

# SOLUBRITA® MSR

PRODUCT PROFILE: MSR-SPD-05/2005  
Soluble Boron B 18%  
Sodium pentaborate decahydrate  
 $\text{Na}_2\text{B}_{10}\text{O}_{16} \cdot 10 \text{H}_2\text{O}$



## + Characteristics

Molecular Weight	590.35
Purity like B element	18.0 % Min.
Purity like $\text{Na}_2\text{B}_{10}\text{O}_{16} \cdot 10\text{H}_2\text{O}$	99.5 % Min.

## ... Chemical and Physical Properties

$\text{B}_2\text{O}_3$	58.0%Min.
$\text{Na}_2\text{O}_3$	10.3% Mín.
$\text{H}_2\text{O}$	31.6% Max.

### Sieve specification

Mesh size ASTM N° 40 = 2% retained

### Bulk Density

0.93 Ton/m<sup>3</sup>

## ... pH

PH = 8.4 (1% by weight of solution at 22°C)

PH = 6.8 (15% by weight of solution at 22°C)

Solubrita® is a mild alkaline salt consisting of a fine white powder that is readily soluble in water. It dissolves even in cool water to give supersaturated solutions with high boron concentrations.

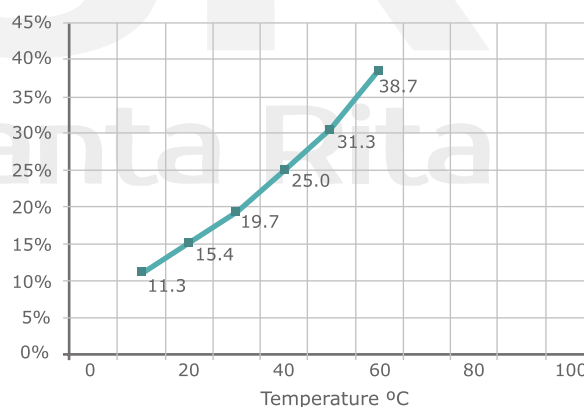
Solubrita® is a multi-functional product with a general application in both industrial and consumer products. It has a number of different uses in agro-industrial markets, in addition to its long establish role in farm sprays.

Boron is one of seven micronutrients essential to all plant growth. Boron deficiency has been recognised in a wide range of crops.

See detailed descriptions in further pages

### Solubility in water

Solubrita® is formulated to give very high solubility levels and ensure speedy mixing.



% by weight of saturated solution

## + Packaging

Solubrita® is available in 25 kg multiwall paper sacks or 1000kg big-bags.

## + Applications and benefits

### Fertilizer

Plant growth regulator. Foliar applications due to boron deficiencies. Coating of finished solid fertilisers. Formulate high performance liquids containing either boron alone or a combination of nutrients for spraying, "fertigation" or irrigation.

### Correcting Boron Deficiency

It 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. Perennial and annual crops can also be sprayed with boron containing solutions. These are normally tank mixed with other micronutrients or with agrochemical products.

### Industrial

Isolation / Flame Retardant / Corrosion Inhibition.

### Wood Protection

Flame proofing. Prevent wood decay from microbial attack.

### Pesticide

Fungicide. Fungi protection. Target ants, cockroaches, crickets, silverfish, earwigs, flies, millipedes, centipedes, mold and mildew.

### PH Adjustment

An acidic or basic substance used to alter the acidity (pH) of a solution or product.



### Soap/Surfactant

Compounds that have surfactant or detergent properties.

### Solvent

Inclusion in multi-element soluble powder formulations for spraying on farm. The amorphous particles of Solubrita facilitate rapid wetting and incorporation in water and move viscous liquids even at low temperatures.

### Defoliant

Kill leaves on broad leaf plants. Commonly used in cotton production to remove leaves before harvest.

### Compatibility

Solubrita® is compatible with most agrochemical and liquid fertilisers.