

# TECHNICAL INFORMATION

## Top Substra 12-12-17(+2+TE)

Technical data:	
<b>Macronutrients</b>	
<b>EC - FERTILIZER</b>	
12,0 % nitrogen (N)	
7,0 % NH <sub>4</sub> nitrogen	
5,0 % NO <sub>3</sub> nitrogen	
- % NH <sub>2</sub> nitrogen	
- % isobutylidenediurea	
- % crotonylidenediurea	
- % methyleneurea	
12,0 % phosphate (P <sub>2</sub> O <sub>5</sub> ) soluble in neutral ammonium citrate and water	5,2 % P
9,6 % P <sub>2</sub> O <sub>5</sub> water soluble	4,2 % P
17,0 % potassium oxide (K <sub>2</sub> O), water soluble	14,1 % K
2,0 % magnesium (MgO)	1,2 % Mg
1,6 % water soluble MgO	1,0 % Mg
8,0 % sulphur (S)	20,0 % SO <sub>3</sub>
6,4 % water soluble S	16,0 % SO <sub>3</sub>
<b>Micronutrients</b>	
0,020 % boron (B)	- % copper (Cu)
0,060 % iron (Fe)	- % manganese (Mn)
0,010 % zinc (Zn)	- % molybdenum (Mo)
<b>low in chlorine</b>	

### Other nutrients :

The raw materials used in the production process also contain low amounts of calcium (Ca), sodium (Na) or trace elements not mentioned above. The concentration of these elements is below EC declaration levels and can not be guaranteed.

### Physical properties :

Colour :	blue
Bulk density :	1050 ± 100 kg / m <sup>3</sup>
Granule size :	90 % = 1 - 2,5 mm
pH ( 1:10 in water ) =	6 - 7
Physical appearance :	Granular solid fertilizer, surface-treated for improved transport and storage properties.

### Recommendation for application :

Thanks to its even granulation the fertilizer can be applied easily with spreaders or by hand. Application is possible during the whole vegetation period. Watering-in promotes the immediate effect.

### Description of fertilizer properties :

Controlled release fine granulated NPK complex fertilizer, partly coated. For mixing into substrates. The nutrients are released in two steps:

- 1) Starter effect after application under moisture influence. As a result, the relatively high immediate demand is met.
- 2) In a second step, the nutrients are released out of the coated granules via diffusion influenced by moisture and temperature.

Mixing into substrate is recommended directly before use (maximum storage time 10 days).

