

## PRODUCT DATA SHEET



11% B (w/w)

Derived from boric acid  $C_2H_7NO_xBH_3O_3$

Reaction products of monoethanolamine and boric acid (1:3)

CAS Number 10377-81-8

## Pre-mixed for easy fertilization

*Liquibor*® is a liquid boron product derived from boric acid. Like all U.S. Borax refined boron products, *Liquibor* is made from only high-quality borates, with no intentionally added impurities, fillers, or coatings.

*Liquibor* can be used in the following agriculture applications:

- Foliar application: Already in liquid form, *Liquibor* provides the convenience for direct spraying on crops and can be added to a tank mix with other fertilizers or crop protection chemicals.
- Fertigation: Applied through irrigation systems with other liquids or water-soluble fertilizers.

### Recommendations for use

*Liquibor* should be dissolved in water and applied by spraying onto crops or by mixing with other liquid fertilizers for direct application on the ground. Use as directed. Do not exceed recommended rates.

### Dispersion

*Liquibor* disperses easily in water.

### Solubility

*Liquibor* is a true solution

### pH

Between 7 and 8

### Packaging

Available in 1 m<sup>3</sup> polypropylene container (dimensions 100 x 120 + 116 cm) or in bulk

### Density

The product density is 1.35 kg/L

### Viscosity

Temperature °C	Viscosity cP
10	1494
15	790
20	526

### Ease of handling

*Liquibor* delivers the convenience of liquid boron fertilizer straight to your farm with no measuring or mixing required.



## Boron: An essential plant nutrient

Boron is one of eight micronutrients essential to all plant growth. Adequate boron is necessary for proper absorption of macronutrients and for maintaining the integrity of plant cell walls.

### Detecting boron deficiency

Different crops show different signs of boron deficiency. Generally, but the time symptoms are seen, yields will already have been adversely affected. The best way to establish boron need is either through soil testing or tissue analysis. In this way, boron supplementation can form part of a regular crop fertilization program.

### Predicting boron deficiency

Certain crops worldwide are known to be more susceptible to boron deficiency than others. Specific crop information can be found at [www.borax.com/ag](http://www.borax.com/ag).

There are several factors which need to be taken into account when boron deficiency may be suspected:

- Abundant precipitation
- Recent addition of lime (pH above 6.6)
- Previous crop
- Subtraction of boron by the previous crop
- Absence of boron intake
- Sandy soils
- Rich in organic matter

### Correcting boron deficiency

Boron deficiency can be remedied by the correct application of a borate containing material in solid or liquid fertilizers, to the seedbed in annual crops or under the foliar canopy of perennial crops. Crops can also be sprayed with boron containing solutions. These are normally tank mixed with other micronutrients or agrochemical products. Mixing with other sprays as part of a program not only saves on application cost, but allows for precise timing.

## About U.S. Borax

U.S. Borax, part of Rio Tinto, is a global leader in the supply and science of borates—naturally-occurring minerals containing boron and other elements. We are 1,000 people serving 650 customers with more than 1,800 delivery locations globally. We supply around 30% of the world's need for refined borates from our world-class mine in Boron, California, about 100 miles northeast of Los Angeles.

Our local agriculture experts understand the uses and benefits of boron on crops. In addition to a global sales team, we have a number of agronomists on staff to help fertilizer distributors maximize the benefits of borates in agriculture applications. Our ag team can answer individual growers' questions and concerns about their particular crop.

High quality, high reliability, high performance borate products. It's what we're known for.

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