



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 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

Gypsum Purity	90%
Free Moisture	0.04%
Combined Moisture	19%

Typical Physical Properties

Appearance	White Powder
Specific Gravity	2.32
Bulk Density	69 lb./ft ³
Mohs Hardness	2.0
pH	8

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 SDS 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.
- **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.