

Product Texts**DESCRIPTION**

Elastollan C 85 A is a polyester based TPU

SPECIAL PROPERTIES

high tensile strength, excellent tear strength,
very good damping behavior, good rebound elasticity,
very good wear performance, good flexibility at low temperature
and resistance to hydrolysis

TYPICAL APPLICATIONS

technical parts, bellows, hoses, screen elements

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] Tensile Modulus	20	MPa	ISO 527
^[C] Stress at 50% strain	5	MPa	ISO 527
^[C] Strain at break	>50	%	ISO 527
^[C] Charpy notched impact strength, +23°C	N	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	N	kJ/m ²	ISO 179/1eA
^[C] Tensile notched impact strength, +23°C	750	kJ/m ²	ISO 8256/1
^[C] Stress at break TPE	50	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	35	%	ISO 815
^[C] Tear strength	70	kN/m	ISO 34-1
^[C] Abrasion resistance	30	mm ³	ISO 4649
^[C] Shore A hardness	87	-	ISO 7619-1
^[C] Shore D hardness	36	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Glass transition temperature, 10°C/min	-38	°C	ISO 11357-1/-2
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	1.0	mm	-
Yellow Card available	yes	-	-
^[C] Oxygen index	22	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	7	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	260	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	630	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E10	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	1E13	Ohm	IEC 62631-3-2
^[C] Electric strength	22	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600	-	IEC 60112

[C]: CAMPUS

Elastollan® C 85 A

(TPU-ARES)

BASF Polyurethanes GmbH

Other properties	Value	Unit	Test Standard
^[C] Density	1190	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	210	°C	ISO 294
Injection Molding, mold temperature	60	°C	ISO 294

[C]: CAMPUS

Characteristics**Processing**

Injection Molding, Profile Extrusion, Blow Molding

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 : 165 - 190 °C

Blow molding

Barrel temperature : 165-200 °C

Mold temperature : 40-80 °C