



CALCIUM CARBONATES = CAL lime fertilisers *Origin*: *E.U.*

INTRODUCTION

We can offer 3 qualities of Calcium carbonates, soil fertilisers. As soil fertiliser, the first aim is to correct the soil's acidity to reduce the concentration of Aluminium (AI) in the soil. The poor growth of the crops is due to the acidity, mainly caused by the AI soluble. This is a toxic product for the radical system of the plants. The lime fertiliser reduces the AI soluble by two chemicals reactions; 1) $CaCO3 + H2O \rightarrow Ca2+ + 2OH- + CO2$

2) Al3+ [soluble] + 3OH- \rightarrow Al(OH)3 [insoluble]

The cal's aggregate is also a valuable source of Ca (and possibly Mg) for the plant's nutrition, any of the collateral benefits linked to the acidity's neutralisation of the soil with Cal include:

- More availability of Phosphorus (P)
- Better Nitrogen (N) fixation for the leguminous plants.
- Increases mineralization of (N) and nitrification
- Best use of water, recuperation of nutrients and plant's growth with a healthy root system.

I. Granular Calcium Carbonates - Extra white marble TYPES 1 Gran and 2 Gran

GRANULOMETRY	Type 1 Gran	Type 2 Gran
Size distribution - Sieve	ISO 787R/7: % retained	ISO 787R/7: % retained
> 2.0 mm	0	0
> 1.0 mm	10 – 20	88 – 98
> 0.5 mm	70 – 90	0 – 10
> 0.25 mm	0 – 5	0 – 2
< 0.25 mm	0 - 1	0 – 1
TECHNICAL PROPERTIES	Type 1 Gran & Type 2 Gran	
(average values)		
Test	Value	Standard
Moisture	< 0.2 %	ISO 787R/2
Bulk density	1.35 kg/l	ISO 787R/11
CHEMICAL COMPOSITION (ICP)	Type 1 Gran & Type 2 Gran	
CaCO ₃	98.84	
MgCO ₃	0.57	
Fe ₂ O ₃	0.011	

II. Micronized Calcium Carbonate - Marble TYPE 3 Micro

GRANULOMETRY	Value	Analytic method
Sieve retention 250 µm	< 2 %	ISO 787R/7 (81)
% < 100 μm	70 – 100 %	mastersizer
Whiteness	Dry	
L	96.5 +/- 1.5	Spectraflash SF450
a	0.16 +/- 0.20	Spectraflash SF450
b	2.80 +/- 1.50	Spectraflash SF450
TECHNICAL PROPERTIES	Type 3 Micro	
(average values)		
Test	Value	Analytic method
Humidity	< 0.1 %	ISO 787R/2 (81)
Dop absorption	29 g/100g CaCO3	ISO 787R/5 (81)
Bulk density	1.0 kg/l	ISO 787R/11 (81)
Insoluble residue (Hcl)	< 0.2 %	INS.LAB10.13
CHEMICAL COMPOSITION	Value	Analytic method
CaCO ₃	98.87 %	ICP
MgCO ₃	0.87 %	ICP
Fe ₂ O ₃	0.011 %	ICP

PACKING

These 3 qualities are available only in 1300 kg net big bags x 20 = 26 MT per 20ft container.