

High Purity Silicon Nitride Powder

High purity silicon nitride powder is a beta (β) particle product that has very low levels of impurities and oxygen. We now offer an average particle size of 1.0 μ m product named "SSN- β 1".

■ Applications :

① Raw material for sintered parts

High purity silicon nitride powder has very low levels of impurities and oxygen. It is used as a raw material for silicon nitride (Si_3N_4) ceramics that need high bending strength, hardness and toughness.

② Raw material for phosphor

High purity silicon nitride powder is used as a raw material for Sialon phosphor in LED & LCD industry.

③ Radiating filler material

High purity silicon nitride powder has high thermal conductivity among insulation fillers, so that it is used for a composite material.

■ Product property (standard value) :

Product	Crystal structure (%)		Average particle size (μ m)	Specific surface area (m^2/g)	Contained substances			
	$\alpha\text{Si}_3\text{N}_4$	$\beta\text{Si}_3\text{N}_4$			O (%)	F · C (%)	Fe (ppm)	Al (ppm)
SSN- β 1	<10	90<	1.0~1.5	3.5~4.5	<1.0	<1.0	<50	<50

■ Particle size distribution and product(appearance) :

