

# Polyaramid Honeycomb Panel

**Formula:** Polymetaphenylene isophthalamide

**Thickness:** 20mm

**Length 1:** 600mm

**Length 2:** 600mm

**Adhesive:** Phenolic

**Cell Size:** 3mm

**Cell Wall:** 0.05mm

**UOM Code:** 077-228-62

**SKU:** 1000010930-group

**Product Code:** AR31-HC-000150

## Material Properties for Polymers

### Chemical Resistance

Element	Value
Acids - concentrated	Poor
Acids - dilute	Good-Fair
Alcohols	Good
Alkalis	Good-Poor
Aromatic hydrocarbons	Good
Greases and Oils	Good
Halogenated Hydrocarbons	Good
Ketones	Good

### Electrical Properties

Element	Value
Dielectric constant @1kHz	2.3
Dielectric strength( kV mm <sup>2</sup> )	32
Volume resistivity( Ohmcm )	6x10 <sup>12</sup>

### Physical Properties

Element	Value
Radiation resistance	Good

<b>Element</b>	<b>Value</b>
Limiting oxygen index( % )	29
Water absorption - equilibrium( % )	9
Water absorption - over 24 hours( % )	0.08
Density( gcm <sup>3</sup> )	1.38

## **Mechanical Properties**

<b>Element</b>	<b>Value</b>
Elongation at break( % )	9
Izod impact strength( J m <sup>-1</sup> )	533unnotched
Tensile strength( MPa )	1800-3900

## **Thermal Properties**

<b>Element</b>	<b>Value</b>
Heat-deflection temperature - 1.8MPa( C )	149
Upper working temperature( C )	200-300
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	1200
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	0.13@23°C
Coefficient of thermal expansion( x10 <sup>-4</sup> K <sup>-1</sup> )	20