

Product Texts**DESCRIPTION**

Elastollan 1185 A FHF is a halogen free, flame retarded polyether based TPU

SPECIAL PROPERTIES

excellent resistance to hydrolysis and good flexibility at low temperature, resistance to microbiological attack, good wear performance, high tensile strength, good damping behavior

TYPICAL APPLICATIONS

cable sheathing, plugs, profiles,

OTHER HINTS

predrying: 2-3h at 100-110°C (air circulating oven) or 80-90°C (dehumidified air dryer),
max. content of humidity before processing: 0,02%
annealing: 20 h at 100°C in order to get optimum properties

CHEMICAL RESISTANCE

For detailed information on the chemical resistance of our materials refer to this [list of chemical resistance](#)

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Stress at 50% strain	6	MPa	ISO 527
^[C] Strain at break	>50	%	ISO 527
^[C] Charpy notched impact strength, -30°C	120	kJ/m ²	ISO 179/1eA
^[C] Stress at 100% elongation	8	MPa	ISO 527
^[C] Stress at 300% elongation	13	MPa	ISO 527
^[C] Stress at break TPE	35	MPa	ISO 527
^[C] Strain at break TPE	>300	%	ISO 527
^[C] Compression set at 23 °C, 24h	25	%	ISO 815
^[C] Compression set at 70 °C, 24h	45	%	ISO 815
^[C] Tear strength	60	kN/m	ISO 34-1
^[C] Abrasion resistance	35	mm ³	ISO 4649
^[C] Shore A hardness	89	-	ISO 7619-1
^[C] Shore D hardness	37	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Glass transition temperature, 10°C/min	-44	°C	ISO 11357-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn. Yellow Card available	V-0 yes	class -	IEC 60695-11-10 -
^[C] Burning Behav. at thickness h Thickness tested Yellow Card available	V-0 3.0 yes	class mm -	IEC 60695-11-10 - -
^[C] Oxygen index	24	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 1MHz	6	-	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	900	E-4	IEC 62631-2-1
^[C] Comparative tracking index	600	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1230	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding, Profile Extrusion

Regional Availability

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

Delivery form

Pellets

Other text information**Injection molding**

Barrel temperature : 195 - 210 °C

Melt temperature : 210 °C

Mold temperature: 25 - 40 °C

Profile extrusion

Barrel temperature : 170 - 200 °C