SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name(s): Boraxo® Powdered Hand Soap - Original Heavy Duty  
Boraxo® Powdered Hand Soap – Household/Original  
Twenty Mule Team® Powdered Hand Soap

Product Use: Powdered Hand Soap

Formula IDH Number(s): 1758077 (Original Heavy Duty); 1758078 (Household/Original); 1758092 (Twenty Mule Team)

Company Address: The Dial Corporation, a Henkel Company; 19001 N Scottsdale Road; Scottsdale, AZ 85255-9672 USA

Contact Information: Medical Emergencies: 1-888-689-9082   CHEMTREC: 1-800-424-9300 (24 hours daily)

SECTION 2: HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION: This product is a white or pink granular powder with a pleasant fragrance. Direct contact with eyes may cause eye irritation. Repeated or prolonged excessive exposure with skin may cause irritation. No significant environmental effects. Not a fire hazard. Product is stable.

This product is labeled in accordance with guidelines set forth in the Food, Drug, and Cosmetic Act. The use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. The requirements of the Occupational Safety and Health Administration applicable to this Material Safety Data Sheet may differ from the requirements of the FD&C Act and as a result, this MSDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

Regulatory Status: While this product is not considered to be hazardous under OSHA’s Hazard Communication Standard (29 CFR 1900.1200), this MSDS includes valuable information that is critical for safe handling and proper use of this product. This MSDS should be retained and available for employees and other users of this product.

Potential Health Effects

NOTE: The acute health effects described below are those which could potentially occur for the finished product. They are based on the toxicology information available for the finished product and/or each hazardous ingredient, and are consistent with the product type and the likelihood of a specific route of exposure. Known chronic health effects related to exposure to a specific ingredient are indicated.

Eye Contact: Direct contact with powder or dusts may cause irritation with redness, pain, blurred vision, and possibly corneal injury.

Skin Contact: Non irritating to intact skin. Absorption through large areas of damaged skin may produce symptoms similar to those following ingestion.

Ingestion: May cause gastrointestinal disturbances such as headache nausea, vomiting, abdominal pain, and diarrhea, with delayed effects of skin redness and peeling.

Inhalation: Dust may cause mucous membrane irritation with sore throat, sneezing, coughing and shortness of breath.

Subchronic/Chronic Health Effects: No chronic health effects are expected from the intended use of these products or from foreseeable handling of them in the workplace. Nonetheless, the following effects have been reported for a component, sodium borate, and boric acid. Sodium borate upon entry into the body becomes boric acid.

Sodium Borate: Sodium borate and boric acid interfere with sperm production, damage the testes and interfere with male fertility when given to animals by mouth at high doses. Boric acid produces developmental effects, including reduced body weight, malformations and death, in the offspring of pregnant animals given boric acid by mouth.

The above mentioned animal studies were conducted under exposure conditions leading to doses many times in excess of those that could occur through product use or inhalation of dust in occupational settings. Moreover, a human study of occupational exposure to sodium borate and boric acid dusts showed no adverse effect on fertility.

Medical Conditions Generally Recognized As Being Aggravated By Exposure: Pre-existing skin conditions or respiratory illnesses.

Potential Environmental Effects

See Section 12: Ecological Information.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Based on our hazard evaluation, the following chemical substance(s) in this product have been identified as hazardous.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Percent (w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Borate Decahydrate (Borax)</td>
<td>1303-96-4</td>
<td>60 – 100 %</td>
</tr>
</tbody>
</table>
**SECTION 4: FIRST AID MEASURES**

**Eyes:** Rinse eyes immediately with plenty of water, occasionally lifting upper and lower lids, until no evidence of product remains. Get medical attention if pain or irritation persists.

**Skin:** Rinse affected area with plenty of water until no evidence of product remains. Get medical attention if irritation persists.

**Ingestion:** Treat symptomatically and supportively. Maintain airway and respiration. If vomiting occurs, keep head below hips to prevent aspiration. Dilution by rinsing the mouth and giving water or milk to drink is generally recommended. If unconscious, the victim should not be given anything to drink. Contact physician or local poison control center.

**Inhalation:** Remove from exposure area to fresh air. If any symptoms appear, get medical attention.

**Note to Physician:** The physician's judgment should be used to control symptoms and clinical condition based on the individual reactions of the patient.

**SECTION 5: FIRE FIGHTING MEASURES**

**Flammable Properties**

OSHA Flammability Classification: Not applicable

Auto-Ignition Temperature: Not applicable

Flammable/Explosive limits – lower: Not available

Hazardous Combustion Products: Oxides of carbon.

