# TYNACETAL-C FOOD GRADE BLUE

TECHNICAL DATASHEET

**Raw Material** Acetal (POM)

| General Properties | Test Method | Unit | Value |
|---|---|---|---|
| Density | ISO 1183 | $g/cm^3$ | 1.39 |
| Water Absorption In Air 50% r.h. | ISO 62 | % | 0.2 |
| Absorption 23-C In Water-Saturation | ISO 62:1999(modified) | % | 0.65 |
| Food Compliance | - | FDA/BfR | YES |
| UV Stability | - | - | YES |
| **Mechanical Properties** | | | |
| Tensile Strength At Yield At Break | ISO 527-1/2:1993 | $N/mm^2$ | 63 |
| Elongation at Break | ISO 527-1/2:1993 | % | 31 |
| Tensile Modulus Of Elasticity | ISO 527-1/2:1993 | $N/mm^2$ | 2600 |
| Impact Strength Charpy 7.5 J | ISO 604:2002 | $KJ/mm^2$ | NO BREAK |
| Notched Impact Strength Charpy | ISO 180:2000 | $KJ/mm^2$ | 6 |
| Ball Indentation Hardness | - | $N/mm^2$ | 125 |
| Rockwell Hardness | ISO 868:2003 | Scale M | 88 |
| Coefficient Of Friction To Steel | - | - | 0.35 |
| **Thermal Properties** | | | |
| Melting Temperature | ISO 3146 | °C | 165 |
| Thermal Conductivity | ISO 8301:1991 | W/(km) | 0.3 |
| Deformation Temperature HDT | ISO 75 | °C | 95 |
| Linear Expansion Coefficient | ISO 11359-2:1999 | $10^{-6} K^{-1}$ | 120 |
| Service Temperature, Long Term | Average | °C | 100 |
| Service Temperature, Short Term (MAX) | Average | °C | 140 |
| Minimum Operating Temperature | Average | °C | -50 |
| Flammability | UL 94 (3-6mm thickness) | - | HB |
| **Electrical Properties** | | | |
| Dielectric Constant | ISO 250 | - | 3.8 |
| Dissipation Factor Tan Δ at 1 MHz | ISO 250 | - | 0.005 |
| Volume Resistivity | ISO 93 | Ωm | $1 \times 10^{15}$ |
| Dielectric Strength | ISO 243 | KV/mm | 40 |

**Applications:**

- High Tolerance Gears
- Precision Guides & Rails
- Conveyor Rollers
- Electrical Insulators

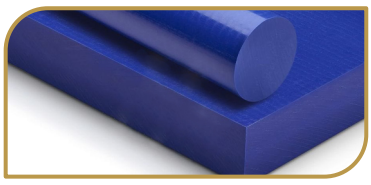
**Characteristics:**

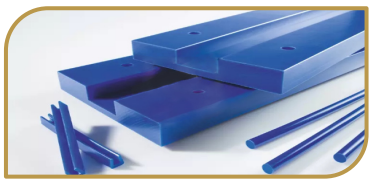
- Excellent Mechanical Properties
- High Wear Resistance
- Excellent Dimensional Stability
- Low Co-Efficient Of Friction

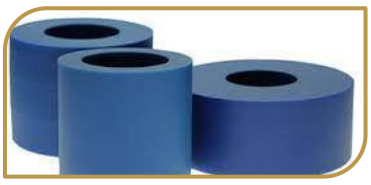
ROD

PLATE

TUBE







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