



Excel Plastics

Material Properties for *Excel GrafiX* Extra White PVC foam sheet.

The values are a list of typical results by testing large numbers of specimens under specified conditions.

Additional processing can influence the properties so we recommend caution must be adhered to when applied to the finished products.

PHYSICAL CHARACTERISTICS

| Characteristic | Excel foam PVC sheet values |
|---------------------------|-------------------------------|
| Base Polymer | Polyvinyl chloride PVC |
| Form | Semi – Finished sheet product |
| Thickness | 3mm – 10mm |
| Density | av. 0.45 g/cm ³ |
| Smell | Odourless |
| Water absorption | 0.10% |
| Water Solubility | Insoluble |
| Tensile strength at yield | 18 MPa |
| Modulus of Elasticity | 900 – 1500 MPa |
| Flexural Strength | 32MPa |
| Elongation at break | 13 % |
| Impact Resistance (IZOD) | 8 kJ/ m ² |
| Shore Hardness | 25-30 |

THERMAL PROPERTIES

| Property | Excel foam PVC sheet values |
|---------------------------------|-----------------------------|
| Vicat Softening temperature | 70.5°C |
| Heat Deflection Temperature | |
| @1.8MPa | 55°C |
| Coefficient of Linear expansion | 4.47 X 10 ⁻⁵ |
| Thermal Expansion | 0.06W/mK |
| Service Temperature | -20°C to +60°C |



ELECTRICAL PROPERTIES

| Property | Excel foam PVC sheet values |
|-----------------------------|-----------------------------|
| Surface Resistivity (ohms) | $10^{14} \Omega$ |
| Volume Resistivity | $10^{15} \Omega\text{cm}$ |
| Dielectric Constant at 1MHZ | |
| dielectric strength | 1.56 |

EXCEL FOAM SHEET AVAILABILITY

SHEET SIZES

| Standard sheet sizes | 3 -10 mm thickness |
|---|--------------------|
| | 2440 mm x 1220 mm |
| | 3050 mm x 1220 mm |
| | 3050 mm x 1560 mm |
| | 3050 mm x 2050 mm |
| Other sizes are available to order | |
| Subject to minimum quantities. | |

TOLERANCES

| | |
|-------------|----------|
| Length | -0 +10mm |
| Width | -0 +3mm |
| Thicknesses | + /- 5% |