



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



Zinc and boron, essential plant nutrients

Zinc and boron are two of the eight micronutrients essential for proper plant nutrition and growth. The deficiency of these two micronutrients is widespread across several regions in the world with several crops susceptible to deficiencies.

Zinc deficiency in crops

Zinc deficiency is widespread in the world. It can be identified by visual symptoms in leaves and sometimes in fruits. Zinc deficiency causes characteristic 'rosetting' or clustering of small leaves at the top of the plant. U.S. Borax recommends soil testing and tissue analysis to assess the status zinc available in the soil for crops. Certain crops are known to be more susceptible to lack of zinc than others.

Boron deficiency in crops

Boron deficiency shows in clearly defined ways in certain crops. Generally, by the time visible symptoms are seen, yields will already have been adversely affected. The best way to assess the need for boron fertilization is through soil testing and tissue analysis. In this way, boron supplementation can form part of a 'balanced nutrition' approach to crop fertilization.

Certain crops are known to be more susceptible to lack of boron than others. There are several factors that need to be taken into account when boron deficiency may be suspected:

- High rainfall
- Recent liming (pH over 6.6)
- Previous cropping
- No boron nutrition
- Sandy soils
- High organic matter

Correcting zinc and boron deficiency

Zinc and boron deficiencies can be remedied by the correct application of fertilizer materials in solid or liquid forms. The rate, method, and time of application depends upon the crop and management practices. Consult an agronomist before applying *Zincubor*® fertilizer.

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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