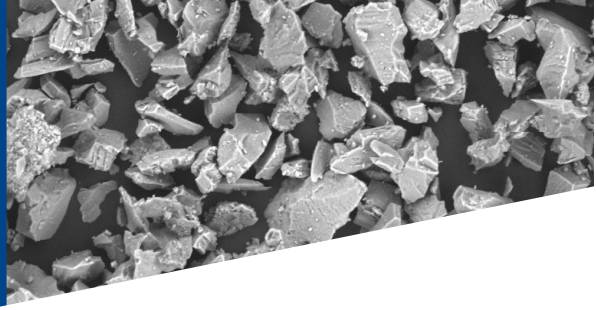
Thermal Spray Powders Technical Datasheet



Saint-Gobain Alumina - 13% Titania

POWDERS CHARACTERISTICS

Product	Nominal Size	Color	Morphology
#106	15-45 micron	Grey (106)	Irregular
#107	5-30 micron	Grey (107)	Irregular

TYPICAL CHEMISTRY

Product	Al_2O_2	TiO_2	SiO_2	Fe_2O_3	MgO	ZrO_2	Other
#106, #107	86%	13%	0.10%	0.08%	0.03%	0.25%	0.20%

KEY PROPERTIES

Saint-Gobain Alumina – 13% Titania is a fusion of aluminum oxide and titanium oxide designed to produce functional coatings. The homogeneity of these fused powders offers differentiation compared to most other commercially available grades that are mechanically blended. These coatings also resist corrosion by most acids and caustics.

Alumina – 3% Titania has the highest hardness of all the Saint-Gobain Alumina – Titania grades. Alumina – 40% Titania has the highest Toughness and Lubricity of all the Saint-Gobain Alumina – Titania grades. Alumina – 13% Titania offers a compromise of these properties.

TYPICAL APPLICATIONS

Sealing Surfaces (e.g. Shafts, Hydraulic Pistons, etc),
Components for Textile Machinery (e.g. Thread Guides, Guide Bars, Pulleys, etc)
Components for Chemical Industry (e.g. Feed Separators, Pumps, Plungers, etc)
Hard Base Coating under Fluoropolymer Topcoat

SAINT-GOBAIN