

**SAFETY DATA SHEET**  
**Boradicate™ Insecticide**

**SDS # :** 6604-1-A  
**Revision date:** 2017-07-12  
**Format:** NA  
**Version** 2.04



**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

**Product Name** Boradicate™ Insecticide

**Other means of identification**

**Product Code(s)** 6604-1-A

**Active Ingredient(s)** Orthoboric Acid (Boric Acid)

**PCP #** 30533

**Recommended use of the chemical and restrictions on use**

**Recommended Use:** Insecticide

**Restrictions on Use:** Use as recommended by the label

**Supplier Address**

FMC Corporation  
2929 Walnut Street  
Philadelphia, PA 19104  
(215) 299-6000 (General Information)  
msdsinfo@fmc.com (E-Mail General Information)

**Emergency telephone number**

Medical Emergencies:  
1 800 / 331-3148 (ProPharma Group - U.S.A. & Canada)  
1 651 / 632-6793 (ProPharma Group - All Other Countries - Collect)

For leak, fire, spill or accident emergencies, call:  
1 800 / 424 9300 (CHEMTREC - U.S.A.)  
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)

**2. HAZARDS IDENTIFICATION**

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Reproductive toxicity	Category 2

**GHS Label elements, including precautionary statements**

**EMERGENCY OVERVIEW**

**Warning**

**Hazard Statements**

H332 - Harmful if inhaled  
 H361 - Suspected of damaging fertility or the unborn child



**Precautionary Statements - Prevention**

P202 - Do not handle until all safety precautions have been read and understood  
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

P308 + P313 - If exposed or concerned: Get medical advice/attention  
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

**Precautionary Statements - Storage**

P405 - Store locked up

**Precautionary Statements - Disposal**

P501 - Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

No hazards not otherwise classified were identified.

**Other Information**

No information available.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS-No	Weight %
Boric acid	10043-35-3	99

Synonyms are provided in Section 1.

**4. FIRST AID MEASURES**

**Eye Contact**

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

**Skin Contact**

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

**Inhalation**

Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**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 a poison control center or doctor. Do not induce vomiting or give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**

Central nervous system effects.

Indication of immediate medical attention and special treatment needed, if necessary      Treat symptomatically

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**      Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical. Use water spray or fog; do not use straight streams.

**Specific Hazards Arising from the Chemical**      Not combustible

**Explosion data**

**Sensitivity to Mechanical Impact**      Not sensitive.

**Sensitivity to Static Discharge**      Not sensitive.

**Protective equipment and precautions for firefighters**      Wear self-contained breathing apparatus and protective suit. Isolate fire area. Evaluate downwind.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions**      Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.

**Other**      For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

**Environmental Precautions**      Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

**Methods for Containment**      Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**      Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

**7. HANDLING AND STORAGE**

**Handling**      Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal. Reference to other sections.

**Storage**      Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep/store only in original container.

**Incompatible products**      Strong reducing agents. Bases. Metals. Strong reducing agents, Bases Metals

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Boric acid (10043-35-3)	STEL: 6 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>	-	-	-
Chemical name	British Columbia	Quebec	Ontario TWA EV	Alberta
Boric acid (10043-35-3)	TWA: 2 mg/m <sup>3</sup> STEL: 6 mg/m <sup>3</sup>	-	TWA: 2 mg/m <sup>3</sup> inhalable  STEL: 6 mg/m <sup>3</sup>	-

**Appropriate engineering controls**

**Engineering measures** Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

**Skin and Body Protection** Wear long-sleeved shirt, long pants, socks, and shoes.

**Hand Protection** Protective gloves

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures** Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

**General information** If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Appearance</b>	Powder White
<b>Physical State</b>	Dry powder
<b>Color</b>	White
<b>Odor</b>	Odorless
<b>Odor threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting point/freezing point</b>	171 °C
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	Not applicable
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Density</b>	No information available
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	Partly soluble
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Molecular weight</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY**

**Reactivity** None under normal use conditions.

**Chemical Stability** Stable under recommended storage conditions.  
**Possibility of Hazardous Reactions** Reacts with strong reducing agents forming flammable hydrogen gas. Reacts as a weak acid which may cause corrosion of base metals.  
**Hazardous polymerization** Hazardous polymerization does not occur.  
**Conditions to avoid** Heat, flames and sparks  
**Incompatible materials** Strong reducing agents. Bases. Metals.  
**Hazardous Decomposition Products** None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION**

**Product Information**

**LD50 Oral** 3160 mg/kg (rat) Boric acid  
**LD50 Dermal** > 2000 mg/kg (rat) Boric acid  
**LC50 Inhalation** > 2.03 mg/L (4-hr) (rat) Boric acid  
**Serious eye damage/eye irritation** Non-irritating.  
**Skin corrosion/irritation** Non-irritating.  
**Sensitization** Not expected to be sensitizing based on the components.

**Information on toxicological effects**

**Symptoms** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic toxicity** Contains a known or suspected reproductive toxin.  
**Mutagenicity** Not mutagenic  
**Carcinogenicity** Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).  
**Reproductive toxicity** Animal studies have shown that ingestion of large amounts of Borates over prolonged periods of time cause a decrease in sperm production and testicle size in males.  
**Developmental toxicity** Animal studies have shown that ingestion of large amounts of Borates produced developmental effects in fetuses of pregnant animals.  
**STOT - single exposure** Not classified.  
**STOT - repeated exposure** Not classified.  
**Target organ effects** Central Nervous System (CNS), Gastrointestinal tract (GI), Reproductive System  
**Aspiration hazard** No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Boric acid 10043-35-3		Group 2A		

**Legend:**  
 IARC (International Agency for Research on Cancer)  
 Group 2A - Probably Carcinogenic to Humans

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

<b>Boric acid (10043-35-3)</b>				
Active Ingredient(s)	Duration	Species	Value	Units
	48 h LC50	Daphnia magna	133	mg/L
	96 h EC50	Algae	24	mg/L

**Persistence and degradability** Boron is naturally occurring and ubiquitous in the environment. The boric acid decomposes in the natural environment to borate.

**Bioaccumulation** No information available.

**Mobility** Boric acid is soluble in water.

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods** Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance.

**Contaminated Packaging** Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

**14. TRANSPORT INFORMATION**

**DOT** This material is not a hazardous material as defined by U.S. Department of Transportation at 49 CFR Parts 100 through 185.

**TDG** Not regulated

**ICAO/IATA** Not regulated

**IMDG/IMO** Not regulated

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	No
<b>Chronic health hazard</b>	Yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

*FIFRA Information*

*This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:*

**ATTENTION**

*Nocif en cas d'ingestion. Provoque une irritation modérée des yeux*

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

**International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Boric acid 10043-35-3	X	X	X	X	X	X	X	X

Mexico - Grade Slight risk, Grade 1

**CANADA**

**WHMIS Statement**

This product has been classified in accordance with the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

WHMIS Hazard Class D2A - Very toxic materials



**16. OTHER INFORMATION**

NFPA	Health Hazards 1	Flammability 0	Instability 0	Special Hazards -
HMIS	Health Hazards 1	Flammability 0	Physical hazard 0	Personal Protection X

Revision date: 2017-07-12  
 Reason for revision: Format Change

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**End of Safety Data Sheet**