

TYPICAL PHYSICAL PROPERTIES

ALUPANEL®

| Property | Conditions | Units | Value/Thickness | | |
|----------------------------------|-----------------------|--------------------|-----------------|--------|--------|
| | | | 2mm | 3mm | 4mm |
| Physical | | | | | |
| Relative Density | | g/cm ³ | 2.9 | 3.8 | 4.75 |
| Water Absorption | 24 hr @ 23°C | % | 0.01 | | |
| Mechanical | | | | | |
| 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 | | | | | |
| 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 | | | | | |
| Dielectric Strength | 500V/s | kV/mm | | | |
| Surface Resistivity | Keithley | Ω | | | |
| Chemical Resistance | | | | | |
| 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 | | |

Other physical properties and values available on request.

Flammability

| Standard | Classification |
|---------------|----------------|
| BS 476 Part 7 | Class 1 |