MATERIAL SAFETY DATA SHEET- Date of Issue: 01/01/12

PROFESSIONAL ROACH BAIT

A Class (4) End Use Insecticidal Bait for Cockroaches only.

Product Name: Professional Roach Bait
Chemical Formula: H3BO3 @ 33.3 % & Inserts @ 66.7 %. Chemical name synonyms: Boric Acid, Orthoboric Acid; Boric Acid MG, Boric Acid Insecticide Chemical Family: Inorganic Borate, CAS Number 10043-35-3.

Canadian Pest Control Products Act Registration Number 29169

Manufactured by: Blue Diamond Exterminating and Manufacturing Co., Inc.
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Mooresburg, Tennessee 37811-0207 USA

Phone: 423-921-9994—Fax: 423-921-9488

Canadian Agent and Canadian Supplier: Garden Chemical
7 Meridian Road
Etobicoke, Ontario M9W 4Z6
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Toll Free Canada: 1-800-561-7302

This product contains 33.3 (%) Boric Acid (H3BO3), which is hazardous under the OSHA Hazard Communication Standard and under the Canadian Controlled Products Regulations of the Hazardous Products ACT (WHMIS).
Based on animal chronic toxicity studies. Refer to Section 3 and 11 for details on hazards.

(1) Emergency Overview:

Professional Roach bait is a grayish white paste substance that is not flammable, Combustible, or explosive and has a low acute oral and dermal toxicity.

(2) Potential Ecological Effects:

Large amounts of Boric Acid can be harmful to plants and other species. Therefore,
Release to the environment should be minimized. Since PROFESSIONAL ROACH BAIT is not a dust,
Release into the environment is not a concern.

(3) Potential Health Effects:
Routes of Exposure: Inhalation is not a route of exposure with PROFESSIONAL ROACH BAIT because
Of its zero (0) rating. Dermal exposure is not usually a concern because Boric Acid
Is poorly absorbed through intact skin.

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INHALATION: NONE

EYE CONTACT: May cause slight, reversible conjunctivitis.

SKIN CONTACT: Not an irritant to intact skin. May cause slight irritation on damaged skin. There is no
Evidence of tissue damage.

INGESTION:
Products containing Boric Acid are NOT intended for ingestion. PROFESSIONAL ROACH BAIT
Has a low acute toxicity. Small amounts (e.g.. a teaspoonful) of Boric Acid at greater than 99 %
Swallowed accidentally are not likely to cause effects: Swallowing amounts larger than that may
cause gastrointestinal symptoms.

CANCER: Boric Acid is not a known carcinogen.

REPRODUCTIVE/DEVELOPMENTAL: Non Applicable since PROFESSIONAL ROACH BAIT is not in a
Powder or Dust form, hence no exposure.

TARGET ORGANS: NONE

SIGNS AND SYMPTIONS OF EXPOSURE: Symptoms of accidental over-exposure to Boric Acid have been

Associated with ingestion or absorption through large areas of damaged skin. These may include nausea,
Vomiting and diarrhea, with delayed effects of skin redness and peeling. Refer to Section 11 for details on
Toxicological data.

(4) FIRT AID MEASURES:

Inhalation: None. There is no harm from breathing. PROFESSIONAL ROACH BAIT is not a powder or dust.
Eye Contact : Flush eyes with plenty of water. Call a physician if irritation persists for more than 30 minutes.
Skin Contact : Wash with plenty of water.
Ingestion : Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by
Touching back of throat with finger. If person is unconscious, do not give anything by mouth and
Do not induce vomiting.

Note to Physicians : Observation only is required for adult ingestion in the range of 4-8 grams of Boric Acid
At greater than 99 percent (%) . Since PROFESSIONAL ROACH BAIT IS FORMULATED at
33.3 percent(%) of Boric Acid, the observation range for adults would be 12-24 grams of PROFESSIOANAL

ROACH BAIT. For ingestion of larger amounts, maintain adequate kidney function and force fluids.
Gastric lavage is recommended for symptomatic patients only. Hemodialysis should be reserved for massive
Acute ingestion or patients with renal failure. Boron analysis of urine or blood is only useful for documenting
Exposure and should not be used to evaluate severity of poisoning or to guide treatment. Refer to Section 11 for
Details.
(5) FIRE FIGHTING MEASURES :
General Hazard : None, because PROFESSIOANAL ROACH BAIT is formulated from Boric Acid
Which is not flammable, combustible, or explosive. Boric Acid is itself a flame retardant.
Extinguishing Media : Any fire extinguishing media may be used on nearby fires.

Flammability Classification (29 CFR 1910.1200): Non- Flammable solid.

(6) ACCIDENTAL RELEASE MEASURES:

General: PROFESSIOANAL ROACH BAIT is a water-soluble grayish white paste that may, at high Concentrations, cause damage to trees or vegetation by root absorption. (Refer to Ecological information, Section 12, for specific information.)

