MATERIAL SAFETY DATA SHEET
MSDS Q-119 REVISION 8

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: Borax®

DATE OF ISSUE: March 31, 2009

TRADE NAMES/SYNONYMS: 20 Mule Team® Borax Natural Laundry Booster

CHEMICAL FAMILY: Inorganic salt

I.D. NUMBERS: 929002

SECTION 2: HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION: This product is white, odorless, crystalline powder. Direct contact with eyes may cause severe irritation with redness, pain, blurred vision, and possibly corneal injury. Repeated or prolonged excessive exposure with skin can result in irritation. Keep out of reach of children. It may be dangerous to aquatic life in high concentrations.. Not a fire hazard. Product is stable.

This product is labeled in accordance with regulations administered by the Consumer Product Safety Commission. 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 differ from the requirements of the CPSC 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 dusts may cause severe 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 coughing, dryness and sore throat.

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 and respiratory illnesses (e.g., asthma).

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.

INGREDIENT	CAS NUMBER	PERCENT (w/w)
Sodium Tetraborate Decahydrate	1303-96-4	60 – 100 %

SECTION 4: FIRST AID MEASURES

EYES: Immediately rinse eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids, until no evidence of product remains. Get medical attention if pain or irritation persist.

SKIN: Rinse affected area with large amounts 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: Immediately 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.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

OSHA FLAMMABILITY CLASSIFICATION: Not applicable FLASH POINT: None available.

UPPER FLAMMABILITY LIMIT: Not applicable LOWER FLAMMABILITY LIMIT: Not applicable

AUTO-IGNITION TEMPERATURE: Not applicable

FIRE AND EXPLOSION HAZARD: Product is not flammable, combustible or explosive.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products may include toxic oxides of sodium and boron.

EXTINGUISHING MEDIA

Extinguish using agent suitable for type of surrounding fire. Product is fire retardant.

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. 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 sewer or other liquid waste system. For larger quantities check with your local water treatment plant.

METHODS FOR CONTAINMENT AND CLEAN UP
SMALL SPILLS: Contain and absorb with sand or other absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. LARGE SPILLS: Dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent material and place into containers for later disposal. Dispose in suitable waste container.

SECTION 7: HANDLING AND STORAGE

HANDLING:
Do not get in eyes or on skin. Do not take internally. Use with adequate ventilation. Avoid generating aerosols and mists. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available.

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 CONTROL / PERSONAL PROTECTION

This product is a laundry care 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.

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

INGREDIENT	CAS NUMBER	EXPOSURE LIMIT
Borate Compouds, Inorganic	1303-96-4	TLV-TWA: 2 mg/m^3, TLV-STEL: 6 mg/m^3.

ENGINEERING CONTROLS: Provide local exhaust or general dilution ventilation to keep potential exposure to airborne contaminants as low as possible.

RESPIRATOR: Air contamination monitoring should be carried out where dusts 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 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 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: Safety glasses are required to prevent eye contact where dusty conditions are anticipated.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	White, odorless, crystalline powder.		
ODOR/ODOR THRESHOLD:	Odorless	PHYSICAL STATE:	Solid
pH (@ 20°C):	9.25 (3% solution)	VAPOR DENSITY:	Not available
BOILING POINT:	Not available	VAPOR PRESSURE:	Not available
MELTING/FREEZING POINT:	MP: 144 °F (62 °C)	FLASH POINT:	See Section 5.
FLAMMABLE PROPERTIES:	See Section 5.	SOLUBILITY IN WATER:	5.8% @ 20 °C
DENSITY/SPECIFIC GRAVITY:	48 lbs/cubic ft	EVAPORATION RATE:	Not available
OCTANOL/WATER PARTITION COEFFICIENT (K_{ow}):	Not available		
VISCOSITY:	Not available	CLOUD POINT:	Not available

SECTION 10: STABILITY AND REACTIVITY

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

CONDITIONS TO AVOID: Avoid storing in direct sunlight, avoid extremes of temperature, avoid contact with incompatible substances

INCOMPATIBLE MATERIALS: Strong oxidizers, acids, zirconium.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products may include toxic oxides of sodium and boron.

POSSIBILITY OF HAZARDOUS REACTIONS: Polymerization does not occur under normal temperatures and pressures.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION SUMMARY: This product is a laundry care product. The use of this product by consumers is safe under normal and reasonable foreseen use. Direct contact with eyes may cause irritation, with possibility of corneal injury if not removed promptly. It may be harmful If swallowed. Repeated or prolonged excessive exposure with skin can result in defatting and drying which may result in irritation and dermatitis.

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.

PRODUCT / INGREDIENT	LD50 / DRAIZE SCORE	TOXICITY / IRRITATION RATING
ACUTE ORAL TOXICITY		
Sodium Tetraborate Decahydrate	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: 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.

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

SECTION 14: TRANSPORT INFORMATION

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

MARINE TRANSPORT (IMDG/IMO)

SECTION 15: REGULATORY INFORMATION

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.

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

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 listed on 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.

CANADA:

CANADIAN ENVIRONMENTAL PROTECTION ACT:
INVENTORY STATUS: All components of this product are listed on the Canadian Domestic Substances List (DSL).

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=severe hazard):	HEALTH=1	FLAMMABILITY=0	REACTIVITY=0

MSDS CREATION DATE: 03/13/89
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REVISION: Updated Company Information.