

**MATERIAL SAFETY DATA SHEET**  
**MSDS L-112 REVISION 9****SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

The Dial Corporation  
19001 N. Scottsdale Road  
Scottsdale, Arizona 85255-9672

Medical Emergencies: 1-888-689-9082  
Chemtrec: 1-800-424-9300 (24 Hours Daily)  
Other Information: 1-888-468-6673

PRODUCT: Powdered Hand Soap DATE OF ISSUE: March 23, 2009

TRADE NAMES/SYNONYMS: Boraxo® Powdered Hand Soap - Industrial  
Boraxo® Powdered Hand Soap - Special Heavy Duty  
Boraxo® Powdered Hand Soap - Household  
Boraxo® Luron Powdered Hand Soap - Pink  
Twenty Mule Team® Powdered Hand Soap

CHEMICAL FAMILY: Mixture

I.D. NUMBERS: 900606 (Industrial), 900607 (Special Heavy Duty), 900608 (Twenty Mule Team),  
900621 (Household), 900631 (Luron)

**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.

**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.

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### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

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

<u>INGREDIENT</u>	<u>CAS NUMBER</u>	<u>PERCENT (w/w)</u>
Sodium Borate Decahydrate (Borax)	1303-96-4	60 – 100 %
Sodium Soap	67701-11-5 & 67701-10-4	10 – 30 %

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### SECTION 4: FIRST AID MEASURES

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**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. Keep affected person warm and at rest. Treat symptomatically and supportively. Contact physician or local poison control center. If breathing has stopped, give artificial respiration, and get medical attention immediately.

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

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### SECTION 5: FIRE FIGHTING MEASURES

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#### FLAMMABLE PROPERTIES

OSHA FLAMMABILITY CLASSIFICATION: Not applicable

FLASH POINT: None

UPPER FLAMMABILITY LIMIT: Not applicable

LOWER FLAMMABILITY LIMIT: Not applicable

AUTO-IGNITION TEMPERATURE: Not applicable

**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.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of carbon and oxides of sodium.

#### EXTINGUISHING MEDIA

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Dry chemical, carbon dioxide, water spray or regular foam. For larger fires, use water spray, fog 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. Do not scatter spilled material with high-pressure water streams. Dike fire-control water for later disposal. Use agents suitable for type of surrounding fire. Avoid breathing vapors, keep upwind.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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### 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. Ensure clean-up is conducted by trained personnel only. 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.

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## SECTION 7: HANDLING AND STORAGE

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### 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.

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## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

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This product is a personal care or cosmetic product. The use of this product by consumers is safe under normal and reasonable foreseen use. The information provided below refers to the occupational settings.

### WORKER EXPOSURE LIMITS

The following exposure limits exist for the ingredients listed below. The TLV-TWA is the ACGIH Threshold Limit Value – Time Weighted Average. TLV-Ceiling Limit is the ACGIH Threshold Limit Value – Ceiling Limit. PEL-TWA is the OSHA Permissible Exposure Limit. TLV-STEL is the ACGIH Short Term Exposure Limit.

INGREDIENT	CAS NUMBER	EXPOSURE LIMIT
Soap Dust = Particles Not Otherwise Specified:	67701-11-5 & 67701-10-4	TLV-TWA: 10 mg/m <sup>3</sup> (total dust), TLV-TWA: 3 mg/m <sup>3</sup> (respirable fraction), PEL-TWA: 15 mg/m <sup>3</sup> (total dust), PEL-TWA: 5 mg/m <sup>3</sup> (respirable fraction),
Sodium Borate Decahydrate (Borax)	1303-96-4	TLV-STEL: 6 mg/m <sup>3</sup> (inhalable fraction); TLV-TWA: 2 mg/m <sup>3</sup> (inhalable fraction), PEL-TWA: 10 mg/m <sup>3</sup>

**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:** Protective gloves are required where repeated or prolonged skin contact may occur.

