

# SuperCal 300

Gilmore City, IA

SuperCal 300 is a small particle sized granular CaCO<sub>3</sub> product processed from quarried high calcium limestone in Gilmore City, IA with minimum calcium content of 38%



## Particle Size Measurement -- Laser Diffraction

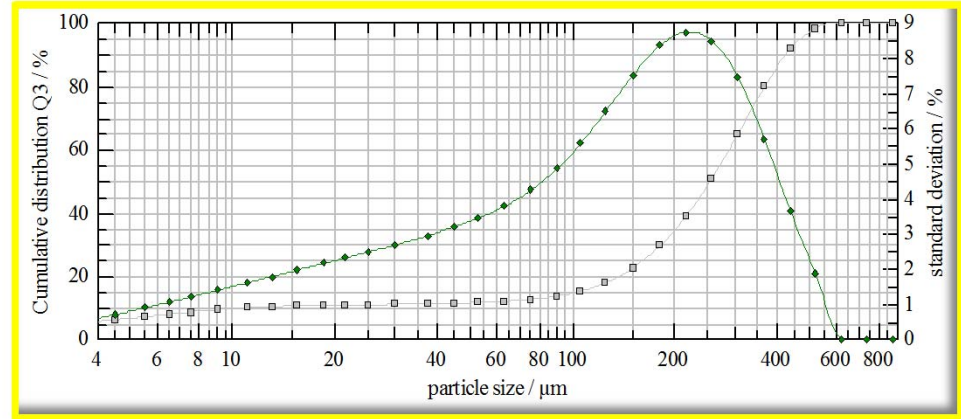
Average Particle Size = **253.21** microns

Ave particle size: half of the particles are above and half are below this point on the "S" shaped cumulative distribution graph.

**% Ca 39.48**  
**%CaCO<sub>3</sub> 98.70**

Typical Analyses		
Magnesium (Mg)	0.403	%
Silicon (Si)	0.09	%
Silica (SiO <sub>2</sub> )	0.20	%
Iron (Fe)	0.112	%
Sodium (Na)	0.017	%
Potassium (K)	0.007	%
Sulfur (S)	0.789	%
Manganese (Mn)	0.014	%
Phosphorus (P)	0.005	%
Chloride (Cl)	0.001	%
Chromium (Cr)	8	ppm
Aluminum (Al)	19	ppm
Boron (B)	10	ppm
Barium (Ba)	< 5	ppm
Lead (Pb)	< 5	ppm
Nickel (Ni)	< 5	ppm
Cobalt (Co)	< 5	ppm
Copper (Cu)	15	ppm
Zinc (Zn)	87	ppm
Cadmium (Cd)	< 5	ppm
Iodine (I)	4	ppm
Arsenic (As)	< 5	ppm
Beryllium (Be)	< 5	ppm
Selenium (Se)	0.287	ppm
Mercury (Hg)	< 0.050	ppm
Vanadium (V)	< 5	ppm
Molybdenum (Mo)	< 5	ppm
Fluorine (F)	< .10	ppm
Bismuth (Bi)	< 5	ppm
Antimony (Sb)	< 5	ppm

% Acid Solubility	
Average	<b>47.45</b>
Maximum	<b>52.62</b>
Minimum	<b>40.85</b>
H <sub>2</sub> O	< 0.5%
Bulk Density (lbs./cu.ft.)	
Loose:	<b>82</b>
Packed:	<b>95</b>



**μm = micron (1/1000 of a millimeter)**

Particle Distribution--U.S.Screen Comparison			
35 X 200 mesh product			
Micron Size	U.S.Screen	% Retained	% Passing
2000	<b>10</b>	0.0	100.0
1700	<b>12</b>	0.0	100.0
1400	<b>14</b>	0.0	100.0
1180	<b>16</b>	0.0	100.0
1000	<b>18</b>	0.0	100.0
710	<b>25</b>	0.0	100.0
500	<b>35</b>	3.0	97.0
425	<b>40</b>	6.9	90.1
355	<b>45</b>	12.8	77.3
300	<b>50</b>	13.9	63.5
212	<b>70</b>	25.3	38.2
180	<b>80</b>	8.6	29.5
150	<b>100</b>	7.0	22.5
75	<b>200</b>	10.2	12.4
10	<b>Pan</b>	12.4	
		100.0	

cumulative distribution (laser diffraction)			
Microns	% Passing	Microns	% Passing
875	100	52.5	11.39
735	100	45	11.15
615	100	37.5	10.95
515	98.22	30	10.77
435	91.80	25	10.66
365	79.80	21.5	10.60
305	64.90	18.5	10.49
255	50.56	15.5	10.31
215	38.96	13	10.04
180	29.53	11	9.69
150	22.54	9	9.12
125	17.86	7.5	8.45
105	15.03	6.5	7.84
90	13.47	5.5	7.06
75	12.38	4.5	6.09
62.5	11.75		