

PRODUCT DESCRIPTION AND APPLICATION

NMSiCΔN99@35 is made of spherical Nitrogen-doped SiC nanoparticles (primary particles) and is supplied as a powder.

This product can be used as an additive in various elastomer, composite or metal alloy formulations to improve electrical, mechanical, chemical and/or plasma-resistance properties of the matrix. It can also be used as a source material for SiC wafer production.

BASIC CHARACTERISTICS

Specific Surface Area (m ² /g)	=	48 - 58
Density (g/cm ³)	=	3.1 - 3.2
Average Particle Size (nm)	=	32 - 40
Moisture Content (wt.%)	=	< 1

CRYSTAL STRUCTURE

Core crystal phase	=	SiC 3C (beta) only
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CHEMICAL COMPOSITION

Silicon (wt. %)	=	63 - 75
Carbon (wt. %)	=	25 - 37
Oxygen (wt. %)	=	< 1
Nitrogen (wt. ppm)	=	> 400
Iron (ppm)	=	< 20
Chromium (ppm)	=	< 10
Nickel (ppm)	=	< 5

MICROSCOPY ANALYSIS

