

## Gallium nitride nanopowder\_GaN from NaBond

Gallium nitride nanopowder is a new semiconductor material for microelectronic and optoelectronic apparatuses. It is called as the third generation of semiconducting material, besides SiC and diamond after Ge and Si which are the first generation of semiconducting materials and GaAs and InP compounds, the third generation. It possesses wider direct band gap, stronger atomic bond, higher heat conductivity, better chemical stability (can hardly be corroded by acid) and stronger anti radioactive ability bringing wide prospect in the application of photoelectrons, high-power and high-temperature appliances and high-frequency microwave appliances. GaN is an extremely stable compound and the material with high rigidity and melting point reaching as high as 1700°C. GaN has the highest ionization degree in III—V compounds (0.5 or 0.43). Under normal atmospheric pressure, GaN crystal is an excellent coating protection material for its high rigidity.

### ◆ Specification:

Product Name	Color	Purity	Average particle size	Crystal Form	Specific surface area	Loose Density
Gallium nitride nanopowder	Black	>99.0%	50 nm	Hexagonal	36m <sup>2</sup> /g	0.05g/cm <sup>3</sup>

### ◆ Storage

The product should be sealed and stored in cool and dry room and not be exposed to air avoiding a conglomeration caused by damp resulting in poorer dispersion and performance. Besides, heavy presses should be prevented.