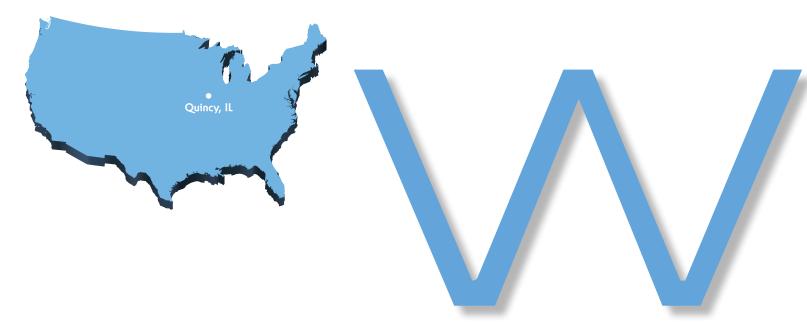


Hubercarb® W Series Calcium Carbonate Products

QUINCY, IL





The Hubercarb® W Series

Huber's Highest Purity Calcium Carbonate

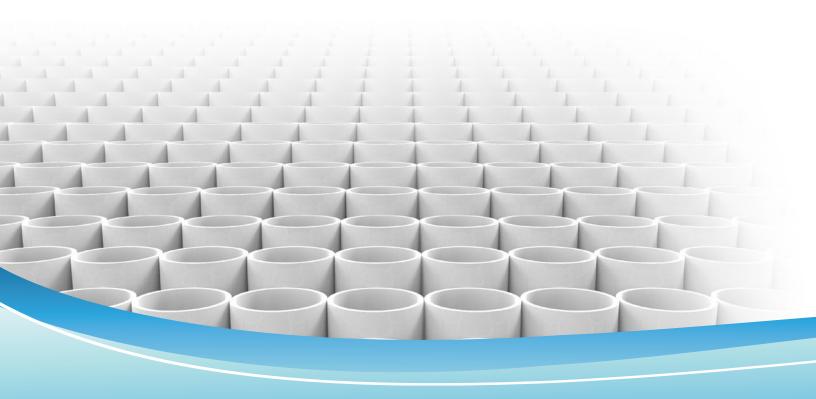
Hubercarb® W Series Calcium Carbonate has a purity level of 99.3%, which is mined from a world-class limestone deposit and processed in Quincy, Illinois. Products include ultra-fine and fine median particle sizes. Two of the W Series grades have been surface-modified to enhance end-use performance. The 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 also 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.

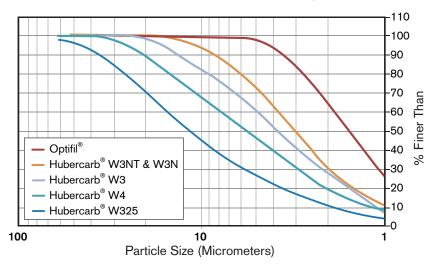
Typical Physical Properties - Ultra-Fine and Fine Products

Hubercarb® W Series	Optifil®	Optifil® T	W3N	W3NT	W3	W4	W325
Surface Treatment		Treated		Treated			
Median Particle Size (µ, SediGraph®)	1.7	1.7	3	3	4	5.9	13
Dry Brightness (Hunter Reflectance)	93	92	92	92	92	92	92
Oil Absorption (lbs oil/100 lbs, ASTM D-281)	17	16	15	15	15	13	
Moisture (%, ASTM D-280)	0.2	0.2	0.2	0.2	0.1	0.1	0.1
Loose Bulk Density (lbs/ft³, ASTM C-110)	50	50	50	50	50	55	50
Compacted Bulk Density (lbs/ft³, ASTM C-110)	70	70	55	55	55	65	75
325 Mesh Residue (max, %)	0.005	0.005	0.005	0.005	0.005	1.0	5
Hegman Grind (ASTM D-1210)	6.5	6.5	6	6	6	2	





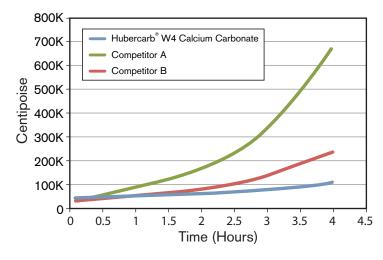
Particle Size Distribution — SediGraph® Method



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**

Typical Chemical Analysis

Chemical	Amount		
Calcium Carbonate	99.3%		
Magnesium Carbonate	0.4%		
Silicas and Silicates	0.05%		
Iron	40 ppm		
Leachable Chlorides	< 5 ppm		
Other	0.23%		

Other Typical Properties

	NA //			
Color	White			
Alkalinity (as NaOH, ASTM D-1208)	0.4 mg/gm			
pH (ASTM D-1208)	9.4 (saturated solution)			
Hardness (Handbook of Chemistry and Physics)	3 Mohs, relatively non-abrasive			
Solubility (Handbook of Chemistry and Physics)	0.0035 gm/100 ml H ₂ O at 100°C			
Particle Shape (Microscope)	Slightly irregular, uniaxial			
Specific Gravity (ASTM D-153)	2.7			
Refractive Index (Handbook of Chemistry and Physics)	1.6			
Weight/Solid Gallon (s.g. x 8.345)	22.6 lbs/solid gallon (0.0443 solid gallons/pound)			
Linear Expansion Coefficient (Handbook of Chemistry and Physics)	4.3 x 10 ⁻⁶ /°C			

W Series Products

- · Optifil®
- · Optifil® T
- Hubercarb® W3N
- Hubercarb® W3NT
- · Hubercarb® W3
- · Hubercarb® W4
- · Hubercarb® W325

Plant Location

Huber Carbonates, LLC 3150 Gardner Expressway Quincy, IL 62305

Applications

- · Adhesives, Caulks and Sealants
- · BOPP
- · Breathable Films
- · Composites Non SMC / BMC
- · Compression Molding SMC / BMC
- · Elastomeric Roof Coatings
- · Extrusion Coatings
- · Fiberglass Reinforced Polyester
- · 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:

1-866-JMHUBER (1-866-564-8237) www.hubermaterials.com/cc Email: hubermaterials@huber.com



