MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

Identity: GRANULAR LAUNDRY DETERGENT FINISHED PRODUCT
Brands: TIDE HE-HIGH EFFICIENCY (ALL SCENTS: REGULAR SCENT)
P&G Telephone Number: 1-800-879-8433 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.
Eye Contact: Contact may cause mild, transient irritation.
Skin Contact: N/A
Inhalation: Heavy exposure to dust may cause transient respiratory tract irritation. Prolonged or repeated heavy exposure to dust may cause respiratory sensitization or symptomatic responses.

Signs and Symptoms of Exposure:
Ingestion: Possible mild gastrointestinal irritation with nausea, vomiting, and/or diarrhea.
Eye Contact: Eye contact with the product or its aqueous solution may produce transient superficial irritation.
Skin Contact: N/A
Inhalation: Heavy exposure to dust may cause transient respiratory tract irritation.
Medical Conditions Generally Known to be Aggravated by Exposure: N/K.

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

SECTION III - COMPOSITION AND INGREDIENTS

Ingredients listed on the product label are: biodegradable anionic surfactants and enzymes.

Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200. and/or WHMIS under the HPA:
This product is hazardous under U.S. OSHA Hazard Communication (eye irritant). With increased exposure compared with consumer use, this mixture, when tested as a whole, is considered an inhalation hazard (enzymes).

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS No.</th>
<th>Composition</th>
<th>LD50/LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate</td>
<td>Soda Ash</td>
<td>497-19-8</td>
<td>7-13%</td>
<td>1.9 g/kg (rats, oral)</td>
</tr>
<tr>
<td>Alkyl Sulfate, Sodium Salt</td>
<td>Alkyl Sulfate</td>
<td>68955-19-1</td>
<td>1-5%</td>
<td>1.3 - 2.1 g/kg (rats, oral)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&amp; Proprietary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linear Alkyl Sulfonate</td>
<td>LAS</td>
<td>68081-81-2</td>
<td>7-13%</td>
<td>0.7 – 1.3 g/kg (rats, oral)</td>
</tr>
<tr>
<td>Sodium Carbonate Peroxide</td>
<td>Percarbonate</td>
<td>15630-89-4</td>
<td>1-5%</td>
<td>1.0 - 3 g/kg (rats, oral)</td>
</tr>
<tr>
<td>Silicic acid, aluminum salt</td>
<td>Zeolite</td>
<td>1344-00-9</td>
<td>15-40%</td>
<td>N/A</td>
</tr>
</tbody>
</table>
**SECTION IV – FIRST AID INFORMATION**

**First Aid Procedures:**

Ingestion: Dilute by drinking 1-2 glasses of water. Do NOT induce vomiting. If symptoms persist, consult a physician.

Eye Contact: Flush eyes thoroughly with lukewarm water for 15 minutes. If irritation persists, consult a physician.

Skin Contact: Rinse exposed area with water. If irritation persists, consult a physician.

Inhalation: Leave dusty area. In rare cases a respiratory reaction can occur which may include tightness of chest and difficulty breathing. If this occurs, seek medical attention immediately.

**Note to Physician:** (if applicable):

**Other:** Consumer product package has the following precautionary statement:

**US:** FRONT LABEL: “CAUTION: EYE IRRITANT. MAY BE HARMFUL IF SWALLOWED. SEE CAUTION ON SIDE PANEL. KEEP OUT OF REACH OF CHILDREN.”

SIDE PANEL: “CAUTION: In case of eye contact, flush with water. If swallowed, give a glassful of water or milk. Call a physician. KEEP OUT OF REACH OF CHILDREN.”

**CANADA:** "CAUTION: MAY IRRITATE EYES. Do not get in eyes. KEEP OUT OF REACH OF CHILDREN. MAY BE HARMFUL IF SWALLOWED. FIRST AID TREATMENT: Contains biodegradable anionic surfactants and enzymes. If swallowed, give a glassful of water or milk and call a Poison Control Centre or doctor immediately. Do not induce vomiting. If in eyes, rinse them well with water for 15 minutes.”

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**SECTION V - FIRE FIGHTING INFORMATION**

**Flash Point (Method Used):** N/A

**Flammable Properties:**

Upper Flammable Limit: N/K

Lower Flammable Limit: N/K

**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/K

**Explosion Data (Sensitivity to Static Discharge):** N/K

**Extinguishing Media:**

Suitable: CO2, water, or dry chemical

Unsuitable: N/K

**Protection of Firefighters:**

Specific Hazards Arising from the Material: N/K

Protective Equipment and Precautions for Firefighters: Firefighters should be equipped with self-contained breathing apparatus to protect against potentially irritating or sensitizing fumes.
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. Minimize prolonged skin contact by using gloves.

