

Thermal Spray Powders Technical Datasheet



Saint-Gobain Ruby

POWDER CHARACTERISTICS

Product	Nominal Size	Color	Morphology
Ruby L	20-45 micron	Black	Agglomerated and sintered
Ruby F	15-40 micron	Black	Agglomerated and sintered
Ruby VF	10-30 micron	Black	Agglomerated and sintered

TYPICAL CHEMISTRY

Cr ₂ O ₃	Al ₂ O ₃	Fe ₂ O ₃	TiO ₂	SiO ₂	Cr
75%	25%	0.05%	0.05%	0.02%	0.01%

PROPERTIES AND APPLICATIONS

Saint-Gobain Ruby was designed as an alternative to pure chromium oxide with a spherical particle morphology and a formulation that enhances plasma melting characteristics. The rounded shape leads to superior flowability while the improved melt characteristics lead to higher buildup rates and significantly higher deposit efficiencies. Compared to standard chromium oxide, Ruby has better temperature stability (>1000°C) and produces significantly less hexavalent chromium oxide during spraying.

Ruby can be used in place of chromium oxide for standard and more demanding applications. Ruby produces coatings with better release properties, high dielectric strength, and better resistance to wear and impact. Typical applications include laser engraved printing rolls and other printing applications requiring higher wear resistance.