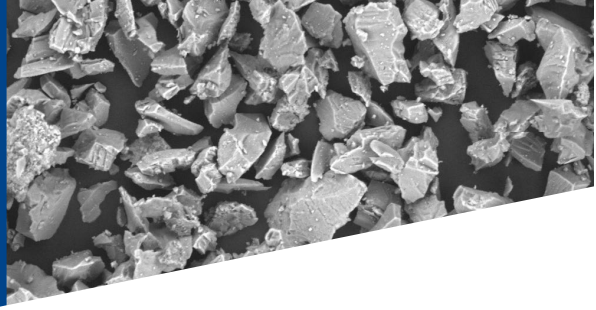
Thermal Spray Powders Technical Datasheet



Saint-Gobain Alumina - 40% Titania

POWDERS CHARACTERISTICS

Product	Nominal Size	Color	Morphology
#108	15-45 micron	Black (108)	Irregular
#109	5-30 micron	Black (109)	Irregular

TYPICAL CHEMISTRY

Product	Al_2O_2	TiO_2	SiO_2	Fe_2O_3	MgO	ZrO_2	Other
#108, #109	57%	42%	0.20%	0.10%	0.02%	0.25%	0.25%

KEY PROPERTIES

Saint-Gobain Alumina Titania is a fusion of aluminum oxide and titanium oxide designed to produce functional coatings. Lower titania levels produce dense and hard coatings that resist wear due to abrasion, fretting, cavitation, and particle erosion. These coatings also resist corrosion by most acids and caustics. Applications include coating machinery components in the chemical and textile industries where very dense and smooth coatings with high friction resistance are required. These would include thread guides, guide bars, feed separators, shafts, and pumps.

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) Feed Separators, Pumps, Plungers, Heater Plates

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