

## TECHNICAL DATA SHEET

<b>Product:</b>	Boric Acid Normal Sulfate (Granular and Powder)
<b>Synonyms:</b>	Boracic acid, Boronic Acid
<b>CAS#</b>	10043-35-3
<b>Formula:</b>	H <sub>3</sub> BO <sub>3</sub>
<b>Product Description:</b>	Boric acid is a granular or powder, white crystalline solid with a slippery or soapy feel.
<b>Packaging:</b>	Boric acid is available in 25 kg (55 lb.) multi-wall paper or plastic bags, 1000 kg (2200 lb.) bulk bag packaging.
<b>Applications:</b>	<ul style="list-style-type: none"><li>- Synthesis of various boron derivatives</li><li>- Glass and ceramics</li><li>- Textile fiberglass</li><li>- Cellulose Insulation</li><li>- Agriculture</li><li>- Nuclear reactors</li><li>- Lubrication</li><li>- Pyrotechnics</li><li>- Wood preservation</li><li>- Insecticide</li><li>- Pharmaceuticals</li><li>- Adhesives</li></ul>
<b>Precautions:</b>	Boric acid is chemically stable under normal condition of storage, however, it is advised to store Boric acid under dry, cool and steady temperature conditions. During storage and transport avoid any wide variation in temperature. With temperature cycling and exposure to humid environment, Boric acid shows tendency for caking.

### Typical properties of Boric Acid:

Property	Typical Value
Appearance	Granular slippery white powder
Bulk Density	50-60lb/ft <sup>3</sup> (Granular); 35-40lb/ft <sup>3</sup> (Powder)
Angle of repose	32-34°
Solubility in water at 20°C, 50°C and 100°C	4.7%, 10.3% and 27.5% respectively
Solubility in Glycerol at 20°C	19.9%
Solubility in Ethylene Glycol at 25°C	13.6%
Solubility in Ethanol at 25°C	11.96

Chemical Analysis					
Component	Unit	Specification (min-max)	Typical Value Granular	Specification (min-max)	Typical Value Powder
B <sub>2</sub> O <sub>3</sub>	%	56.25-56.9%	56.5	56.25-56.8%	56.5
SO <sub>4</sub>	ppm	300 max.	250	300 max.	250
Fe	ppm	4 max.	3	4 max.	3
Cl	ppm	5 max.	5	5 max.	5
Water Insoluble	ppm	-	60	-	60
Purity	%	99.92-101.07%	100	99.92-101.07%	100

Dry Sieve Analysis						
Size	US Mesh	Unit	Specification Granular	Typical Value Granular	Specification Powder	Typical Value Powder
(+)1.000 mm	+18	%	4 max.	2.0	0 max.	0.0
(+)0.841 mm	+20	%	-	5.5	-	-
(+)0.420 mm	+40	%	-	14.0	-	-
(+)0.149 mm	+100	%	-	65.0	-	-
(-)0.125 mm	-120	%	-	-	45 min.	75.0
(+)0.074 mm	+200	%	-	10.0	-	-
(-)0.063 mm	-230	%	4 max.	2.0	-	-
(+)0.044 mm	+325	%	-	1.0	-	-
(-)0.044 mm	-325	%	-	0.5	-	-

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