

High Calcium Limestone

Production Facility: Faulkner Plant – Faulkner, Manitoba

Description:

A fine grained, powdery white product derived from crushing and grinding fined grained creamy white high-calcium limestone rock composed primarily of calcium carbonate (CaCO₃).

Composition and Typical Chemical Properties: (ASTM C 25, C 1271, C 1301)

	%
Calcium Carbonate (CaCO ₃), (%)	94.7
Calcium (Ca)	37.9
Magnesium Carbonate (MgCO ₃)	1.0
Magnesium (Mg)	0.3
Silica (SiO ₂)	2.6
Ferric Oxide (Fe ₂ O ₃)	0.2
Alumina (Al ₂ O ₃)	0.7
Total Sulfur (S)	0.01
Loss on Ignition	42.3

Classical Reference Data: (CRC Handbook of Chemistry and Physics)

Specific Gravity (Pure Calcite)	2.71
Solubility in Water (25 °C), (g/l)	0.014 – 0.015
pH (saturated solution) (25 °C)	9.4



Typical Physical Properties	"0" Grind	325	Poultry Grit	Supercal	Premix
Normal Size (mm)	0 – 0.630	0 – 0.045	1.25 – 5	0.160 – 1.25	0.250 – 0.630
Bulk Density (ASTM C110) (kg/m ³)	1050 – 1535	930 – 1215	1295 – 1455	1400 – 1650	1440 – 1600
(lbs/ft ³)	66 – 96	58 – 76	81 – 91	87 – 103	90 – 100

Size Distribution:

Sieve (mm)	Sieve (U.S.A)	% Passing				
4.000	No. 5			100		
3.150	No. 6			85 – 100		
2.000	No. 10				100	
1.250	No. 16			0 – 1	95 – 100	100
0.630	No. 30				15 – 60	85 – 100
0.400	No. 40	100				
0.315	No. 50	85 – 100				
0.250	No. 60					0 – 15
0.200	No. 70				0 – 10	
0.080	No. 200	55 – 80	100			
0.045	No. 325	40 – 70	95 – 100			