

Terlux® 2802 TR

BASF Corporation - *Methyl Methacrylate / ABS*

Product Description

MABS - Standard-injection moulding grade for transparent parts.

Product Characteristics

| | |
|---------------------------|--|
| Material Status | • Commercial: Active |
| Availability | • North America • Europe |
| Test Standards Available | • ASTM • ISO 10350 |
| Recycled Content | • No |
| Features | • Amorphous • Clarity, High • Sterilizable, Ethylene Oxide • Sterilizable, Radiation • Toughness, Good • Impact Resistance, High • Chemical Resistance, Good |
| Uses | • General Purpose |
| Agency Ratings | • USP Class VI |
| Automotive Specifications | • FORD WSF -M4D881 -A • CHRYSLER MSDB 224 CPN3721 • CHRYSLER MSDB 224 CPN3712 |
| Appearance | • Transparent • Opaque • Natural Color • Colors Available |
| Forms | • Pellets |
| Processing Method | • Injection Molding • Extrusion • Blow Molding |
| Multi-Point Data | • Creep Modulus vs. Time (ISO 11403-1) • Isochronous Stress vs. Strain (ISO 11403-1) • Isothermal Stress vs. Strain (ISO 11403-1) • Secant Modulus vs. Strain (ISO 11403-1) • Viscosity vs. Shear Rate (ISO 11403-2) |

Properties ¹

| Physical | Nominal Values (English) | Test Method |
|--|--------------------------------|-------------|
| Density -Specific Gravity | 1.08 sp gr 23/23°C | ASTM D792 |
| Melt Flow Rate (200°C/21.6 kg) (220°C/10.0 kg) | 4.00 g/10 min 2.00 g/10 min | ASTM D1238 |
| Mold Shrink, Linear-Flow | 0.0040 to 0.0070 in/in | ASTM D955 |
| Water Absorption @ Equil (50%, 73 °F) | 0.70 % | ASTM D570 |
| Water Absorption @ 24 hrs | 0.35 % | ASTM D570 |
| Mechanical | Nominal Values (English) | Test Method |
| Tensile Modulus | 290000 psi | ASTM D638 |
| Tensile Strength @ Yield | 6960 psi | ASTM D638 |
| Impact | Nominal Values (English) | Test Method |
| Notched Izod Impact (-22 °F) (73 °F) | 0.37 ft-lb/in 1.31 ft-lb/in | ASTM D256 |
| Thermal | Nominal Values (English) | Test Method |
| DTUL @264psi - Annealed | 194 °F | ASTM D648 |
| DTUL @66psi - Annealed | 201 °F | ASTM D648 |
| Max. Continuous Use Tmp | 167 °F | ASTM D794 |
| Electrical | Nominal Values (English) | Test Method |
| Surface Resistivity | 1.0E+013 ohms | ASTM D257 |

| | | |
|----------------------------------|-----------------|-----------|
| Volume Resistivity | 1.0E+015 ohm-cm | ASTM D257 |
| Dielectric Constant (1000000 Hz) | 2.800 | ASTM D150 |

| Ignition Characteristics | Nominal Values (English) | Test Method |
|---------------------------------|---------------------------------|--------------------|
| Flame Rating - UL (0.0591 in) | HB | UL 94 |

| UL 746 | Nominal Values (English) | Test Method |
|--------------------------------------|---------------------------------|--------------------|
| Rel Temp Indx Mech w/Imp (0.0590 in) | 140 °F | UL 746 |
| Rel Temp Indx Elect (0.0590 in) | 140 °F | UL 746 |
| Comparative Track Index | 600 V | UL 746 |
| Hot Wire Ignition (0.0591 in) | 23 sec | UL 746 |
| (0.118 in) | 45 sec | |

Processing Information

| Injection Molding Parameters | Nominal Values (English) | Test Method |
|-------------------------------------|---------------------------------|--------------------|
| Drying Temperature | 158 °F | |
| Drying Time | 2.0 to 4.0 hr | |
| Suggested Max Moisture | 0.020 % | |
| Suggested Max Re grind | 10 % | |
| Processing (Melt) Temp | 445 to 500 °F | |
| Mold Temperature | 120 to 165 °F | |
| Back Pressure | 50.0 to 100 psi | |
| Screw L/D Ratio | 16.0:1.0 to 20.0:1.0 | |

Notes

¹ Typical properties; not to be construed as specifications.