



Unical-L

Alden, IA

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

| | |
|--------------------|--------------|
| % Ca | 39.14 |
| %CaCO ₃ | 97.85 |

| 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: | 78 |
| Packed: | 84 |

| % Acid Solubility | |
|-------------------|--------------|
| Average | 47.56 |
| Maximum | 50.32 |
| Minimum | 43.93 |

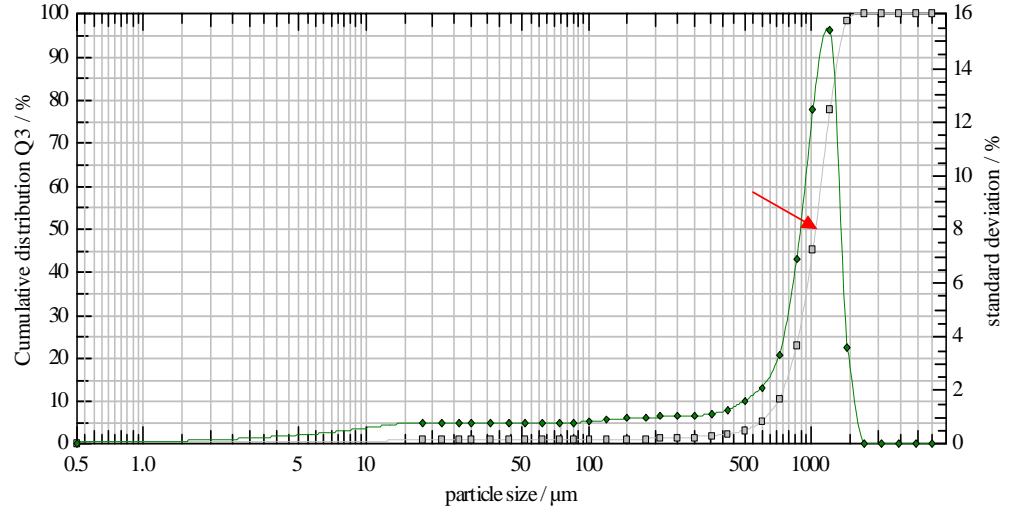
Surface Area (Sq.cm)/gm= 54
 Number Particles per gm= 1,998

| Particle Distribution--U.S.Screen Comparison | | | |
|--|------------|--------------|-------------|
| 12 X 40 mesh | | | |
| Micron Size | U.S.Screen | % Retained | % Passing |
| 1700 | 12 | 0.3 | 99.7 |
| 1000 | 18 | 57.7 | 42.1 |
| 710 | 25 | 32.3 | 9.8 |
| 425 | 40 | 7.7 | 2.1 |
| 212 | 70 | 1.1 | 1.0 |
| 75 | 200 | 0.4 | 0.6 |
| 30 | PAN | 0.6 | |
| TOTAL | | 100.0 | |

Particle Size Measurement -- Laser Diffraction**

Average Particle Size = **1060.19** 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 | % |
|---------|-------|---------|------|---------|------|
| 3500 | 100 | 500 | 2.86 | 74 | 0.60 |
| 2940 | 100 | 420 | 1.99 | 62 | 0.59 |
| 2460 | 100 | 360 | 1.58 | 52 | 0.59 |
| 2060 | 100 | 300 | 1.29 | 44 | 0.58 |
| 1740 | 100 | 250 | 1.09 | 36 | 0.58 |
| 1460 | 98.21 | 210 | 0.95 | 30 | 0.57 |
| 1220 | 77.59 | 180 | 0.84 | 26 | 0.57 |
| 1020 | 44.89 | 150 | 0.76 | 22 | 0.57 |
| 860 | 22.45 | 120 | 0.69 | 18 | 0.53 |
| 720 | 10.22 | 100 | 0.63 | | |
| 600 | 4.94 | 86 | 0.60 | | |