

One Grind Limestone

Production Facility: Clearwater Quarry, Alberta

Description:

A light grey high-purity ground limestone produced from a limestone reserve by quarrying, crushing, and screening operations. A sedimentary rock composed predominantly of calcium carbonate (CaCO₃).

Typical Chemical Properties:

	%
Calcium Carbonate (CaCO ₃), (%)	95.0
Calcium (Ca)	37.0
Magnesium Carbonate (MgCO ₃)	1.9
Magnesium (Mg)	1.0
Silica (SiO ₂)	1.4
Ferric Oxide (Fe ₂ O ₃)	0.1
Alumina (Al ₂ O ₃)	0.2
Manganese Oxide (MnO) (ppm)	< 50
Total Sulfur (S)	0.03
Loss on Ignition	43.3

Classical Reference Data:

Specific Gravity (Pure Calcite)	2.84
Solubility in Water (25 °C), (mg/l)	13.62
pH (saturated solution (25 °C)	8 – 10
Crushing Strength (mPa)	7.9 – 198.4
Hardness (Mohs)	2.1 – 5.2
Specific Heat (38 °C) (cal/g. °C)	0.114
Dielectric Constant	8 – 12



Typical Physical Properties:

Bulk Density: Loose/packed 1490 – 1784 kg/m³ or 91 – 106 lb/ft³

Size Distribution:

Sieve (mm)	Sieve (USA)*	% Passing
1.250	No. 16	100
0.630	No. 30	99
0.315	No. 50	90
0.250	No. 60	86
0.160	No. 100	55
0.080	No. 200	30

* approximate USA mesh size corresponding to mm