Technical Data Sheet

Version: EN 1.0

Bnitril N、NS、NAQ Series

INCI Name: **Boron Nitride**

Hexagonal boron nitride, formed by sintering reaction at a high temperature of about 2000 degrees. The molecular structure of hexagonal crystal is formed by wet stripping in a sheet form. It is a typical electrical insulator with high thermal conductivity, good lubricity, oxidation resistance, Corrosion resistance and chemical stability. Oxygen atmosphere temperature resistance 800 degrees, inert gas atmosphere temperature resistance 1800 degrees, theoretical density 2.25g/cm³, Moh's hardness 2, expansion coefficient 2×10-6, thermal conductivity 35W/m.k, dielectric constant 4. For most metal hot melts, neither wetting nor reacting. KingPowder's unique wet peeling process, the layer is round and complete, and the lipophilic surface modification improves the filling and dispersing of boron nitride in resin, rubber and plastic systems.

Product Parameters:

Appearance: (visual inspection)	White powder
Crystal form:	Hexagonal
B2O3(%):	≤0.10
Boron nitride content (%):	≥ 99
Average particle size D50 (um):	0.50—20.00
Tap density (g/cm3):	＜0.60
Loss on drying (%):	≤0.10
Surface properties:	NS lipophilic modification, AQ hydrophilic modification, N no surface modification

Product specifications:

Product name	D 50 mean particle size (μm)	Specific surface area (㎡/g)	Surface properties
Bnitril N-1	＜1	14	No surface modification
Bnitril N-3	3	8	No surface modification
Bnitril N-6	6	7	No surface modification
Bnitril N-8	8	5	No surface modification
Bnitril N-12	12	2	No surface modification
Bnitril N-20	20	1	No surface modification
Bnitil NS-3	3	8	Lipophilic surface modification
Bnitil NAQ-6	6	7	Hydrophilic surface modification
Others			

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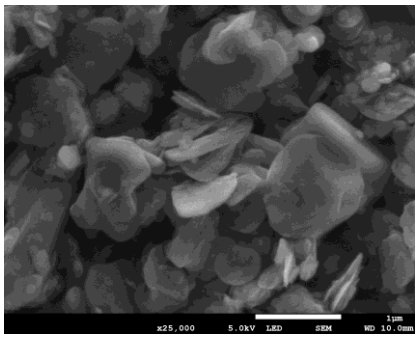
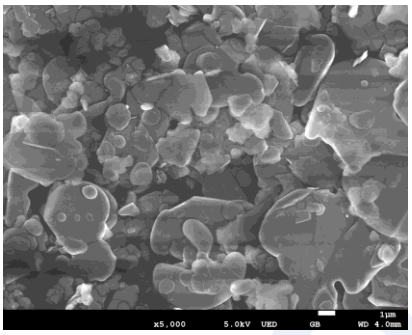


Bnitril NS-3



Bnitril NS-6

Product Features and Applications:

Features:

1) High insulation, high thermal conductivity, low expansion coefficient.
2) High temperature resistance, ceramic white, stable physical and chemical properties, no color change at high temperature.
3) Lubrication performance, excellent mechanical properties.
4) Film-forming property, excellent isolation and blocking anti-corrosion effect of lamella.
5) Non-wetting with metal and glass.

Applications:

Mainly used in thermal conductive coatings, adhesives, thermal conductive rubber plastics, fibers, electronic insulation and thermal conductive packaging materials, LED package heat dissipation, high temperature metal casting, mold release agents for artistic glass, high temperature grease, lubricant additives, and oxidation and corrosion resistance material.

Storage Information:

Manufacture area:	China
Packing:	10、15、20 kg/barrel
Storage:	Sealed and stored in a cool and dry place away from light
Shelf life:	36 months

Date:2020/10/30