



Unical-S

Alden, IA

Unical-S Calcium Carbonate is a small granular product processed from quarried high calcitic limestone in Alden with calcium content ranging 38.0% or above.

% Ca	38.88
%CaCO ₃	97.20

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:	84
Packed:	91

% Acid Solubility	
Average	58.43
Maximum	61.72
Minimum	54.69

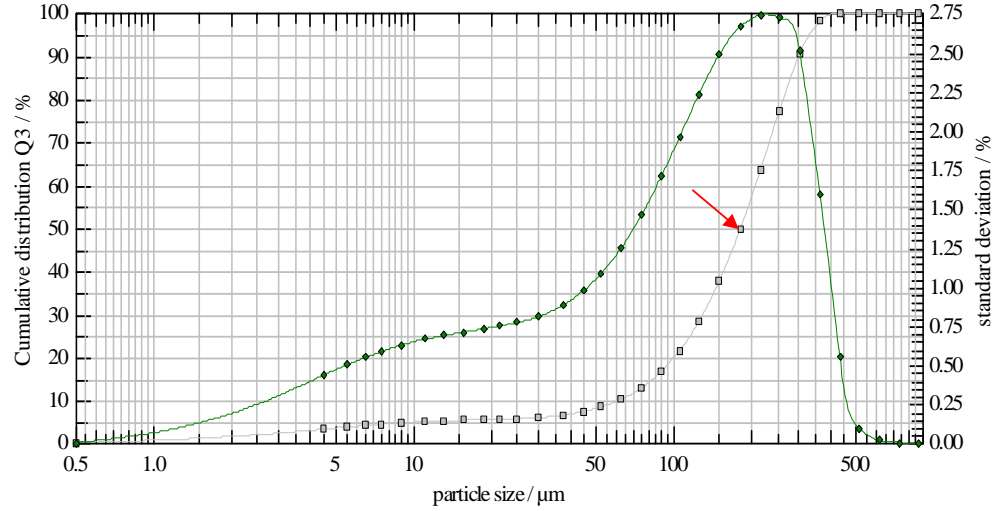
Surface Area (Sq.cm)/gm= 393
 Number Particles per gm= 1,920,873

Particle Distribution--U.S.Screen Comparison			
35 X 100 mesh			
Micron Size	U.S.Screen	% Retained	% Passing
850	20	0.0	100.0
500	35	0.0	100.0
300	50	10.9	89.1
212	70	27.0	62.1
150	100	24.3	37.7
75	200	25.0	12.7
30	PAN	12.7	
TOTAL		100.0	

Particle Size Measurement -- Laser Diffraction**

Average Particle Size = **181.06** 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	%
875	100	125	28.24	18.5	5.30
735	100	105	21.28	15.5	5.17
615	100	90	16.67	13	5.02
515	99.99	75	12.71	11	4.84
435	99.85	62.5	10.01	9	4.58
365	97.99	52.5	8.28	7.5	4.27
305	90.42	45	7.25	6.5	3.99
255	77.25	37.5	6.42	5.5	3.63
215	63.24	30	5.82	4.5	3.17
180	49.63	25	5.55		
150	37.74	21.5	5.41		