

## PRODUCT DATA SHEET



# SOLUBOR® FLOW +K



10% B w/w

$\text{KB}_5\text{O}_8 \cdot 4\text{H}_2\text{O}$

Potassium pentaborate

CAS Number 12229-13-9

## Boron and potassium in a ready-to-use formula

*Solubor*® Flow +K is a solvent-free, liquid boron formulation. It's a sodium borate placed in suspension without the use of chemical solvents. The product is non-viscous and non-oily.

*Solubor* Flow +K is used in the following applications:

- Spray to prevent boron deficiency in sensitive crops
- Foliar spray on young plants
- Sprayed on the ground in a mixture with nitrogen solution
- Provide boron by fertigation or hydroponic growing where these systems are used

### Recommendations for use

*Solubor* Flow +K should be dissolved in water and applied by spraying onto crops or also, by mixing with other liquid fertilizers for direct application on the ground. It can be introduced by using the hydromixer (when the sprayer is equipped) or directly in the tank.

In both cases, vigorous stirring must be maintained during the filling and mixing operations. Use as directed. Always consult an agronomist to determine the right rate, time, and method of application.

### Potassium content

In order to obtain higher crop yields, both macro- and micronutrients are necessary. We developed *Solubor* Flow + K to provide both potassium and borates to crops. The product contains 10 wt% boron and 7.2 wt% potassium. Boron and potassium work together in the plant nutrition process to maintain cell wall structure and integrity:

- Potassium uptake increases when boron is present
- Optimal levels of boron increases potassium permeability within the cell membrane
- Boron plays a fundamental role in potassium translocation within plants

### Compatibility

*Solubor* Flow +K is compatible with most phytosanitary products. It has been tested in combination with the most known and used products in modern agriculture. Compatibility lists are available from your distributor.

### Packaging

Available in 1300 kg polypropylene container (dimensions 100 x 120 + 116 cm)

### Bulk density

1300kg/m<sup>3</sup>

"Viscosity @ 24 hours" mPas: ≤6000

### Storage

We recommend storing the product indoors, at a temperature range between 5-35°C. If frozen, the product returns to liquid phase when the temperature rises.

### Shelf life

9 months from production date. The shelf life is indicative only for easier handling. The product is chemically stable beyond the indicated shelf life and can still be used by stirring the mixture to re-homogenize.



## 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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