONSIDERATION S****Waste from residues / unused products:** Dispose of in accordance with local regulations.**Contaminated Packaging:** Empty containers should be taken to local recyclers for disposal. Dispose of as unused product.**Waste Disposal:** Dispose of according to Local, State, Provincial and / or Federal regulations.

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14. TRANSPORT INFORMATION

General remarks	Not classified as dangerous in the meaning of transport regulations. For long distance transport of bulk material or shrunk pallet take into consideration sections 7 and 10.
DOT	Not regulated
TDG	Not regulated
MEX	Not applicable.
ICAO	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated
RID	Not applicable.
ADR	Not applicable.
ADN	Not applicable.

15. REGULATORY INFORMATION

Chemical Name	PICCS	TSCA	DSL	NDSL	ENCS	CHINA	AICS	EINECS/ ELINCS	South Africa STELs
Sodium carbonate	Present	Present	X		X	X	X	207-838-8	
Sodium percarbonate	Present	Present	X		X	X	X	239-707-6	
Trisodium citrate		Present	X		X	X	X	200-675-3	
Fatty Alcohol Alkoxyate		XU	X			X	X	None	
Subtilisin	Present	XU	IUB#3.4.21.6 2			X	X	232-752-2	
Alpha Amylase		XU	IUB#3.2.1.1			X	X	232-565-6	

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U.S. Regulations:
Sodium carbonate - 497-19-8

NJRTK	Not Listed.
Appearance	Grayish-w hite pow der or lumps
SARA313	None
California Prop. 65	Not Listed

Sodium percarbonate - 15630-89-4

NJRTK	Not Listed.
SARA313	None
California Prop. 65	Not Listed

Trisodium citrate - 68-04-2

NJRTK	Not Listed.
Appearance	None.
SARA313	None
California Prop. 65	Not Listed

Fatty Alcohol Alkoxylate - 68937-66-6

NJRTK	Not Listed.
Appearance	None.
SARA313	None
California Prop. 65	Not Listed

Subtilisin - 9014-01-1

NJRTK	Not Listed.
Appearance	None.
SARA313	None
California Prop. 65	Not Listed

Alpha Amylase - 9000-90-2

NJRTK	Not Listed.
Appearance	None.
SARA313	None
California Prop. 65	Not Listed

WHMIS (Canada)

WHMIS Hazard Class	D2B Toxic materials
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16. OTHER INFORMATION
**National Fire
Protection Association
(U.S.A.):**

HMIS (U.S.A.):

Health Hazard	2
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Flammability:	0
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Physical hazards	0
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PERSONAL PROTECTION	B
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Reason for revision: Update product information

Additional advice: This product should only be used as directed on the label and for the purpose intended.

Prepared by: Regulatory Department

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