Fire and Explosion Hazard: The fire hazard for this product has not been determined. The hazard(s) of the component(s) with the most severe hazard(s) are: Slight fire hazard when exposed to heat or flame. Dust - air mixtures may ignite or explode.

**Extinguishing Media**

Dry chemical, carbon dioxide, water spray or regular foam.

**Protection of Firefighters**

In case of fire, wear a full-face positive-pressure self-contained breathing apparatus and protective suit. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Use flooding amounts of water as a fog, solid streams may be ineffective. Avoid breathing vapors; keep upwind.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:**

Wear skin, eye and respiratory protection as recommended in Section 8. Stop or reduce any leaks if it is safe to do so. Spills present a slipping hazard. Keep unnecessary personnel away. Ventilate spill area if possible. Make sure area is slip-free before re-opening to traffic.

**Environmental Precautions:**

Small or household quantities may be disposed in regular domestic trash. For larger quantities check with your local disposal authorities.

**Methods for Containment and Clean-Up:**

**SMALL SPILLS:** Sweep or scoop up and place into suitable clean, dry containers for reclamation or later disposal. Wash site of spillage thoroughly with water.

**LARGE SPILLS:** Sweep or scoop up. Dispose in suitable waste container. Keep unnecessary people away from spill.

**SECTION 7: HANDLING AND STORAGE**

**Handling:** Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Keep the containers closed when not in use.

**Storage:** Store in original containers in a cool dry area. Store away from excessive heat and incompatible substances. Storage areas for large quantities (warehouse) should be well ventilated. Keep the containers tightly closed when not in use.

**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

This product is a personal care or cosmetic product. The use of this product by consumers is safe under normal and reasonable foreseen use.

**Worker Exposure Limits**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Borate Decahydrate (Borax)</td>
<td>STEL: 6 mg/m³ (inhalable fraction); TWA: 2 mg/m³ (inhalable fraction)</td>
<td>TWA: 10 mg/m³</td>
<td>N/A</td>
<td>REL: TWA 5 mg/m³</td>
</tr>
<tr>
<td>Soap Dust (Particles Not Otherwise Specified)</td>
<td>TWA: 10 mg/m³ (total dust); 3 mg/m³ (respirable fraction)</td>
<td>TWA: 15 mg/m³ (total dust); 5 mg/m³ (respirable fraction)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Engineering Controls:**

Provide local exhaust or general dilution ventilation to keep exposure to airborne contaminants below the permissible exposure limits where mists or vapors may be generated.
Respirator:
Air contamination monitoring should be carried out where mists or vapors are likely to be generated, to assure that the employees are not exposed to airborne contaminants above the permissible exposure limits. If respiratory protection is required, it must be based on the contamination levels found in the workplace, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA).

For Fire Fighting and Other Immediately Dangerous To Life or Health Conditions:
Any self-contained breathing apparatus that has a full-face piece and is operated in a pressure-demand or other positive-pressure mode. Any supplied-air respirator that has a full-face piece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure demand or other positive-pressure mode.

Clothing: Protective clothing is required where repeated or prolonged skin contact may occur.

Gloves: Chemical-resistant gloves are required where repeated or prolonged skin contact may occur.

Eye/Face Protection: Splash-proof safety glasses are required to prevent eye contact where splashing of product may occur.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White powder</td>
</tr>
<tr>
<td>Odor</td>
<td>Pleasant</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>9.1 (1% Solution)</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammable Properties</td>
<td>See Section 5</td>
</tr>
<tr>
<td>Physical state</td>
<td>Powder</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>None</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>~5% @ 20°C</td>
</tr>
<tr>
<td>Viscosity (Dynamic)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammable Properties</td>
<td>See Section 5</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable under normal ambient temperature (70°F, 21°C) and pressure (1 atm).

Conditions to Avoid: Avoid contact with incompatible substances and excessive heat.

Incompatible Materials: Strong oxidizers, zirconium.

Hazardous Decomposition Products: Thermal decomposition may release toxic and/or hazardous gases, including ammonia.

Possibility of Hazardous Reactions: Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Information Summary: This product is a personal care or cosmetic product. The use of this product by consumers is safe under normal and reasonable foreseen use. Direct contact with eyes may cause eye irritation. Repeated or prolonged excessive exposure with skin may cause irritation.

