

Product Texts

is a 72 Shore D Hardness thermoplastic polyester elastomer **TPC-ET** with a high modulus.

Flammability at thickness h (1.5 HB mm)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	1.9	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.9	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	475	MPa	ISO 527
^[C] Yield stress	25	MPa	ISO 527
^[C] Yield strain	20	%	ISO 527
^[C] Nominal strain at break	>50	%	ISO 527
^[C] Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	19	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	4.5	kJ/m ²	ISO 179/1eA
^[C] Stress at 10% elongation	27	MPa	ISO 527
^[C] Stress at break TPE	40	MPa	ISO 527
^[C] Tear strength	193	kN/m	ISO 34-1
^[C] Shore D hardness	72	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	215	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 0.45 MPa	100	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	140	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 1MHz	3.7	-	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	400	E-4	IEC 62631-2-1
^[C] Surface resistivity	>1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	28	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.4	%	Sim. to ISO 62
^[C] Density	1260	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	121	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.05	%	-
Melt temperature	220 - 235	°C	-
Mold temperature	20 - 55	°C	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information**Injection molding**

To avoid hydrolytic degradation during processing, RITEFLEX resins have to be dried to a moisture level equal to or less than 0.05%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints <-30°F (-34°C) at 225°F (121°C) for 4 hours.

Rear Temperature 390-420(200-215) deg F (deg C)

Center Temperature 420-450(215-230) deg F (deg C)

Front Temperature 420-450(215-230) deg F (deg C)

Nozzle Temperature 420-450(215-230) deg F (deg C)

Melt Temperature 430-460(220-235) deg F (deg C)

Mold Temperature 75-125(20-55) deg F (deg C)

Back Pressure 0-50 psi

Screw Speed Medium

Injection Speed Fast

Injection speed, injection pressure and holding pressure have to be optimized to the individual article geometry. To avoid material degradation during processing low back pressure and minimum screw speed have to be used. Overheating of the material has to be avoided, in particular for flame retardant grades. Up to 25% clean and dry regrind may be used.