

# Technical Data Sheet

## BOARD DEFENSE® (Insecticide, Termiticide and Fungicide)



### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Brand Name</b>	BOARD DEFENSE®	<b>Manufacturer</b>	InCide Technologies, Inc.
<b>Chemical Formula</b>	Na <sub>2</sub> B <sub>8</sub> O <sub>13</sub> 4H <sub>2</sub> O		50 North 41 <sup>st</sup> Avenue
<b>Chemical Name/Synonyms</b>	Disodium Octaborate Tetrahydrate		Phoenix, AZ 85009
<b>Chemical Family</b>	Inorganic Borates	<b>EMERGENCY PHONE NUMBERS</b>	
<b>CAS Registry No.</b>	12280-03-4	<b>CHEMTREC</b>	<b>800-424-9300</b>
<b>TSCA Inventory No.</b>	12008-41-2 (anhydrous form)	<b>INCIDE TECHNOLOGIES</b>	<b>602-233-0756</b>
<b>EPA Pesticide Reg. No.</b>	44757-20	<b>Effective date</b>	January 1, 2018

### SECTION 2 – TYPICAL PROPERTIES

The following properties are typical of normal production.

#### CHEMICAL ANALYSIS

		<u>Typical Analysis</u>
Sodium Oxide	(Na <sub>2</sub> O)	14.2 %
Boron Oxide	(B <sub>2</sub> O <sub>3</sub> )	67.3 %
Water of Crystallization	(H <sub>2</sub> O)	17.6 %
Sulfate	(SO <sub>4</sub> )	600 ppm
Chloride	(Cl)	500 ppm
Iron	(Fe)	6 ppm

#### SCREEN ANALYSIS

<u>US Std.</u>	<u>Typical Percent</u>
<u>Sieve No.</u>	<u>Cumulative</u>
+200	8

**BULK DENSITY, poured**  
31 lb/ft<sup>3</sup>

### SECTION 3 – THEORETICAL PROPERTIES

The following properties are textbook theoretical data and are provided for convenience and reference only. These properties are not normally tested for the commercial product and no representation is made relative to the commercial product.

#### THEORETICAL COMPOSITION

		<u>Percent</u>
Boric Oxide	(B <sub>2</sub> O <sub>3</sub> )	67.5 %
Sodium Oxide	(Na <sub>2</sub> O)	15.0 %
Water of Crystallization	(H <sub>2</sub> O)	17.5 %

#### SOLUBILITY IN WATER AS Na<sub>2</sub>B<sub>8</sub>O<sub>13</sub>·4H<sub>2</sub>O

<u>Temperature</u>		<u>Percent by Weight Of</u>
<u>°C</u>	<u>°F</u>	<u>Saturated Solution</u>
0	32	5.0
10	50	10.2
20	68	14.8
30	86	22.8
40	104	26.7
50	122	33.4
60	140	42.1

#### pH Of Aqueous Solutions

<u>Percent Na<sub>2</sub>B<sub>8</sub>O<sub>13</sub>·4H<sub>2</sub>O</u>	<u>pH at</u>
<u>By Weight Of Solution</u>	<u>23°C (73.4°F)</u>
1	8.5
2	8.4
5	8.0
10	7.6
15	7.3

### SECTION 4 - APPLICATIONS

Insecticide, termiticide, and fungicide for control of wood destroying insects and rot. Mold control agent in cellulose insulation. Flame retardant and mold control agent in the paint industry. Flame and mold retardant for timber impregnation, and in ceramics and glass industry where a high B<sub>2</sub>O<sub>3</sub> to Na<sub>2</sub>O ratio is desired.

### SECTION 5 – PACKAGING AND HANDLING

**45 pound (20.43 kg)** multiwall plastic lined paper bags palletized and stretch wrapped. Fifty (50) bags per pallet. Also available in 25 lb. pails (48 pails/pallet) and one pound bottles (12 bottles/case, 42 cases/pallet). Information concerning the handling and use of this product is provided in a material safety data sheet (MSDS). This MSDS must be fully read and understood prior to any exposure, handling, or use of the product.

*Information presented herein has been compiled from sources considered dependable and is accurate and reliable to the best of our knowledge and belief, but it is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or any product in violation of any law or regulation. It is the user's responsibility to determine the suitability of any material for a specific purpose and adopt necessary safety precautions. We make no warranty as to results to be obtained in using any material and, since conditions or use are not under our control, we must necessarily disclaim all liability with respect to use of any material supplied by us.*

Replaces: January 1, 2016