

## Certificate of Analysis : 12.12.17S+2MgO+TE BLUE

EC Fertilizer – NPK fertilizer low in chloride (Mg) (S) 12.12.17 with micronutrients (B, Zn)

Grade : 12+12+17+2 SOP Blue  
 Product code : 12.12.17S-303  
 Production period : February 2019, batch n° 602210  
 Site of Production : ROSIER S.A.

Parameters	Specifications (% w/w)	Minimum acc. to EC Reg. (% w/w)	ROSIER Analysis (% w/w)
Total nitrogen (N)	12.0	10.9 *	12.4
Ammoniacal nitrogen (N)	9.0	7.8	8.5
Nitric nitrogen (N)	3.0	1.8	3.9
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> ) soluble in neutral ammonium citrate and water	12.0	10.9 *	12.3
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> ) soluble in water	6.9	5.7	11.6
Potassium oxide (K <sub>2</sub> O) soluble in water, low in chloride	17.0	15.9 *	17.4
Magnesium oxide (MgO) total	2.0	1.5	2.6
Sulphur trioxide (SO <sub>3</sub> ) total	24.2	23.3	27.5
Sulphur trioxide (SO <sub>3</sub> ) soluble in water	18.7	17.8	27.2
Boron (B) soluble in water	0.0200	0.0160	0.0402
Zinc (Zn) total	0.1000	0.0800	0.1227

\* Total negative deviations from the declared value of primary nutrients N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O must be below 1.9

Parameters	Specifications	ROSIER Analysis
Arsenic (As) total (ppm)	< 15	3.9
Cadmium (Cd) total (mg Cd/kg P)	< 50	27.9
Chromium (Cr) total (ppm)	< 120	34.1
Mercury (Hg) total (ppm)	< 1	n.a.
Nickel (Ni) total (ppm)	< 40	15.5
Lead (Pb) total (ppm)	< 15	< 2

n.a. : not analyzed

Parameters	ROSIER Analysis
Humidity (H <sub>2</sub> O) (%)	1.07
pH 10% (w/w)	6.22
Chloride (Cl) (%)	0.80

Parameters	ROSIER Analysis
Hardness (kgF)	10 - 12
Tapped density (t/m <sup>3</sup> )	1.23
Bulk density (t/m <sup>3</sup> )	1.19

Particle size distribution	ROSIER Analysis
> 5 mm (%)	0.5
4 – 5 mm (%)	25.6
3.15 – 4 mm (%)	68.5
2.5 – 3.15 mm (%)	5.2
2 – 2.5 mm (%)	0.1
1.6 – 2 mm (%)	0.1
< 1.6 mm (%)	0.0
D50 (mm)	3.72

Tolerance

Regulation (EC) N°2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers (OJ-L304/1).

10/07/2019 – ROSIER SA – LABORATORY

