Hubercarb® W Series
Calcium Carbonate Products
QUINCY, IL
The Hubercarb® W Series

Huber’s Highest Purity Calcium Carbonate
Hubercarb® W Series Calcium Carbonate has a purity level of 99.3%, is mined from a world-class limestone deposit and processed in Quincy, Illinois. Products include ultra-fine and fine median particle sizes. Two of the W Series grades have been surface-modified to enhance end-use performance. The W Series products are ideal for applications that require high-filler loadings, low moisture content and silica content below detectable levels. The W Series is low in trace metals like iron, which can promote undesirable degradation in some polymer systems. The unique particle shape and particle size distribution lend the W Series products to low viscosity at high-filler loadings, improved surface-finish in molded parts, reduced part shrinkage and part breakage, while saving on expensive equipment repair costs.

Our Key Ingredient: Quality
At Huber Carbonates, LLC, quality is the key ingredient in all of our products. Our processes are certified to ISO standards and when combined with Six Sigma® tools, you are ensured consistent, high-performance products time after time.

Typical Physical Properties – Ultra-Fine and Fine Products

<table>
<thead>
<tr>
<th>Hubercarb® W Series</th>
<th>Optifil®</th>
<th>Optifil® T</th>
<th>W3N</th>
<th>W3</th>
<th>W4</th>
<th>W325</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Particle Size (µ, SediGraph®)</td>
<td>1.7</td>
<td>1.7</td>
<td>2.8</td>
<td>4</td>
<td>5.9</td>
<td>13</td>
</tr>
<tr>
<td>Dry Brightness (Hunter Reflectance)</td>
<td>93</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Oil Absorption (lbs oil/100 lbs, ASTM D-281)</td>
<td>17</td>
<td>16</td>
<td>15</td>
<td>15</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Moisture (%; ASTM D-280)</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Loose Bulk Density (lbs/ft³; ASTM C-110)</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>55</td>
<td>50</td>
</tr>
<tr>
<td>Compacted Bulk Density (lbs/ft³; ASTM C-110)</td>
<td>70</td>
<td>70</td>
<td>55</td>
<td>55</td>
<td>65</td>
<td>75</td>
</tr>
<tr>
<td>325 Mesh Residue (max, %)</td>
<td>0.005</td>
<td>0.005</td>
<td>0.005</td>
<td>0.005</td>
<td>1.0</td>
<td>5</td>
</tr>
<tr>
<td>Hegman Grind (ASTM D-1210)</td>
<td>6.5</td>
<td>6.5</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
Hubercarb® W Series Advantage for Liquid Polyester Applications: Low Chloride Content, Broad Particle Size Distribution

A key advantage of the Hubercarb W Series is a low leachable chlorides content. Chlorides are known to absorb water, which undesirably accelerates the cure. A broad particle size improves particle packing and lowers viscosity.

Thickened Viscosity – First Four Hours

For thermally-sensitive applications, the iron in the Hubercarb® W Series Calcium Carbonate grades is 10 times lower than domestically-sourced ore for superior weatherability and thermal stability.
Hubercarb® W Series
Calcium Carbonate Products

Other Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Alkalinity (as NaOH, ASTM D-1208)</td>
<td>0.4 mg/gm</td>
</tr>
<tr>
<td>pH (ASTM D-1208)</td>
<td>9.4 (saturated solution)</td>
</tr>
<tr>
<td>Hardness (Handbook of Chemistry and Physics)</td>
<td>3 Mohs, relatively non-abrasive</td>
</tr>
<tr>
<td>Solubility (Handbook of Chemistry and Physics)</td>
<td>0.0035 gm/100 ml H2O at 100°C</td>
</tr>
<tr>
<td>Particle Shape (Microscope)</td>
<td>Slightly irregular, uniaxial</td>
</tr>
<tr>
<td>Specific Gravity (ASTM D-153)</td>
<td>2.7</td>
</tr>
<tr>
<td>Refractive Index (Handbook of Chemistry and Physics)</td>
<td>1.6</td>
</tr>
<tr>
<td>Weight/Solid Gallon (s.g. x 8.345)</td>
<td>22.6 lbs/solid gallon (0.0443 solid gallons/pound)</td>
</tr>
<tr>
<td>Linear Expansion Coefficient (Handbook of Chemistry and Physics)</td>
<td>4.3 x 10^-6/°C</td>
</tr>
</tbody>
</table>

W Series Products

- Optifil®
- Optifil® T
- Hubercarb® W3N
- Hubercarb® W3
- Hubercarb® W4
- Hubercarb® W325

Applications

- Adhesives, Caulks and Sealants
- BOOP
- Breathable Films
- Composites – Non SMC / BMC
- Compression Molding SMC / BMC
- Elastomeric Roof Coatings
- Extrusion Coatings
- Fiberglass Reinforced Polyester
- Inks
- Paints and Coatings
- Paper
- Pipe and Conduit
- Polyolefins
- Pultrusion
- PVC Compounds
- PVC Siding
- Rubber and Plastics
- Silicone Rubber
- Thermally Sensitive Materials
- Thermoplastics
- Weatherable Items
- Wire and Cable

Other Products

- Hubercarb® G Series Calcium Carbonate
- Hubercarb® M Series Calcium Carbonate
- Hubercarb® Q Series Calcium Carbonate

Additional Products Available From

Marble Hill, Georgia
Marble Falls, Texas

For more information or to order samples, contact us:

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Email: hubermaterials@huber.com

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ISO 9001:2015 Certified Quality Management System