Component Analysis: The following toxicity information is for the hazardous ingredient(s) when used as technical grade and is provided as reference for the occupational settings.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LD50 / Draize Score</th>
<th>Toxicity / Irritation Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Borate Decahydrate</td>
<td>2,660 mg/kg (rat)</td>
<td>Moderately Toxic</td>
</tr>
<tr>
<td>Sensitization</td>
<td>This product is not considered a skin or respiratory sensitizer.</td>
<td></td>
</tr>
</tbody>
</table>

Carcinogenicity: None of the ingredients in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA).

Mutagenicity: None of the ingredients in this product are known to cause mutagenicity.

Reproductive/Fetal/Developmental effects: None of the ingredients in this product are known to have reproductive, fetal, or developmental hazards.

Target organ toxicity: None of the ingredients in this product are known to have target organ toxicity.

Epidemiological information: None of the ingredients in this product are known to have health-related information in working populations.

SECTION 12: ECOLOGICAL INFORMATION

This product is anticipated to be safe for the environment at concentrations predicted in household settings under normal use conditions.

Environmental Fate: No environmental fate data exists for the product.

Persistence and Degradability: The persistence and degradability of this product has not been determined.

Bioaccumulation Potential: The bioaccumulation potential of this product has not been determined.

Mobility: The mobility of this product (in soil and water) has not been determined.
SECTION 13: DISPOSAL CONSIDERATIONS

Waste Number and Description: Not applicable, not regulated.

Disposal Considerations:
Disposal of products: This product is not a RCRA hazardous waste and can be disposed of in accordance with federal, state and local regulations.
Disposal of packages: Not applicable.
Additional information: Observe all federal, state and local regulations when storing or disposing of this substance.

SECTION 14: TRANSPORT INFORMATION

DOT Transportation of Dangerous Goods – Ground
DOT Hazard Class: Not regulated
DOT Proper Shipping Name: Not applicable
UN/NA Number: Not applicable
Packing Group: Not applicable
Shipping Label Information: Not applicable

International Air Transportation (ICAO/IATA)
ICAO/IATA Hazard Class: Not regulated
ICAO/IATA Proper Shipping Name: Not applicable
UN/NA Number: Not applicable

Water Transportation (IMO/IMDG)
IMO/IMDG Hazard Class: Not regulated
IMO/IMDG Proper Shipping Name: Not applicable

SECTION 15: REGULATORY INFORMATION

Occupational Safety and Health Act:
Hazard Communication Rule, 29 CFR 1910.1200: The Occupational Safety and Health Administration (OSHA) require Material Safety Data Sheets (MSDSs) to provide information about any hazard that may be associated with the product and make this information available in the workplace. Since the use pattern and exposure in the workplace are generally not consistent with those experienced by consumers, this MSDS may contain health hazard information not relevant to consumer use.

United States Regulatory Information:
Food and Drug Administration: This product is regulated as a cosmetic under the Food and Drug Administration.
TSCA: All components of this product are either listed on or exempt from the U.S. Toxic Substances Control Act (TSCA) chemical substance inventory.
EPA CERCLA/SARA TITLE III Superfund Amendment and Reauthorization Act: This product contains no CERCLA/SARA Title III materials.
CERCLA/SARA Section 302 EHS: This product contains no extremely hazardous substances reportable under Sections 302.
CERCLA/SARA 311/312: This product contains no substances reportable under Sections 311/312.
CERCLA/SARA 313: Not applicable - Consumer product. Boron is listed by the SARA Section 110 – Priority List of Hazardous Substances.

State Regulations
California Proposition 65: This product does not contain substances listed under California Proposition 65.

Canada Regulatory Information:
Canadian Environmental Protection Act:
Inventory Status: Some components of this product are not listed on the Canadian Domestic Substances List (DSL) nor the NDSL.

Health Canada:
This product is regulated as a natural health product under the Natural Health Products Directorate.

Worker Hazardous Materials Information System:
WHMIS Classification: Not subject to classification.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, The Dial Corporation makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose. Accordingly, The Dial Corporation will not be responsible for damages of any kind resulting from the use of or reliance upon such information. No representations, or warranties, either expressed or implied of merchantability, fitness for a particular purpose or of any other nature is made hereunder with respect to the information set forth herein or to the product to which the information refers.

NFPA RATINGS (Scale 0-4, where 4=high degree of hazard): HEALTH=1 FLAMMABILITY=0 REACTIVITY=0
HMIS RATINGS (Scale 0-4, where 4=high degree of hazard): HEALTH=1 FLAMMABILITY=0 REACTIVITY=0

Creation Date: 04/24/1992
Supercedes: Rev. 10, 03/26/2012
Revision: Updated Formula I.D. Numbers and Trade Names