

A87 Fillite

Low density Silicate Spheres

A87 Fillite is a glass hard, inert, hollow silicate sphere. It is primarily used to reduce the weight of plastics, rubber, resin and cement etc. It also imparts further benefits in many situations. Due to spherical nature of the particles, increased filler loading and improved rheology can be obtained while using A87 Fillite.

Special Features

Low density
Chemically stable
High strength to weight ratio
Grey in colour

Spherical Particles
Excellent compatibility with most resins
High filler loading possible

Chemical Properties

Parameter	Quantity
Shell	
Alumina as Al ₂ O ₃	27% – 33%
Silica as SiO ₂	55% – 65%
Iron as Fe ₂ O ₃	4% Max
Gas	
Carbon Dioxide, CO ₂	70%
Nitrogen, N ₂	30%

Physical Properties

Parameter	Quantity
Average Particle Density	0.60 – 0.80 g/cm ³
Average Bulk Density	0.35 – 0.45 g/cm ³
Packing Factor	60% - 65%
Hardness	Mohs Scale 5
Average wall thickness	5% - 10% of sphere dia
Particle size	5 – 300 micron
Particle below 150 micron	60% - 90%
Melting Temperature	1200 – 1350 °C
Thermal Conductivity	0.11 W/mK
Coefficient of Thermal Expansion	0 < = 8x 10 ⁻⁶ (K)
Surface Moisture	0.3 % Maximum

Further Information

*This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

Our technical advice, whether verbal, or in writing is given in good faith, but without warranty – this also applies where proprietary rights of third parties are involved. It does not release you from the obligation to test the products supplied by us as to their suitability for the intended process and use.

Before using any of our products, users should familiarise themselves with the relevant Technical and MSDS provided by Alchemie Ltd.

Alchemie Limited

Alchemie Ltd develop, formulate and distribute Epoxy Resins, Polyurethane Resins, Silicones, Model Boards and Sheet Wax for use in the following applications:

- Electrical encapsulation
- Rapid Prototyping
- Prototypes
- Casting
- Gel Coating
- Laminating
- Model Making
- Master Models
- Flexible and rigid mould making

We offer fast service, technical support, development expertise, innovative products, diverse knowledge and experience.

We are a well-established company, with a high level of investment and experience. We implement BS EN ISO 9001.

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