

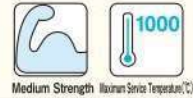
Electric Insulation

Nichias electric and thermal insulation boards are inorganic thermal insulation boards that also have excellent performance in electric insulation. These products are used in a variety of applications such as a heater terminal support, arc shooter materials and fire resistant material for LNG piping.

※Dry the following products adequately prior to use in electric insulation.

TOMBO™No.6850

NEOARK™



NEOARK™ is a non-sintered and chemically bound ceramic (CBS) product and is a completely inorganic composite material. NEOARK™ is thermal and electric insulation boards that have high heat resistance and strength designed to be for use also in automotive ark shooter materials where service conditions are very severe.

Advantages

- Retains high strength after heated in high temperatures (Fire resistant to 1000°C)
- Low dimensional changes after heated in high temperatures
- Excellent electrical insulation properties
- Incombustible due to inorganic composite material

Advantages

- Retains high strength after heated in high temperatures (Fire resistant to 1000°C)
- Low dimensional changes after heated in high temperatures
- Has thermal insulation properties equivalent to that of asbestos millboards
- Low in moisture and water absorption and excellent in electric insulation
- Incombustible due to completely inorganic composite material

Physical Properties

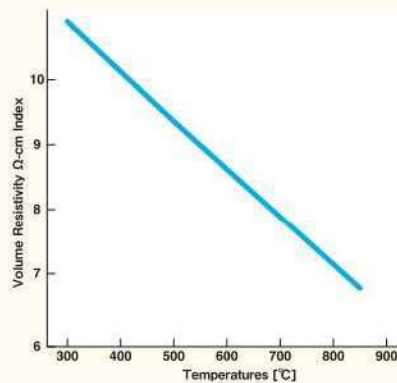
Properties	Unit	NEOARK™
Maximum Service Temperature	°C	1,000
Bulk Density	kg/m ³	2,350
Bending Strength 100°C	MPa	39
500°C		34
1000°C		26
Compressive Breaking Strength	MPa	154
Linear Heat Shrinkage 1000°C	%	0.2
Charpy Impact	J/cm ²	0.24
Brinell Hardness ^{※1}		40
Thermal Conductivity 200°C	W/(m·K)	0.51
400°C		0.59
600°C		0.62
Water Absorption	%	6.0
Volume Resistivity (After drying)	Ω·cm	10 ¹³
Surface Resistivity (After drying)	Ω	10 ¹³
Dielectric Breakdown Strength (After drying)	kV/mm	5.6
Linear Expansion Coefficient	×10 ⁶ /°C	5.6

●These figures are test results and should not be used for specification purposes.

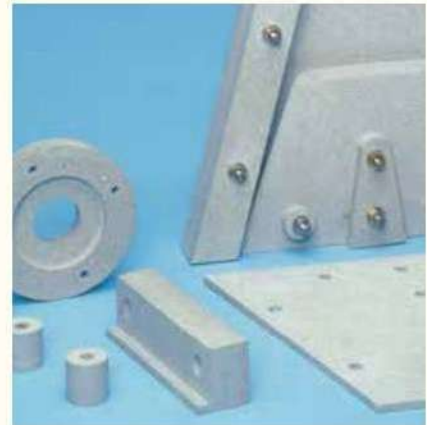
●The data after high temperature heating are measured at normal temperature after heating.

※1 Brinell Strength : HB 10/500/10

Volume Resistivity at room temperature after heating at high temperatures



●The volume resistivity on the y-axis shows the n-value (n-plex or n-th power) as in the volume resistivity (Ω·cm) = $x \times 10^n$. Accordingly the y-axis shows values in the range from 10⁶ through 10¹¹.



※Moisture content of Neoark might cause deformation when it is exposed to rapid heating with its both top and bottom surface covered. In this case pre-calcining is necessary to prevent the deformation from occurring. If the service conditions are similar to the above, please contact us.

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Standard Dimensions (mm)	400×500
Standard Thickness (mm)	3, 5, 10, 15, 20, 25, 30, 35, 40

⚠ Cautions for handling the products

1. Store these products in the original package and keep from water leakage in a cool and dark place to retain the designed performance.
2. Check on the SDS (Safety Data Sheet) regarding cautions on occupational health.
3. Comply with your local legislation in the case of disposal of these products.