

Material Safety Data Sheet  
May be used to comply with  
OSHA's Hazard communication Standard,  
29 CFR 1910.1200. Standard must be consulted  
requirements.

U.S. Department of Labor  
Occupational Safety and Health Administration  
(Non-Mandatory Form)  
Form Approved for specific  
OMB No. 1218-0072

IDENTITY (As Used on Label and List)

## Bonide Boric Acid Roach Powder

**ID # 4-460**

Date: February 28, 2013

### Section I

Bonide Products, Inc.  
6301 Sutliff Road  
Oriskany, NY 13424

(800) 424-9300 (Chemtrec)  
(315) 736-8231

### Section II - Hazardous Ingredients/Identity

Hazardous Components (Specific Chemical Identity: Common Names(s))	OSHA	PEL	ACGIN	TLV	Other Limits	% (Optional)
Boric Acid (CAS# 10043-35-3)						98%

### Section III – Fire/Explosive Hazard Data

FIRE: Not considered to be a fire hazard.

EXPLOSION: A mixture of potassium and boric acid may explode on impact.

FIRE EXTINGUISHING MEDIA: Use any means suitable for extinguishing surrounding fire.

SPECIAL INFORMATION: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode.

### Section IV – Health Hazard Data

EMERGENCY OVERVIEW:

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM, LIVER AND KIDNEYS.

POTENTIAL HEALTH EFFECTS:

Inhalation: causes irritation to the mucous membranes of the respiratory tract. May be absorbed from the mucous membranes, and depending on the amount of exposure could result in the development of nausea, vomiting, diarrhea, drowsiness, rash, headache, fall in body temperature, low blood pressure, renal injury, cyanosis, coma, and death.

Ingestion: Symptoms parallel absorption via inhalation. Adult fatal dose reported at 5 to >30 grams.

Skin Contact: Causes skin irritation. Not significantly absorbed through the intact skin. Readily absorbed through damaged or burned skin. Symptoms of skin absorption parallel inhalation and ingestion.

Eye Contact: Causes irritation, redness, and pain.

Chronic Exposure: Prolonged absorption causes weight loss, vomiting, diarrhea, skin rash, convulsions and anemia. Liver and particularly the kidneys may be susceptible. Studies of dogs and rats have shown that infertility and damage to testes can result from acute or chronic ingestion of boric acid. Evidence of toxic effects on the human reproductive system is inadequate.

Aggravation of pre-existing conditions: Persons with pre-existing skin disorders or eye problems, or impaired liver, kidney or respiratory function may be more susceptible to the effects of the substance.

### Section V – First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

Skin Contact: Remove any contaminated clothing. Wash skin with soap or mild detergent and water for at least 15 minutes. Get medical attention if irritation develops or persists. Wash clothing before re-use.

## Section VI - Physical and Chemical Properties

APPEARANCE: white powder or granules.	ODOR: Odorless.
SOLUBILITY: 1 g/18mL in cold water.	BOILING POINT: Decomposes.
MELTING POINT: 169C (336F)	VAPOR PRESSURE: 2.6 @ 20C (68F)
DENSITY: 1.43	pH: 5.1 Aqueous solution: (0.1M)
VAPOR DENSITY (Air = 1): N/A	EVAPORATION RATE (BuAc=1): N/A

## Section VII- Reactivity Data

STABILITY: Stable under ordinary conditions of use and storage. If moisture is present, boric acid can be corrosive to iron.

HAZARDOUS DECOMPOSITION PRODUCTS. Loses chemically combined water upon heating, forming metaboric acid (HB02) at 212-221F, then pyroboric acid (H2B407) AT 285-320F, and boric anhydride at higher temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBLE MATERIALS: Potassium, acetic anhydride, alkalis, carbonates, and hydroxides.

CONDITIONS TO AVOID: N/A

## Section VIII - Ecological Data

ENVIRONMENTAL FATE: N/A

ENVIRONMENTAL TOXICITY: The EC50/48-hour values for daphnia are over 100 mg/l. This material may be toxic to aquatic life.

## Section IV - Special Precautions

AIRBORNE EXPOSURE LIMITS:

-OSHA Permissible Exposure Limit (PEL): 15 mg/m<sup>3</sup> total dust, 5 mg/m<sup>3</sup> respirable fraction for nuisance dusts.

-ACGIH Threshold Limit Value (TLV): 10 mg/m<sup>3</sup> total dust containing no asbestos and <1% crystalline silica for Particulates Not Otherwise Classified (PNOC).

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial ventilation, a Manual of Recommended Practices*, most recent edition, for details.

PERSONAL RESPIRATORS (NIOSH Approved): If the exposure limits is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instance where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Gloves and lab coat, apron or coveralls.

Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

**NOTICE:** This information is believed to be accurate and reliable. However, no guarantee expressed or implied is made with respect to the information contained herein.

**KEEP OUT OF REACH OF CHILDREN**

### ABBREVIATION KEY

N/A: NOT AVAILABLE OR APPLICABLE

N/E: NOT ESTABLISHED

ND: Not Determined

TLV: THRESHOLD LIMIT VALUE

TWA: TIME WEIGHTED AVG./8 HOUR WORKDAY

STEL: SHORT TERM EXPOSURE LIMIT

D.O.T.: DEPARTMENT OF TRANSPORTATION

### DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.