**EYE/FACE PROTECTION:** Safety glasses are required to prevent eye contact where dusty conditions may occur.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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APPEARANCE:	White powder	PHYSICAL STATE:	Solid
ODOR/ODOR THRESHOLD:	Pleasant fragrance	VAPOR DENSITY:	Not available
pH (@ 25 °C):	9.1 (1% Solution)	VAPOR PRESSURE:	Not available
BOILING POINT:	Not available	FLASH POINT:	See Section 5.
MELTING/FREEZING POINT:	Not available	SOLUBILITY IN WATER:	~ 5% @ 20 °C
FLAMMABLE PROPERTIES:	See Section 5.	EVAPORATION RATE:	Not available
DENSITY/SPECIFIC GRAVITY:	Not applicable		
OCTANOL/WATER PARTITION COEFFICIENT ( $K_{ow}$ ):	Not available		
VISCOSITY (Dynamic):	Not available		

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## SECTION 10: STABILITY AND REACTIVITY

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**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.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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**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.

INGREDIENT	LD50 / DRAIZE SCORE	TOXICITY / IRRITATION RATING
ACUTE ORAL TOXICITY		
Sodium Borate Decahydrate (Borax)	2,660 mg/kg (rat)	Moderately Toxic

**SENSITIZATION:** This product is not considered a skin or respiratory sensitizer.

**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 TOXICITY: None of the ingredients in this product are known as 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.

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## SECTION 12: ECOLOGICAL INFORMATION

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This product is anticipated to be safe for the environment at concentrations predicted in household settings under normal use conditions. No toxicity information is available for the hazardous ingredient(s).

ENVIRONMENTAL FATE: No environmental fate data exists for the product. The product is anticipated to be rapidly biodegradable.

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.

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## SECTION 13: DISPOSAL CONSIDERATIONS

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WASTE NUMBER AND DESCRIPTION: Not applicable, not regulated.

DISPOSAL CONSIDERATIONS: This product is not a RCRA hazardous waste and can be disposed of in accordance with federal, state and local regulations.

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## SECTION 14: TRANSPORT INFORMATION

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### GROUND TRANSPORT

DOT Hazard Class:	Not regulated	Packing Group:	Not applicable
DOT Proper Shipping Name:	Not applicable	Shipping Label Information:	Not applicable
UN/NA Number:	Not applicable		

### AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Hazard Class:	Not regulated
ICAO/IATA Proper Shipping Name:	Not applicable

### MARINE TRANSPORT (IMDG/IMO)

IMDG/IMO Hazard Class:	Not regulated
IMDG/IMO Proper Shipping Name:	Not applicable

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## SECTION 15: REGULATORY INFORMATION

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### UNITED STATES:

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

The Occupational Safety and Health Administration requires Material Safety Data Sheets to provide any hazards 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 additional health hazard information not pertinent to consumer use.

FOOD AND DRUG ADMINISTRATION:

This product is regulated as a cosmetic under the Food and Drug Administration.

EPA - SARA TITLE III SECTION 313: Not applicable - Consumer product.

EPA CERCLA/SARA TITLE III SUPERFUND AMENDMENT AND REAUTHORIZATION ACT:

This product contains no CERCLA/SARA Title III materials. This product contains no hazardous chemicals reportable under Sections 311/312. This product contains no hazardous chemicals reportable under Section 304.

TSCA: All components of this product are either listed on or exempt from the U.S. Toxic Substances Control Act (TSCA) chemical substance inventory.

### STATE REGULATIONS

CALIFORNIA PROPOSITION 65: This product does not contain substances listed under California Proposition 65.

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**CANADA:****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 cosmetic product under the Cosmetics Programme.

**WORKER HAZARDOUS MATERIALS INFORMATION SYSTEM:****WHMIS CLASSIFICATION:** Not subject to classification.

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**SECTION 16: OTHER INFORMATION**

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**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=1 REACTIVITY=0**  
**HMIS RATINGS** (Scale 0-4, where 4=severe hazard): **HEALTH=1 FLAMMABILITY=1 REACTIVITY=0**

**MSDS CREATION DATE:** 04/24/92**SUPERCEDES:** 08/30/07, Rev. 8**REVISION DATE:** 03/23/09**REVISION:** Updated Company Information.