

ANT-FIX MSDS

1. Identification of the Substance and of the Company

1.1 Identification of the Substance

Commercial name: Ant-Fix

1.2 Company Identification

Manufacturer: Effective Products, Inc.
2501 West Busch Boulevard
Tampa, FL 33618

Phone: 813-931-3993

2. Composition and Ingredient Information

Common Name: Boric Acid

Chemical Formula: H_3BO_3

Chemical Name: Orthoboric Acid

CAS No: 10043-35-3

Percent: 5.8% in a sugary paste

3. Hazards Identification

Appearance: Brownish paste

Primary routes of exposure: Dermal exposure is the most likely route of exposure. Eye contact and ingestion are possible routes also. Since Boric Acid is not absorbed through the intact skin, dermal exposure is not usually a concern.

Potential Health Effects:

Inhalation:

Not a potential route of exposure from the paste formulation

Ingestion:

Products containing Boric Acid are not intended for ingestion. Boric Acid has a relatively low acute toxicity. If small amounts of Boric Acid (e.g. teaspoonful

swallowed accidentally, it is not likely to cause an effect. However swallowing amounts larger than that may cause nausea, vomiting, diarrhea, and headache.)

Skin Contact:

Not significantly absorbed through the intact skin and doesn't cause irritation.

Eye Contact:

Boric acid is non-irritating to eyes in normal industrial use.

Cancer:

Boric acid is not considered a carcinogen substance. EPA has classified Boric Acid as a Group E carcinogen (evidence of non-carcinogenicity in humans).

Reproductive:

Boric Acid demonstrated in pregnant Sprague Dawley rats, maternal and development No Observable Effect Level (NOEL) of 78mg/kg/day and Lowest Observable Effect Level (LOEL) of 163 mg/kg/day. In CD-1 mice, Boric Acid demonstrated a maternal LOEL of 248 mg/kg/day and developmental NOEL of 248 mg/kg/day and a LOEL of 452 mg/kg/day. In New Zealand white rabbits, the maternal and developmental NOELs and LOELs were 125 mg/kg/day and 250 mg/kg/day, respectively. A human study of occupationally exposed borate worker population showed no adverse reproductive effects.

Target Organs:

No target organs have been determined in humans. In high dose animal ingestion studies, there were reported decreases in body weight in both sexes and testicular atrophy in males.

Signs and Symptoms of Exposure:

Prolonged absorption in high doses may cause nausea, vomiting, diarrheas with delayed effects of skin redness and peeling. Symptoms of accidental over exposure to Boric Acid have been associated with ingestion or by absorption through large areas of damaged skin.

Emergency Overview:

Boric Acid is a white odorless substance. It is not flammable, combustible, or explosive. It has little or no hazard to humans. Although Boric Acid has low acute oral and dermal toxicity, it is harmful if swallowed or inhaled in large amounts.

4. First Aid Measures:

Ingestion:

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to

do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Skin Contact:

Rinse skin immediately with plenty of water for 15- 20 minutes. Call a poison control center or doctor for treatment advice.

Eye Contact:

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

5. Fire Fighting Measures

Flash Point and Method: N/A

Flammability Limits (%): None

Fire: Not considered to be fire hazard.

Explosion: Not explosive

Extinguishing Media:

In case of fire, use water, foam, carbon dioxide or dry chemical type extinguishers. Use equipment/media appropriate to surrounding fire conditions.

Fire and Explosion Hazards:

Stable at room temperature in closed containers under normal storage and handling conditions. There are no hazardous decomposition products. Hazardous polymerization is not expected to occur.

6. Accidental Release Measures

Boric Acid is water-soluble and could result in damage if absorbed by the roots of trees and vegetation.

Spill: Pick up and place in a suitable container for reclamation or disposal. Wear appropriate personal protective equipment as specified in Section 8 to avoid contamination. In case of water spill, Boric Acid may cause localized contamination of surrounding waters and at high concentrations may result in damage to local vegetation, fish and other aquatic life.

7. Handling and Storage

Store product in original container in a cool dry place out of reach of children and pets. Do not contaminate water, food or feed by storage.

8. Exposure Control/Personal Protection

Airborne Exposure Limits:

OSHA Permissible Exposure Limit (PEL): 15 mg/m³ total dust, 5 mg/m³ respirable fraction for nuisance dusts. ACGIH Threshold Limit Value (TLV): 10 mg/m³ total dust containing no asbestos and <1% crystalline silica from Particulates Not Otherwise Classified (PNOC).

