



Unical-UF

Alden, IA

Unical-UF calcium carbonate is a finely ground product processed from quarried high calcitic limestone in Alden with calcium content ranging 38.0% or above.

% Ca	38.28
%CaCO₃	95.70

Typical Analyses	
Mg	0.18%
Si	0.28%
Fe	0.24%
Na	0.03%
K	0.02%
S	0.16%
Mn	0.01%
P	0.01%
Cl	0.03%
Al	0.04%
Pb	14 ppm
Cd	0.54 ppm
V	2.1 ppm
H ₂ O	< 0.05%
Bulk Density	(lbs./cu.ft.)
Loose:	49
Packed:	55

% Acid Solubility	
Average	66.27
Maximum	69.23
Minimum	64.65

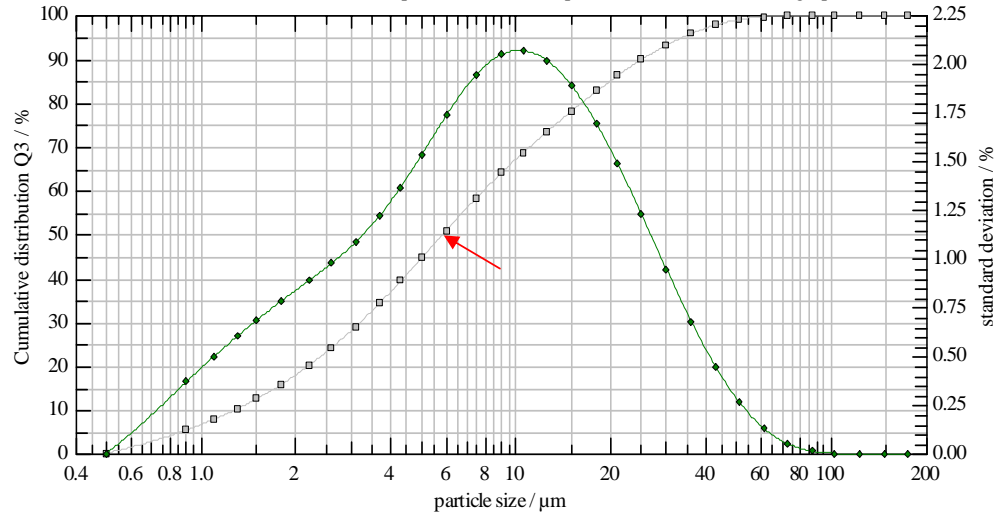
Surface Area (Sq.cm)/gm= 1134
 Number Particles per gm= 11,820,703

Particle Distribution--U.S.Screen Comparison			
Minus 325 mesh			
Micron Size	U.S.Screen	% Retained	% Passing
250	60	0.0	100.0
180	80	0.0	100.0
150	100	0.0	100.0
75	200	0.1	99.9
45	325	1.9	98.0
38	400	1.7	96.3
30	PAN	96.3	
TOTAL		100.0	

Particle Size Measurement -- Laser Diffraction**

Average Particle Size = 5.90 microns

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



μm = micron (1/1000 of a millimeter)

**Cumulative Distribution (% Passing through...)

Microns	%	Microns	%	Microns	%
175	100	25	89.80	3.7	34.35
147	100	21	86.14	3.1	28.95
123	100	18	82.59	2.6	24.13
103	100	15	78.08	2.2	20.05
87	100	12.5	73.31	1.8	15.78
73	99.91	10.5	68.51	1.5	12.44
61	99.60	9	64.04	1.3	10.14
51	98.91	7.5	58.33	1.1	7.78
43	97.70	6	50.79	0.9	5.35
36	95.77	5	44.47		
30	93.11	4.3	39.3		