



** ERTACETAL® is the registered trademark of

QUADRANT

PRODUCT CAPABILITIES:

- Rod : Dia. 3mm - 320mm
- Heavy Gauge Sheet : 0.5mm - 120mm
- Tube : OD. 20mm - 350mm

ADVANTAGES:

- High Mechanical Strength, Stiffness And Hardness
- Excellent Resilience
- Good Creep Resistance
- High Impact Strength, Even At Low Temperatures
- Very Good Dimensional Stability (Low Water Absorption)
- Good Sliding Properties And Wear Resistance
- Excellent Machinability

PRODUCT COLORS:

- White (Natural)
- Black

APPLICATIONS INCLUDE:

- Gear Wheels With Small Modulus
- Cams
- Heavily Loaded Bearings And Rollers
- Valve Seats
- Bearings And Gears With Small Clearances

| GENERAL PROPERTIES | Test Method ISO (IEC) | ERTACETAL® H Typical Values |
|---|----------------------------|--------------------------------|
| PHYSICAL | | |
| Specific Gravity (g/cm ³) | 1183 | 1.43 |
| Water Absorption, 24 hrs (%) | 62 | 0.21 |
| MECHANICAL | | |
| Tensile Stress at Yield (MPa) | 527 | 78 |
| Tensile Strain at Break (%) | 527 | 35 |
| Tensile Modulus of Elasticity (MPa) | 527 | 3,600 |
| Charpy Impact Strength, Un-Notched (kJ/m ²) | 179/1eU | ≥200 |
| Charpy Impact Strength, Notched (kJ/m ²) | 179/1eA | 10 |
| IZOD Impact Strength, Notched (kJ/m ²) | 180/2A | 10 |
| Rockwell Hardness | 2039-2 | M 88 |
| THERMAL | | |
| Coeff. of Linear Thermal Expansion (m/[m.k]) | - | 95 x 10 ⁻⁶ |
| Heat Deflection Temp (°F / °C) @ 1.8 MPa | 75 | 239 / 115 |
| Thermal Conductivity at 23 °C (W/[m.k]) | - | 0.31 |
| Melting Temperature (°F / °C) | - | 347 / 175 |
| Flammability Rating @ (3 mm thickness) | UL-94 | HB |
| ELECTRICAL | | |
| Surface Resistivity (ohms/sq) | {60093} | > 10 ¹³ |
| Volume Resistivity (ohm-cm) | {60093} | > 10 ¹⁴ |
| Dielectric Dissipation Factor Tan δ : at 100 Hz | {60250} | 0.003 |

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.