

MATERIAL SAFETY DATA SHEET

JT EATON EATON'S BORIC ACID INSECTICIDAL DUST



SECTION 1 • IDENTIFICATION

IDENTITY:

JT EATON BORIC ACID INSECTICIDAL DUST

EPA Registration No. 56-73

ACTIVE INGREDIENT CHEMICAL NAME: **Boric Acid**

CHEMICAL FAMILY: Inorganic Borates

Manufacturer's Name:

J.T.EATON & CO., INC.

1393 East Highland Road

Twinsburg, Ohio 44087

Prepared by: Bart Baker Date Prepared: January 28, 2004

HMIS Rating: Health: 1*
Flammability: 0
Reactivity: 0
Personal Protection: 0
*Chronic Effects

Emergency Telephone Number: **1-800-664-9042** or

National Pesticide Telecommunications Network at **1-800-858-7378**

Telephone Number for Information:

9 AM to 5 PM EST - 330-425-7801

SECTION 2 HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS NUMBER	PEL	STEL	<-OSHA LIMITS ->		OPTIONAL %
				CEILING	ACGIH TLV	
Boric Acid H ₃ BO ₃	10043-35-3	15 mg/m ³	N/A	N/A	10 mg/m ³	N/A

Contains greater than 99 percent (%) 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.

SECTION 3 • PHYSICAL / CHEMICAL DATA

BOILING POINT: (F): N/A

VAPOR PRESSURE: (mm hg): Negligible at 20° C

VAPOR DENSITY: (AIR = 1): N/A

SOLUBILITY IN H₂O: 4.7% @ 20° C; 27.5% @ 100° C

APPEARANCE / ODOR: White, odorless, crystalline solid.

BULK DENSITY: 19.3 to 22.6 pounds per cubic foot

MELTING POINT: 170.9°C (340° F) (heated in closed space)

EVAPORATION RATE (Butyl Acetate = 1): N/A

% VOLATILE: N/A

SPECIFIC GRAVITY (H₂O = 1): 1.51

MOLECULAR WEIGHT: 61.84

SECTION 4 • FIRE & EXPLOSION HAZARD DATA

FLASH POINT (Method Used) - None

FLAMMABLE LIMITS: None LEL: N/A UEL: N/A

EXTINGUISHING MEDIA: In case of fire use: Any fire extinguishing media may be used on nearby fires.

SPECIAL FIRE FIGHTING PROCEDURES: The product is itself a flame retardant.

UNUSUAL FIRE & EXPLOSION HAZARDS: None.

SECTION 5 • REACTIVITY DATA

CHEMICAL STABILITY: Stable.

CONDITIONS TO AVOID: Alkalies

HAZARDOUS DECOMPOSITION PRODUCTS (from burning, heating, or reaction with other materials): None

INCOMPATIBLE MATERIALS: Boric Acid reacts as a weak acid and may cause corrosion of metals. Reaction with strong reducing agents, such as metal hydrides or alkali metals, will generate hydrogen gas, which could create an explosive hazard.

HAZARDOUS POLYMERIZATION: Will not occur

SECTION 6 • HEALTH HAZARD DATA

ROUTES OF ENTRY:	INHALATION?	SKIN?	INGESTION?
	YES	NO	YES

SIGNS AND SYMPTOMS 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.

HEALTH HAZARDS (ACUTE and CHRONIC): Products containing Boric Acid are **not** intended for ingestion. Boric Acid has a low acute toxicity. Small amounts (e.g., a teaspoonful) swallowed accidentally are not likely to cause effects; swallowing amounts larger than that may cause gastro-intestinal symptoms.

INHALATION: Occasional mild irritation effects to nose and throat may occur from inhalation of Boric Acid dust at levels greater than 10 mg/m³.

SKIN IRRITATION: Boric Acid does not cause irritation to intact skin.

