

METZO[®] PLAST ABS/MRF

Brief characteristic:

Recyclat of different types of ABS , coloured to anthrazit / black

Mechanical properties

| | | | |
|--|----------------|-------------------|------|
| Yield strength | ISO 527 | MPa | 34 |
| Elongation at yield | ISO 527 | % | 4 |
| Tensile strength at break | ISO 527 | MPa | 33 |
| Elongation at break | ISO 527 | % | 25 |
| Modulus of elasticity | ISO 527 | MPa | 2200 |
| Flexural stress at conventional deflection | DIN 53452 | MPa ² | 45 |
| Charpy impact strength at 23°C | EN ISO 179/1eU | kJ/m ² | > 35 |
| Charpy impact strength at -30°C | EN ISO 179/1eU | kJ/m ² | 25 |
| Charpy impact strength notched at 23°C | EN ISO 179/1eA | kJ/m ² | 6 |
| Charpy impact strength notched at -30°C | EN ISO 179/1eA | kJ/m ² | 5 |
| Shore hardness (Shore D) | ISO 868 | | |

Thermal properties

| | | | |
|---|----------|---------------------|-----|
| Vicat softening point VST B 50 | ISO 306 | °C | 90 |
| ISO/R75 process A | ISO 75 | °C | |
| ISO/R75 process B | ISO 75 | °C | |
| Continuous working temperature | | °C | (1) |
| Thermal coefficient of linear expansion | ISO 7991 | 10 ⁻⁵ /K | |
| Thermal conductivity | ISO 8302 | W/Km | |
| Specific heat | | kJ/kgK | |

Electrical properties

| | | | |
|-----------------------------|------------------|------------------|--|
| Dielectric constant (1 MHz) | IEC 250 | | |
| Dissipation factor | IEC 250 | 10 ⁻⁴ | |
| Specific volume resistivity | DIN EN 61340-5-1 | Ωcm | |
| Surface resistivity | DIN EN 61340-5-1 | Ω | |
| Dielectric strength | DIN 53481 | kV/mm | |

Other properties

| | | | |
|------------------|-----------|-------------------|------|
| Shrinkage | | % | |
| Water absorption | DIN 53495 | % | |
| Density (nature) | ISO 1183 | g/cm ³ | 1,06 |

- (1) The continuous working temperature of this formulation depends on many different external factors like place of installation, environmental effects like chemicals etc..
- (2) The shrinkage behaviour depends also on the thermoforming process, design and final wall thickness distribution of the final product, mould temperature, material being used to build the mould and draw ratio etc. We recommend to do tests when constructing the mould

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