



Alupanel

Physical Properties

Property	Conditions	Units	Value 2mm	Value 3mm	Value 4mm
Relative Density	-	g/cm ³	2.9	3.8	4.75
Water Absorption	24hr @ 23°C	%	0.01	-	-

Mechanical Properties

Property	Conditions	Units	Value 2mm	Value 3mm	Value 4mm
Pencil Hardness	-	-	>HB	-	-
Toughness of Coating	-	-	3T	-	-
Tensile strength at yield	10mm/min	MPa	145	-	-
Tensile strength at break	10mm/min	MPa	185	-	-
Elongation at yield	10mm/min	%	-	-	-
Elongation at break	10mm/min	%	-	-	-
Tensile modulus of elasticity	1mm/min	MPa	70,000	-	-
Izod impact strength	notched	J/m	-	-	-
Charpy impact strength	notched	J/m	-	-	-
Impact falling weight	3mm sheet	J	-	-	-
Rockwell hardness	-	-	-	-	-
Peel strength 180°	-	N/mm	>5	-	-

Thermal Properties

Property	Conditions	Units	Value 2mm	Value 3mm	Value 4mm
Service temperature	-	°C	-50 to +90	-	-
Coefficient of thermal expansion	-	Mm/m°C	0.024	-	-
Thermal resistance	R	m ² K/W	0.0047	0.0057	0.0072
Specific heat capacity	-	kJ/kg°K	-	-	-

Electrical Properties

Property	Conditions	Units	Value 2mm	Value 3mm	Value 4mm
Dielectric strength	500V/s	kV/mm	-	-	-
Surface resistivity	Keithley	Ω	-	-	-



Chemical Resistance

Property	Conditions	Units	Value 2mm	Value 3mm	Value 4mm
Boiling water	2 Hours	-	No change	-	-
Acid	24 Hr @ 2% HCl	-	No change	-	-
Alkali	24 Hr @ 2% NaOH	-	No change	-	-
Oil	24 Hr @ 2% Engine Oil	-	No change	-	-
Solvent	100 x Dimethylbenzene	-	No change	-	-
Cleaning resistance	>1000 times	-	No change	-	-

Flammability

Standard	Classification
BS 476 Part 7	Class 1