Environmental Precautions: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH FEDERAL, STATE/PROVINCIAL AND LOCAL REGULATIONS. Small (household) solutions may be disposed of in sewer. Dry product may be landfilled if permitted by local regulations. Discard empty container in trash. Waste water containing product may be sewered in compliance with all federal and state/provincial regulations, and local ordinances.

Methods for Containment: For dry product spills, collect material in an approved container while minimizing dust generation. Vacuum, as appropriate, remaining dust on floor.

Methods for Cleanup: Recycle or dispose of product, as necessary, in accordance with regulations. Flush small (household) quantities down acceptable sanitary/process sewer. Wipe up small spills with a damp cloth. Dispose of according to local regulations.

Other Information: (if applicable):

SECTION VII – HANDLING AND STORAGE

Precautions To Be Taken in Handling: Avoid breathing product dust.

Precautions To Be Taken in Storage: Store in a cool, dry place. Keep product dry to maintain free-flowing granules.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines: Minimize dust.

Engineering Controls: N/A

Personal Protective Equipment (PPE):
Eye/Face Protection: None required for normal, consumer use.
Skin Protection: None required for normal, consumer use.
Respiratory Protection: None required for normal, consumer use.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance (color, physical form, shape): White powder with or without colored speckles

Odor: Scented and/or unscented.

Odor Threshold: N/A

Physical State: Solid granules at 68°F (20°C)

Vapor Pressure (mm Hg): N/A

Vapor Density (Air=1): N/A

Boiling Point: N/A

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

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

Flash Point (Method Used): N/A

Reserve Alkalinity: ~ 5-8.75 g NaOH/100 mL (at pH=9.5)

Solubility in Water: Mostly soluble at 68°F (20°C)

Decomposition Temperature: N/A

Evaporation Rate (nBuOAc=1): N/A

Specific Gravity/Density: Density 420–650 g/L

Melting/Freezing Point: N/A

pH (of a 1% solution): 10–11.5

SECTION X - STABILITY AND REACTIVITY

Chemical Stability: Stable.

Conditions to Avoid: Open flame.

Incompatible Materials: N/K

Hazardous Decomposition Products: N/K

Possibility of Hazardous Reactions: N/K
SECTION XI - TOXICOLOGICAL INFORMATION

Granular detergent has a relative low order of toxicity. If ingested, it may result in mild gastrointestinal irritation, diarrhea, and/or vomiting. Eye contact with the product or its aqueous solution may produce transient superficial irritation.

**Chronic Effects:** No chronic health effects reported.

**Target Organs:** No target organs reported.

**Carcinogenicity:** This finished consumer product is not carcinogenic.

**NTP:** No

**IARC:** No

SECTION XII - ECOLOGICAL INFORMATION

Based on ecotoxicity and chemical fate data the ingredients in this product are not expected to harm the environment when disposed of through normal routes of use. The surfactants in this detergent are readily biodegradable and well removed during sewage treatment processing.

SECTION XIII - DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** DISPOSAL SHOULD BE IN ACCORDANCE WITH FEDERAL, STATE/PROVINCIAL AND LOCAL REGULATIONS.

**Non-Household Setting (federal):** 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 (California):** Hazardous, in accordance with 22 CCR 66261.20 through 22 CCR 66261.24

**Household Use:** Consumer may discard empty container in trash, or recycle where facilities exist. Consumer produced household solutions may be disposed of down the drain with running water. Product used in household may be disposed of in refuse or in sewer.

SECTION XIV - TRANSPORT INFORMATION

Products covered by this MSDS, in their original form, are not regulated for transportation.

**Ground Transport (US DOT):** Not regulated

**Air Transport (IATA):** Not regulated

**Marine/Water Transport (IMDG):** Not regulated
**SECTION XV - REGULATORY INFORMATION**

While the finished product is not considered hazardous as defined by OSHA in 29 CFR 1910.1200(d), this MSDS contains valuable information critical to the safe handling and proper use of the product.

**United States**

All intentionally added components of this product are listed on the US TSCA Inventory.

EPA Registration Number: Not Applicable.

SARA 313/302/304/311/312 chemicals: None

**California:** This product has been evaluated and does not require 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:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS#</th>
<th>Level</th>
<th>CERCLA RQ</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>IL  MA  NJ PA RI</td>
<td></td>
</tr>
<tr>
<td>Sodium Percarbonate</td>
<td>15630-89-4</td>
<td>1-5%</td>
<td>N/A</td>
<td>X</td>
</tr>
<tr>
<td>Zeolite</td>
<td>1344-00-9</td>
<td>15-40%</td>
<td>N/A</td>
<td>X X X</td>
</tr>
</tbody>
</table>

**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: 1 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 the 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.