MATERIAL SAFETY DATA SHEET MSDS L-112 REVISION 4

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SUBSTANCE IDENTIFICATION

SUBSTANCE: POWDERED HAND SOAP

TRADE NAMES/SYNONYMS: BORAXO® POWDERED HAND SOAP (HOUSEHOLD); BORAXO® SPECIAL

HEAVY DUTY POWDERED HAND SOAP; PINK LURON POWDERED HAND SOAP

with SKIN CONDITIONERS; TWENTY MULE TEAM® POWDERED HAND SOAP (WHITE & PINK); BORAXO® INDUSTRIAL POWDERED HAND SOAP

CHEMICAL FAMILY: Mixture

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

White), 900609 & 900630 (Twenty Mule Team, Pink), 900613 & 900631 (Pink

Luron), 900621(Household)

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

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.

HAZARDOUS INGREDIENT INFORMATION

COMPONENT: SODIUM BORATE DECAHYDRATE (BORAX) CAS# 1303-96-4

10 mg/m³ OSHA TWA 5 mg/m³ ACGIH TWA

OCCUPATIONAL EXPOSURE LIMITS:

SOAP DUST = PARTICULATES NOT OTHERWISE CLASSIFIED (PNOC)
15 mg/m³ OSHA TWA (total dust); 5 mg/m³ OSHA TWA (respirable fraction)
10 mg/m³ ACGIH TWA (total dust); 3 mg/m³ ACGIH TWA (respirable fraction)

Carcinogen status of components: Not listed as carcinogenic by NTP, IARC, or OSHA.

PHYSICAL AND CHEMICAL DATA

DESCRIPTION: White or pink granular powder with a pleasant fragrance.

SPECIFIC GRAVITY: 0.898 PH: 9.1 (1% Solution)

SOLUBILITY IN WATER: Approximately 5% @ 20 °C.

FIRE AND EXPLOSION DATA

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:

Dust - air mixtures may explode.

FIRE FIGHTING MEDIA - Dry chemical, carbon dioxide, water spray or regular foam. For larger fires, use water spray, fog or regular foam.

FIRE FIGHTING - 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 hazardous vapors, keep upwind.

HEALTH HAZARD DATA

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.

ACUTE HEALTH EFFECTS:

INHALATION: Dusts may cause mucous membrane and respiratory tract irritation.

SKIN CONTACT: Repeated or prolonged exposure can result in defatting and drying of the skin which may result

in irritation and dermatitis. Absorption of sodium borate through severely damaged skin can result in effects and symptoms similar to those following ingestion. However, there are no cases

of poisoning from occupational exposures reported in the literature.

EYE CONTACT: May cause moderate to severe irritation, with possibility of corneal injury if not removed

promptly.

INGESTION: Large quantities may cause nausea, vomiting, abdominal pain, diarrhea, lethargy, headache,

lightheadness, or atypical rash.

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: Depending upon the dose, 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. Depending upon the dose, 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: Persons with history of chronic skin conditions.

EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Remove from exposure area to fresh air immediately. 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.

SKIN CONTACT: Rinse affected area until no evidence of product remains. Get medical attention if symptoms of overexposure, as described above for ingestion, develop or if irritation persists.

EYE CONTACT: Immediately rinse eyes with plenty of water, occasionally lifting upper and lower lids, until no evidence of product remains. Get medical attention if pain or irritation persist.

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.

REACTIVITY

REACTIVITY - Stable under normal temperatures and pressures.

INCOMPATIBILITIES: Strong oxidizers, zirconium.

DECOMPOSITION - Thermal decomposition may release toxic and/or hazardous gases.

POLYMERIZATION - Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

STORAGE AND DISPOSAL

Store away from incompatible substances. Observe all federal, state and local regulations when storing or disposing of this substance.

CONDITIONS TO AVOID

Avoid contact with incompatible substances and excessive heat.

SPILL AND LEAK PROCEDURES

OCCUPATIONAL SPILL - Sweep up and place in suitable clean, dry containers for reclamation or later disposal. Do not flush spilled material into sewer. Keep unnecessary people away.

OCCUPATIONAL PROTECTIVE EQUIPMENT

VENTILATION - Provide local exhaust ventilation to meet permissible exposure limits where generation of dust is likely to occur.

RESPIRATOR - Air contamination monitoring should be carried out where generation of dust is likely to occur to assure that the employees are not exposed to harmful concentrations exceeding 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 facepiece and is operated in a pressure-demand or other positive-pressure mode. Any supplied-air respirator that has a full facepiece 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 should be worn where prolonged skin contact may occur.

GLOVES - Chemical-resistant gloves should be worn where prolonged skin contact may occur.

EYE PROTECTION - Safety glasses are not generally required during occupational conditions, unless dusty conditions are anticipated.

REGULATORY INFORMATION

DOT FLAMMABILITY CLASSIFICATION: Not applicable.

EPA - SARA TITLE III SECTION 313: Toxic chemical - None.

TSCA: All components of this product are listed or are exempted or

excluded from listing on the U.S. Toxic Substances Control Act

(TSCA) chemical substance inventory.

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REVISION: Update format and regulatory information.