Land Spill: Vacuum, shovel or sweep up PROFESSIONAL ROACH BAIT and place in containers For disposal in accordance with applicable local regulations. Avoid contamination of water bodies during Cleanup and disposal. No personal protective equipment is needed to clean up land spills.

Spillage into Water: Where possible, remove any intact containers from the water. Advise local water Authority that none of the affected water should be used for irrigation or for the abstraction of potable water Until natural dilution returns the Boron value to its normal environmental background level. (Refer to Section 12, 13 and 15 for additional information.) PROFESSIONAL ROACH BAIT is a non- Hazardous waste when spilled or disposed of, as defined in the Resource Conservation and Recovery Act (RCRA) Regulations (40 CFR 261). Refer to Regulatory Information, Section 15, for additional information.

(7) HANDLING AND STORAGE:

General: No special handling precautions are required, but dry, indoor storage is recommended. To maintain Package integrity, product should be handled on a first-in, first-out basis.

Storage Temperature: Ambient
Storage Pressure: Atmospheric
Special Sensitivity: None

(8) EXPOSURE CONTROLS/ PERSONAL PROTECTION:

Engineering Controls: None. PROFESSIONAL ROACH BAIT is not a Nuisance Dust.
Personal Protection: None required

Occupational Exposure Limits: None

(9) PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Grayish white, odorless solid
Specific Gravity: 8.4 lbs. / gal.
Melting Point: N/A
Heat of Solution: N/A
Solubility in Water: Partially soluble in water with suspended and settled ingredients.
PH @ 3.9 AS IS

(10) OTHER PHYSICAL AND CHEMICAL PROPERTIES:

General: PROFESSIONAL ROACH BAIT is a product of Boric Acid, which is stable, but when heated
It loses water, first forming Metaboric Acid (HBO2), and on further heating it is converted into Boric Oxide
(B2O3).
Incompatible Materials and Conditions to Avoid: PROFESSIONAL ROACH BAIT is a product of Boric
Acid of which the Boric Acid reacts as a weak acid which may cause corrosion of base metals. Reaction with
Strong reducing agents, such as metal hydrides or alkali metals, will generate hydrogen gas, which could create
An explosive hazard.

Hazardous Decomposition: None

(11) TOXICOLOGICAL INFORMATION:

ACUTE TOXICITY

Ingestion: Low acute oral toxicity; In Boric Acid @ greater than 99 percent (%), the LD 50 IN RATS is
3,500 to 4,100 mg/kg of body weight. Since PROFESSIONAL ROACH BAIT is formulated
With 33.3 percent(%) Boric Acid, multiply these amounts by three (3). The acute oral toxicity for
PROFESSIONAL ROACH BAIT in Toxicity Category IV, Core Minimum for ingestion.

Skin/ Dermal: Low acute dermal toxicity. In Boric Acid Powder @ greater than 99 percent(%), the LD 50 IN Rabbits are greater than 2,000 mg/kg of body weight. Since PROFESSIONAL ROACH BAIT Is a product of Boric Acid @ 33.3 percent (%), multiply this amount by three (3). The dermal toxicity In rabbits would be greater than 6,000 mg/kg of body weight, classifying PROFESSIONAL ROACH

BAIT in Toxicity Category IV, Core Minimum for skin/ dermal. PROFESSIONAL ROACH BAIT is poorly absorbed through intact skin.

Inhalation: NONE. PROFESSIONAL ROACH BAIT is in the form of a compound and not in a Powder or dust form. Therefore, it cannot be inhaled, classifying PROFESSIOAL ROACH BAIT as zero (0) rating for inhalation.

Skin Irritation: Application of PROFESSIONAL ROACH BAIT to unbraided skin of rabbits Produced a primary skin irritation score of 2.13, classifying it in Toxicity Category IV Core Minimum for skin effects.

Eye Irritation: Instillation of PROFESSIONAL ROACH BAIT into the eyes of rabbits produced a Maximum mean irritation score of 4.7/ 110.0 in unwashed eyes, classifying the product in Toxicity Category IV Core Minimum for eye irritation.

Sensitization: PROFESSIONAL ROACH BAIT is not a skin sensitizer.

OTHER:

Reproductive / Developmental: N/A. PROFESSIONAL ROACH BAIT is not meant for consumption And is not a dust, there are no exposures to cause Reproductive and Developmental problems.

Carcinogenicity / Mutagenicity: N/A. There is no exposure relative to PROFESSIONAL ROACH BAIT

Human Data : N/A . There are no dust exposures relative to PROFESSIONAl ROACH BAIT.

