



Datasheet

ENGLISH

RS PRO

PMMA Extruded Clear Tube

50mm OD x 40mm ID x 1000mm

long

Stock No: **282-2262**



Specifications:

| | |
|----------------------|---|
| Chemical designation | Acrylic (PMMA (Poly-methyl Methacrylate)) |
| Colour | Clear |
| Density | 1.19 g/cm ³ |
| Filler(s) | None |

Technical Specifications:

| Mechanical properties | parameter | value | unit | norm |
|--|-------------------------|-----------|-------------------|--------------|
| Modulus of elasticity | 23°C | 3300 | MPa | D790 |
| Tensile strength | -40°C | 110 | MPa | D638 |
| Tensile strength | 20°C | 80 | MPa | D639 |
| Tensile strength | 70°C | 40 | MPa | D640 |
| Elongation at break | | 5.5 | % | DIN 53455 |
| Flexural Strength | 80x10x4 mm ³ | 115 | MPa | D790 |
| Compressive Yield Stress | | 110 | MPa | |
| Impact strength (Charpy) | | 15 | kJ/m ² | DIN 53453 |
| Notched impact strength (IZOD) | | 1.6 | kJ/m ² | DIN 53453 |
| Indentation hardness | 961/30 | 175 | MPa | DIN 53456 |
| Thermal properties | parameter | value | unit | norm |
| Forming Temperature | | 160 - 175 | °C | |
| Ignition temperature | | 425 | °C | DIN 51794 |
| Heat deflection temperature under load | 1.8MPa | 105 | °C | |
| Heat deflection temperature under load | 0.45MPa | 113 | °C | |
| Service temperature | Max | 80 | °C | |
| Thermal expansion (CLTE) | | 0.07 | mm/m°C | DIN 53752 |
| Specific heat | | 1.47 | J/(g*K) | |
| Thermal conductivity | 20°C | 0.19 | W/(K*m) | DIN 52612 |
| Electrical properties | parameter | value | unit | norm |
| Volume resistivity | | >1015 | Ohm.cm | DIN VDE 0303 |
| Dielectric strength | 1mm | ~30 | kV/mm | DIN VDE 0303 |
| Other properties | parameter | value | unit | norm |
| Water absorption | 24h (20°C) | 41 | mg | DIN 53495 |
| Flammability | >2mm | B2 | | DIN 4102 |
| Refractive index | | 1.49 | | ISO 489 |



Features & Benefits:

- **Good impact strength**
- **Excellent optical clarity**
- **Good UV and weather resistance**
- **High light transmission**
- **Excellent chemical resistance**

Compliances:

- **ISO 9001**
- **ROHS**
- **REACH**