EYE IRRITATION: Boric Acid is non-irritating to eyes in normal industrial use.
Reproductive/developmental: Animal ingestion studies in several species, at high doses, indicate that borates cause reproductive and developmental effects. A human study of occupational exposure to borate dust showed no adverse effect on reproduction.

Target organs: No target organ has been identified in humans. High dose animal ingestion studies indicate the testes are the target organs in male animals.

SECTION 6 • HEALTH HAZARD DATA

CARCINOGENICITY: Boric Acid is not a known carcinogen.

NTP? IARC MONOGRAPH? OSHA REGULATED?
NO NO NO

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

EMERGENCY AND FIRST AID PROCEDURES

EYES: Use eye wash fountain or fresh water to cleanse eye. If irritation persists for more than 30 minutes, seek medical attention.

FIRST AID PROCEDURES continued

SKIN: Boric Acid does not cause irritation to intact skin.

INHALATION: If symptoms such as nose or throat irritation are observed, remove person to fresh air.

INGESTION: Swallowing small quantities (one teaspoon) may cause no harm to healthy adults. If larger amounts are swallowed, give two glasses of water to drink and seek medical attention.

SECTION 7 • PRECAUTIONS FOR SAFE HANDLING

IN CASE MATERIAL IS RELEASED OR SPILLED: Vacuum, shovel or sweep up Boric Acid 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.

WASTE DISPOSAL METHOD: Small quantities of Boric Acid can usually be disposed of at landfill sites. No special disposal treatment is required, but local authorities should be consulted about any specific local requirements. Tonnage quantities of product are not recommended to be sent to landfills. Such product should, if possible, be used for an appropriate application.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

No special handling precautions are required, but dry, indoor storage is recommended. To maintain package integrity and to minimize caking of the product, bags should be handled on a first-in first-out basis. Good housekeeping procedures should be followed to minimize dust generation and accumulation.

SECTION 8 • CONTROL MEASURES

RESPIRATORY PROTECTION: Where airborne concentrations are expected to exceed exposure limits, NIOSH/MSHA certified respirators should be used.

VENTILATION: LOCAL EXHAUST: Yes

SPECIAL: NO

MECHANICAL EXHAUST: NO

PROTECTIVE GLOVES AND EYE PROTECTION: Eye goggles and gloves are not required for normal industrial exposures, but may be warranted if environment is excessively dusty.

OTHER PROTECTIVE EQUIPMENT: None.

WORK/HYGIENIC PRACTICES: Clean clothes with vacuum hose, not by blowing off. Wash hands before taking food.

SECTION 9 • CALIFORNIA ADDENDUM

(PROPOSITION 65) SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986

The following specific warnings are hereby given relative to substances that the State of California has identified as carcinogens and/or reproductive hazards under Proposition 65: None

WARNING: None

WARNING: None

SECTION 10 • SARA TITLE III HAZARD CATEGORY

For Reporting Under Sections 311 & 312

Immediate - NO Delayed - NO Fire - NO Reactive - NO Sudden Release of Pressure - NO

SECTION 11 • SHIPPING INFORMATION

HAZARD CLASS: NOT D.O.T. Regulated

BILL OF LADING DESCRIPTION: Insecticide ITEM 102120 Class 60

Manufacturer makes no warranty, express or implied, other than indicated on Label and MSDS. Customer assumes all risk of use and/or handling of this material when such use and / or handling is contrary to Label and MSDS.

All information contained in this Material Safety Data Sheet is furnished free of charge and is intended for your evaluation. In our opinion the information is, as of the date of this Material Safety Data Sheet, reliable, however, it is your responsibility to determine the suitability of the information for your use. You are advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional or variable conditions or circumstances exist or because of applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information gathered by you and you must make independent determinations of the suitability and completeness of the information from all sources to assure both proper use of the material described herein and the safety and health of employees. Accordingly, no guarantee expressed or implied is made by J.T. Eaton & Co., Inc. as to the results to be obtained based upon your use of the information nor does J.T. Eaton & Co., Inc. assume any liability arising out of your use of the information.

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Page 2