(12) ECOLOGICAL INFORMATION:

General: PROFESSIONAL ROACH BAIT is a 33.3 percent (%) Boric Acid Product, however it is
Is reformulated into a compound bait formula that contains no dust particles that can be released into the
Environment. The Ecological Information in Section 12 is the Ecotoxicity Data on Boric Acid, Manufactures
Grade MG at greater than 99 percent (%). In case of accidental spills of PROFESSIONAL ROACH
BAIT INTO THE ENVIRONMENT, The calculations in this section should be DECREASED by 66.7 %
To determine the Ecotoxicity of this product to the environment.

ECOTOXICITY DATA

General: Boron (B) is the element in Boric Acid, which is used by convention to report borate product
Ecological effects. It occurs naturally in seawater at an average concentration of 5 mg B/L and generally
Occurs in freshwater at concentrations up to 1 mg B/L. In dilute aqueous solutions the predominant boron
Species present is undissociated Boric Acid. To convert Boric Acid into equivalent boron (B) content,
Multiply by 0.1748.

Fish Toxicity:

Seawater 9:
Dab, Limanda limanda
96-hr LC 50=74 mg B/L +

Freshwater 10:
Rainbow trout, S. gairdneri (embryo larval stage)
24-day LC 50=150 mg B/L ++
32-day LC 50=100 mg B/L ++

Goldfish, Carassius auratus(embryo-larval stage)
7-day LC 50=46 mg B/L ++
3-day LC 50= 178 mg B/L ++

Phytoxicity: Boron is an essential micronutrient for healthy growth of plants ; however, it can be harmful to Born sensitive plants in high quantities. Care should be taken to minimize the amount of Boric Acid Released to the environment.

Algal Toxicity:

Green algae, Scenedesmus subspicatus
96-hr EC10=24 mg B/L +

Invertebrate Toxicity 8:

Damphnids, Daphnia magna straus
48-hr LC 50=133 mg B/L
21-day NOEC-LOEC=6-13 mg B/L Test substance: + Sodium Tetraborate+Boric Acid +

Environmental Fate Data

Persistence / Degradation: Boron is naturally Occurring and ubiquitous in the environment. Boric Acid Decomposes in the environment to natural borate.

Octanol / Water Partition Coefficient:

Log Pow: 0.7570 at 25 Degree C.

Soil Mobility: Boric Acid is soluble in water and is leachable through normal soil.

RCRA (40 CFR 261):

PROFESSIONAL ROACH BAIT is not listed under any sections of the Federal Resource Conservation and Recovery Act (RCRA).

NPRI (Canada):

PROFESSIONAL ROACH BAIT is not listed on the Canadian National Pollutant Release Inventory (NPRI).

(13) DISPOSAL CONSIDERATIONS:

Pesticide Disposal:
Wastes resulting from the use of this product may be disposed of onsite or at an approved waste
Disposal facility. Refer to Section 15 for additional regulatory information.

Container Disposal:
Do not reuse empty container. Securely wrap in newspaper and discard in trash.

(14) TRANSPORT INFORMATION:
International Transportation: PROFESSIOANAL ROACH BAIT has no UN Number, and is
Not regulated under international rail, road, water or air transport regulations.

DOT Hazardous Classification: PROFESSIONAL ROACH BAIT is not regulated by the US
Department of Transportation (DOT) and is therefore not considered a hazardous material/substance.

TDG Canadian Transportation: PROFESSIONAL ROACH BAIT is not regulated under
Transportation of Dangerous Goods (TDG).

(15) REGULATORY INFORMATION:

OSHA / Cal OSHA: This MSDS document meets the requirements of both OSHA (29 CFR 1910.1200) and
Cal OSHA Title 8 CCR 5194 (g) hazard communication standards. Refer to Section 8 for regulatory
Exposure limits.

WHMIS Classification: PROFESSIONAL ROACH BAIT is a formulation of 33.3 percent Boric Acid
MG of which is classified as Class D-Division 2 A under Canadian WHMIS guidelines.

Chemical Inventory Listing: PROFESSIONAL ROACH BAIT is a product of 33.3 % Boric
Acid MG (10043-35-3), which appears on the Canadian DSL list under the CAS Number 10043-35-3.

Canadian Drinking Water Guideline: An ‘ Interim Maximum Acceptable Concentration”
(IMAC) For Boron is currently set at 5 mg B/L.

LARC: The International Agency for Research on Cancer(LARC)(a unit of the World Health
Organization) does not list or categorize Boric Acid as a carcinogen.

NTP Biennial Report on Carcinogens: Boric Acid is not listed.

Clean Air Act (Montreal Protocol): Boric Acid was not manufactured with and does not contain
Any Class 1 or Class 11 ozone depleting substances.

(16) OTHER INFORMATION:
References on Inorganic Borates: Refer to Material Safety Data Sheet of 20 Mule Team
Boric Acid Manufacture Grade.

PRODUCT LABEL TEXT HAZARD INFORMATION:

Refer to PROFESSIONAL ROACH BAIT label for additional product hazard
And precautionary information.