



14.5% B | 29% Zn

$2ZnO \cdot 3B_2O_3 \cdot 3.5H_2O$

Zinc borate

CAS Number 138265-88-0

Streamlined crop nutrition with boron and zinc

Zincubor® is a white, crystalline zinc borate powder. The product delivers the 2:1 zinc-to-boron ratio most crops need.

High quality production

Zincubor is produced at U.S. Borax's California facility in the United States. It is a synthetic fertilizer material made out of high-quality raw materials from our world-class boron and zinc sources. *Zincubor* is a consistent product with minimal impurities.

Zincubor can be used in these applications:

- Designed to coat granular/compacted fertilizers giving flexibility on the micronutrient rate and assuring an even distribution in the field. U.S. Borax recommends the use of a binder material during the coating process.
- Used as a raw material to produce compound or fortified fertilizers
- Depending upon the cropping system, can be applied directly to soil as a standalone application
- Used as a raw material to produce suspensions

Ease of a two-in-one product

Because zinc and boron deficiency are widespread around the world, a product with both nutrients is a good fit in many regions. *Zincubor* brings these two important micronutrients together in one product. Perfectly formulated with a 2:1 zinc-to-boron ratio that exactly meets most crop demands.

Solubility

Less than 0.28% in water at 20°C

pH

6.8-7.5 in aqueous solution at 20°C

Bulk density		
Pack type	kgm ⁻³	lb/cu ft
Loose pack	649	41
Tight pack	1000	65

Containers

Available in these bulk options:

- 2500 lb (1000 kg) IBC bags
- 25 lb (11.3 kg) plastic bags



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.

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.

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.

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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