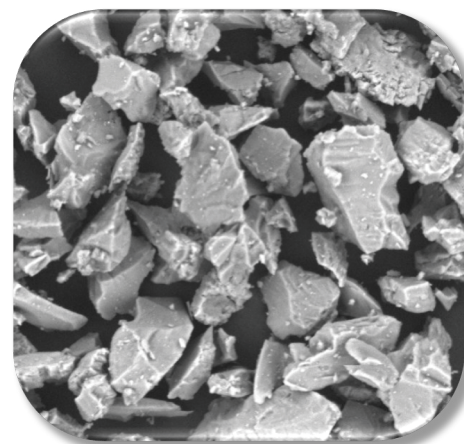


Thermal Spray Powders Technical Datasheet



Saint-Gobain Alumina Titania

POWDER CHARACTERISTICS

Product	Nominal Size	Color	Morphology
#106, #108	15-45 micron	Gray (106), Black (108)	Irregular
#107, #109	5-30 micron	Gray (107), Black (109)	Irregular
#1010	5-25 micron	Black	Irregular

TYPICAL CHEMISTRY

Product	Al ₂ O ₃	TiO ₂	SiO ₂	Fe ₂ O ₃	MgO	ZrO ₂	Other
#106, #107	86%	13%	0.10%	0.08%	0.03%	0.25%	0.20%
#108, #109	57%	42%	0.20%	0.10%	0.02%	0.25%	0.25%
#1010	52%	32%	9%	0.25%	3%	3%	0.75%

PROPERTIES AND APPLICATIONS

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.

Higher titania levels produce softer coatings that when polished exhibit low wettability to dilute solutions of common acids. Applications include chemical and textile industry bearing surfaces such as heater plates, godet rolls, thread guides, tension washers, and creel rolls.

Saint-Gobain #1010 is a stabilized aluminum titanate used in wear resistant applications. These coatings can also be used as a release agent in special environments.