

Shapal™ Hi-M soft Machinable Aluminum Nitride Disk

Grade: Shapal- Hi-M soft

Formula: AlN / BN

Thickness: 1mm

Diameter: 24mm

CAS Number: 24304-00-5

UOM Code: 865-415-43

SKU: 1000010505-group

Product Code: AK61-SH-000211

Material Properties for Ceramics

Chemical Resistance

| Element | Value |
|----------------|-------|
| Acids - dilute | Fair |
| Alkalis | Poor |

Electrical Properties

| Element | Value |
|--|-----------------------------|
| Dielectric constant | 7.3 |
| Dielectric strength(kV mm ⁻¹) | 40 |
| Volume resistivity(Ohmcm) | 1.8 x 10 ¹³ @25C |

Physical Properties

| Element | Value |
|------------------------------|-------|
| Apparent porosity(%) | 0 |
| Density(gcm ⁻³) | 2.95 |

Thermal Properties

| Element | Value |
|---|-----------|
| Upper continuous use temperature(C) | 1000-1900 |
| Thermal conductivity(W m ⁻¹ K ⁻¹) | 100@20°C |

| Element | Value |
|---|---------------|
| Coefficient of thermal expansion($\times 10^{-6} \text{ K}^{-1}$) | 5.2@20-1000°C |

Mechanical Properties

| Element | Value |
|--|--------------|
| Tensile modulus(GPa) | 160 |
| Hardness - Vickers(kgf mm^{-2}) | 560 |

Pultrusions

| Element | Value |
|-----------------------------|--------------|
| Compressive strength(MPa) | 1000 |