

# DuPont™ Nomex® T993 Medium Density Polyaramid Film (Polymetaphenylene isophthalamide)

**Grade:** DuPont™ Nomex® T993 - Medium Density Pressboard

**Formula:** Polymetaphenylene isophthalamide

**Thickness:** 1mm

**Length 1:** 150mm

**Length 2:** 150mm

**Type:** Pressboard

**UOM Code:** 071-621-74

**SKU:** 1000010022-group

**Product Code:** AR31-SH-000100

## 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>-1</sup> )	32
Volume resistivity( Ohmcm )	6x10 <sup>12</sup>

### Physical Properties

<b>Element</b>	<b>Value</b>
Radiation resistance	Good
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