Ventilation System:

None is required for use of formulated product.

Personal Respirators:

None is required for use of formulated product.

Skin Protection:

Wear leather, cloth, or rubber gloves

Eye Protection:

Avoid eye contact. Wash hands thoroughly after using formulated product.

9. Physical and Chemical Properties

Vapor Pressure: No information available

Vapor Density: No information available

Bulk Density: No information available

Density: 11.67 pounds/gallon

Solubility in Water: No information available

pH: 4.8

Appearance: Brownish white past

Melting Point: No information available

Evaporation Rate: No information available

Boiling Point: No information available

Odor: Slight sweet odor

Molecular Weight: NA

10. **Stability and Reactivity**

Stability:

Stable under ordinary conditions of use and storage.

Conditions to avoid:

No information available

Hazardous Decomposition Products:

None are likely to occur.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Information is not known

11. **Toxicological Information**

Ingestion (Acute Oral Toxicity):

Not known on formulated product. Boric Acid demonstrated low acute oral toxicity LD₅₀ in rats of 3.45 g/kg. The formulated product contains 5.8% Boric Acid with the remainder of the ingredients being human food products

Skin (Acute Dermal Toxicity)

Not known on formulated product. The demonstrated dermal toxicity LD₅₀ of Boric Acid on rabbit skin is > 2 g/kg. Boric Acid is not absorbed through intact skin. The formulated product contains 5.8% Boric Acid with the remainder of the ingredients being human food products.

Primary Skin Irritation Index:

Not known on formulated product. Boric Acid is not a skin irritant. In primary skin irritation study, 1 out of 6 animals had erythema present at the end of 72 hours. The formulated product contains 5.8% Boric Acid with the remainder of the ingredients being human food products.

Eye Irritation Index:

Not known on formulated product. In an eye irritation study with Boric Acid, there was no corneal opacity and conjunctivitis cleared by day 4..Boric Acid produced moderate eye irritation effects.

12. **Ecological Information**

Environmental Toxicity:

Not known of formulated product. EPA concluded that technical Boric Acid is practically nontoxic to fish and aquatic invertebrates.

Environmental Fate:

Boric acid, borax, and boron-containing salts are ubiquitous in the natural environment. Boron salts are mobile in the soil profile. The range of boron as a micronutrient in soil is 5-150 ppm, and representative surface soil contain 50 ppm. The average concentration for boron in surface waters has been reported to range from 0.001 mg/liter to 0.1 mg/liter. Seawater concentrations average 4.5 mg/liter.

13. **Disposal Considerations**

No special disposal treatment is required for Boric Acid. The container for the formulated product should be placed in the trash or offered for recycling if available.

14. **Transport Information**

No special transportation requirements are needed for the formulated product.

15. **Regulatory Information**

-----\Chemical Inventory Status-Part 1\-----				
	TSCA	EC	Japan	Australia
Ingredient Boric Acid(10043-35-3)	YES	YES	YES	YES
----- \Chemical Inventory Status-Part 2\-----				
	Korea	DSL	NDSL	Phil.
Ingredient Boric Acid(10043-35-3)	YES	YES	No	YES
-----\Federal, State & International Regulations –Part 1\-----				
	RQ	SARA 302 TPQ	List	SARA 313 Chemical Catg.
Ingredient Boric Acid(10043-35-3)	No	No	No	No
-----\Federal, State & International Regulations – Part 2\-----				
Ingredient Boric Acid(10043-35-3)		---RCRA----- CERCLA	261.33	-----TSCA----- 8(d)
		No	No	No

Chemical Weapons Convention: No

TSCA 12(b): No
CDTA: No
SARA 311/312 – Acute: Yes
Chronic: Yes
Fire: No
Pressure: No
Reactivity: No

16. Other Information

NFPA Ratings: Health: 0 Flammability: 0 Reactivity: 0

Label Hazard Precautions:

- ?? Harmful if swallowed.
- ?? Causes moderate eye irritation

Label Precautions

- ?? Avoid contact with eyes or clothing
- ?? Wash hands before eating, drinking, using tobacco or using the toilet.

Label First Aid

- ?? If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- ?? If in the eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- ?? If swallowed, call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Effective Products, Inc. shall not be held liable for any damage resulting from contact with the above product.

Date prepared: February 11, 2003