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 Procter & Gamble
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MATERIAL SAFETY DATA SHEET

MSDS #: FH/H/2001/LDLS-4WXHY6
 Supersedes: L98031M

Issue Date: 6/18/01
 Issue Date: 11/1/99

SECTION I - CHEMICAL PRODUCT

Identity: **Granular Laundry Detergent**

Brands: **TIDE WITH BLEACH (All variations)**

"KILLS 99.9% OF BACTERIA"

Hazard Rating:

Health: 1

4=EXTREME

Flammability: 0

3=HIGH

Reactivity: 0

2= MODERATE

1=SLIGHT

Emergency Telephone Number: 24hr P&G Operator - 1-800-879-8433 or call Local Poison Control Center

SECTION II - COMPOSITION AND INGREDIENTS

Ingredients/Chemical Name: Sodium nonanoyloxybenzenesulfonate; perboric acid, sodium salt; surfactants (anionic and nonionic) 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>Recommended Limits</u>	<u>Composition Range</u>	<u>LD50/LC50</u>
Sodium carbonate	Soda Ash	497-19-8	N/A	15-40%	LD50=1.86 g/kg LC50=N/A
Linear alkyl benzene sulfonate	C12.3 LAS	68081-81-2	N/A	3-7%	LD50=0.65-1.26 g/kg LC50=N/A
Subtilisin	Protealytic enzyme	9014-01-1	NIOSH/ ACGIH STEL: 0.00006 mg/m3	0.1-1%	LD50=3.7 g/kg LC50=N/A

Under normal consumer use, this product would not constitute a hazardous product under US OSHA Hazard Communication. With increased exposure (compared with consumer use) this mixture, when tested as a whole, is considered an inhalation hazard (enzymes) and an eye irritant within the meaning of the OSHA Hazard Communication Standard.

*Subtilisin is listed on Table Z-1-A (1989 Air Contaminants Rule - 29 CFR 1910.1000). Though Table Z-1-A was revoked on 6/30/93, the following U.S. states continue to enforce Table Z-1-A limits: Alaska, California, Connecticut, Maryland, Minnesota, New Mexico, Vermont, Washington, and Virgin Islands. The OSHA STEL (as listed on Table Z-1-A) is 0.00006 mg/m3.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Minimize dust levels while collecting product (see "Inhalation" health effects). Prevent exposure to dust with NIOSH approved respirators with HEPA filters. Use gloves to minimize skin contact.

Environmental Precautions: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. Small (household) solutions may be disposed of in sewer. Dry product may be landfilled if permitted by local regulations. Do not reuse container except with Tide with Bleach Refill. Discard empty container in trash.

Steps To Be Taken in Case Material is Released or Spilled: Flush small (household) quantities down acceptable sanitary/process sewer. Wipe up small spills with a damp cloth. Dispose of according to local regulations.

SECTION VII - HANDLING AND STORAGE

Precautions To Be Taken in Handling and Storing: Avoid skin contact and breathing product dust. Store in a cool, dry place. Keep product dry to maintain free-flowing granules.

Other Precautions: None

SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection (Specify Type): None required with normal consumer use. Industrial use may require a NIOSH approved respirator with HEPA filters.

Ventilation *Local Exhaust:* None required with normal consumer use. *Special:* None
Industrial use may require LEV.

Mechanical (General): General dilution ventilation is adequate *Other:* None
with normal consumer use.

Eye Protection: None required with normal consumer use.

Industrial setting: If a splash of product in solution is likely, chemical goggles may be needed.

Protective Gloves: None required with normal consumer use.

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

Other Protective Equipment: None required with normal consumer use.

Industrial setting: Protective disposable suits may be required under heavy industrial dust conditions.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point °F: N/A

Specific Gravity (H₂O=1): N/A

Vapor Pressure (mm Hg): N/A

Percent Volatile by Volume (%): N/A

Vapor Density (Air=1): N/A

Evaporation Rate (nBuOAc=1): N/A

Odor Threshold: N/A

Freezing Point: N/A

Coefficient of Water/Oil Distribution: N/A

pH (10% solution): ~10.7

Scooped Density: ~667 g/L

Solubility in Water: Mostly

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

Reserve Alkalinity: ~5

SECTION X - STABILITY AND REACTIVITY

Possible Hazardous Reactions/Conditions: None known

Conditions to Avoid: Open flame

Materials to Avoid: None

Hazardous Decomposition Products: None known

Other Recommendations: None

SECTION XI - TOXICOLOGICAL INFORMATION

LD50 (rats oral): 2.8 - 7.1 g/kg

ED50 approx. 15-119 mg/kg

SECTION XII - ECOLOGICAL INFORMATION

No concerns at relevant environmental concentrations. This product contains an anionic surfactant that has an aquatic LC50 of 0.92 ppm. However, risk assessments on the finished product confirm objective safety of its usage because of the removal and biodegradability kinetics of the surfactant. The surfactant is rapidly biodegradable under aerobic and anaerobic conditions (protocols: OECD 301-B and ECETOC 1988, respectively). The level of biodegradation in both conditions is >70%.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. Small (household) solutions may be disposed of in sewer. Dry product may be landfilled. Do not reuse empty container except with Tide with Bleach Refill. Discard empty container in trash.

SECTION XIV - TRANSPORT INFORMATION

The finished product is non-hazardous under DOT.

SECTION XV - ADDITIONAL REGULATORY INFORMATION

All intentionally-present components of Tide with Bleach are listed on the US TSCA Inventory. No components are affected by Significant New Use Rules (SNURs) under TSCA §5.

Tide with Bleach is not subject to labeling under California Proposition 65.

Sodium carbonate (497-19-8) is listed on the Canadian WHMIS Ingredient Disclosure List (IDL) as item number 1431, with a threshold of 1%.

All ingredients are CEPA approved for import to Canada by Procter & Gamble. This product has been classified with Hazard Criteria of the Canadian Controlled Products Regulation (CPR) and this MSDS contains all information required by the Canadian Products Regulation.

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.