



ALLIED CUSTOM GYPSUM

PRODUCT DATA SHEET

VALU-FIL® 650

Flame Retardant Filler

Valu-Fil 650 is a finely ground, soft white, Calcium Sulfate Dihydrate which is utilized as an economical flame retardant filler in polymer resin systems. This product is produced by grinding high purity gypsum into a particle size distribution which optimizes its loading potential. Loading resin systems with high concentrations of **Valu-Fil 650** has the benefits of maximizing the flame retardant properties of the cured resin, lowering resin system cost and reducing resin shrinkage.

Typical Chemical Analysis

Combined Moisture	19.8%
Free Moisture	0.04%
Calcium Sulfate/Dihydrate	94.6%

Typical Physical Properties

Appearance	White Powder
Specific Gravity	2.32
Bulk Density	69 lb/ft ³
Moh Hardness	2.0
pH	7.5

Typical Particle Size Distribution

Particles Passing ASTM Sieves

40 Mesh	100.0%
100 Mesh	97.8%
200 Mesh	84.0%
325 Mesh	65.0%

*Certificate of Analysis and MSDS available upon request

Advantages

- **Flame Retardant** – Valu Fil 650 contains chemically combined water which acts as a flame retardant in resin systems. It has been used successfully to pass the UL E-84 and UL – E-162 flame and smoke tests.
- **Economical** – Valu Fil 650 low product cost and its ability to be filled at high volumetric concentrations reduces the amount of resin used, lowering the cost of the resin system. Use Valu-Fil 650 Blend as an economical and effective substitute for the ATH-Carbonate blends, without sacrificing flame retardance properties.
- **Compatibility** – Valu Fil 650 is compatible with a wide variety of the resin systems currently in use from a variety of manufacturers. Used successfully at load ratios in excess of 50%.
- **Fluidity/Suspension**- The particle size distribution of Valu-Fil 650 has been optimized to provide excellent viscosity and suspension properties in resin systems improving mixing and processing operations.



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Packaging Options

Valu-Fil 650 is packaged in industry standard 50 lb. net weight bags, palletized and stretch wrapped on 3000 lb. pallets. It is also available in Super Sacks and in bulk.

Transportation Logistics

Allied Custom Gypsum has the ability to provide full traffic and distribution services to coordinate logistical activities involving product delivery in accordance with customer requirements which include FOB and delivered price billing.

Product Quality

Allied Custom Gypsum is vertically integrated in order to be in complete control of all materials and processes responsible for the production of our products. To be sure consistency is maintained, we continuously sample and analyze Valu-Fil 650 for purity, moisture, particle size, and overall quality. A certificate of analysis is available upon request for each lot produced.