

## High Purity Silicon Nitride Powder

High purity silicon nitride powder is a beta ( $\beta$ ) particle product that has low levels of impurities.

We now offer an average particle size of 3.0 $\mu$ m product named "SSN- $\beta$ 2".

### ■ 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( $\text{Si}_3\text{N}_4$ ) ceramics that need high bending strength, hardness and toughness.

#### ② Filler material

Beta( $\beta$ ) type of high purity silicon nitride powder has high thermal conductivity among insulation fillers, so that it is used for a composite material.

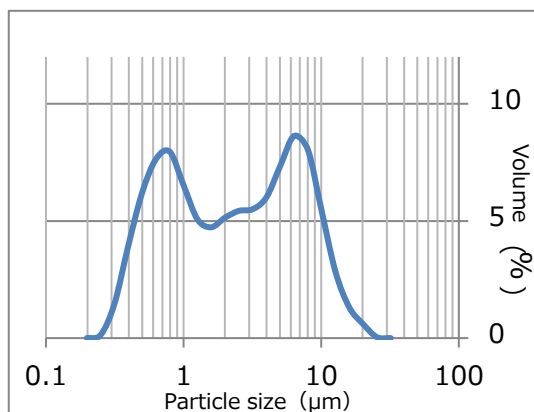
#### ③ Raw material for phosphor

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

### ■ Product property (standard value) :

Product	Crystal structure (%)		Average particle size ( $\mu$ m)	Contained substances			
	$\alpha$ $\text{Si}_3\text{N}_4$	$\beta$ $\text{Si}_3\text{N}_4$		C (%)	Fe (%)	Al (%)	Ca (%)
SSN- $\beta$ 2	<10	90<	2.0~4.0	$\leq 2.0$	$\leq 0.5$	$\leq 0.5$	$\leq 0.5$

### ■ Particle size distribution and particle image :



SEM  $\times 3000$

