

**NS6130-02-210**

## Quick Facts

Product	:	Silicon Nitride Nanoparticles
Stock No	:	NS6130-02-210
CAS	:	12033-89-5
Molecular Formula	:	$\text{Si}_3\text{N}_4$
Form	:	Powder

# SILICON NITRIDE Nanoparticles

**Purity**  
99.9%

## Technical Specification

Molecular Weight	Density	Melting Point	APS
140.28g/mol	3.52g/cm <sup>3</sup>	1900°C	15-30nm

Silicon nitride is a chemical compound of the elements silicon and nitrogen. It is used in high temperature, wear resistant, and corrosion resistant structural component such as sleeves, valves, sliding bearings, ball and roller bearings. It is also used in surface treatment of metals and other materials such as cutting tools, turbine blades and rotors, molds, and cylinder wall coatings. Silicon nitride nanoparticles is also used in composite materials such as metals, rubbers, plastics, ceramics, coatings, and polymers.

## Application

- ✓ Manufacturing structural components valves for rolling bearings used in metallurgical, chemical, mechanical, aviation, aerospace and energy industries, high temperature resistance and corrosion resistance, rocket nozzles and missile nozzles
- ✓ Surface treatment of metals and other materials: cutting tools, turbine blades, turbine rotors and cylinder inner wall coating
- ✓ Wear-resistant and self-lubricating nano-particle film is used for surface protection of mobile phones and automobiles, as well as additives of wear-resistant coatings and electrophoretic paints, which has high wear resistance.



**$\text{Si}_3\text{N}_4$**   
**APS 15-30nm**



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