

Supercal - 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), (%)	96.5
Calcium (Ca)	38.7
Magnesium Carbonate (MgCO ₃)	0.8
Magnesium (Mg)	0.2
Silica (SiO ₂)	1.6
Ferric Oxide (Fe ₂ O ₃)	0.2
Alumina (Al ₂ O ₃)	0.4
Manganese Oxide (MnO) (ppm)	225
Total Sulfur (S)	0.01
Loss on Ignition	43.2

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

Specific Gravity (Pure Calcite)	2.71
Solubility in Water (25 °C), (g/l)	14
pH (saturated solution) (25 °C)	8-9
Crushing Strength (MPa)	8.3 – 195.8
Hardness (Mohs)	2-4
Specific Heat (38°C) (cal/g.°C)	0.114
Dielectric Constant	8-12



Size Distribution:

(ASTM MNL32)

Sieve (mm)	Sieve (U.S.A)	% Passing
2.50	No. 8	100
1.25	No. 16	88
1.00	No. 18	70
0.800	No. 20	53
0.630	No. 30	38
0.400	No. 40	16
0.315	No. 50	10
0.200	No. 70	3