

CAMPUS® Datasheet

Elastollan® C 95 A - (TPU-ARES)

BASF Polyurethanes GmbH



Product Texts

DESCRIPTION

Elastollan C 95 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, hoses, profiles, screen elements

OTHER HINTS

predrying: 2-3h at 100-110°C (air circulating oven)
or 90-100°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](#)

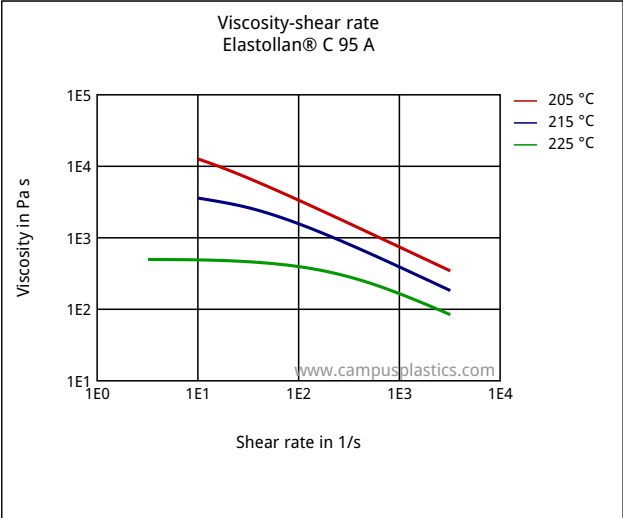
Mechanical properties	Value	Unit	Test Standard
Tensile modulus	140	MPa	ISO 527-1/-2
Stress at 50% strain	9	MPa	ISO 527-1/-2
Stress at 100% elongation	11	MPa	ISO 527-1/-2
Stress at 300% elongation	22	MPa	ISO 527-1/-2
Stress at break TPE	55	MPa	ISO 527-1/-2
Strain at break	>50	%	ISO 527-1/-2
Strain at break TPE	>300	%	ISO 527-1/-2
Charpy notched impact strength, +23°C	N	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	N	kJ/m ²	ISO 179/1eA
Tensile notched impact strength, +23°C	650	kJ/m ²	ISO 8256/1
Compression set at 23 °C, 24h	30	%	ISO 815
Compression set at 70 °C, 24h	45	%	ISO 815
Tear strength, parallel	120	kN/m	ISO 34-1
Abrasion resistance	30	mm ³	ISO 4649
Shore A hardness	96	-	ISO 48-4
Shore D hardness	45	-	ISO 48-4
Thermal properties	Value	Unit	Test Standard
Glass transition temperature, 10°C/min	-28	°C	ISO 11357-1/-2
Burning behavior at 1.5 mm nominal thickness	V-2	class	IEC 60695-11-10
Electrical properties	Value	Unit	Test Standard
Dissipation factor, 100Hz	560	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	700	E-4	IEC 62631-2-1
Volume resistivity	1E9	Ohm*m	IEC 62631-3-1
Surface resistivity	1E15	Ohm	IEC 62631-3-2
Electric strength	26	kV/mm	IEC 60243-1

Elastollan® C 95 A - (TPU-ARES)
BASF Polyurethanes GmbH

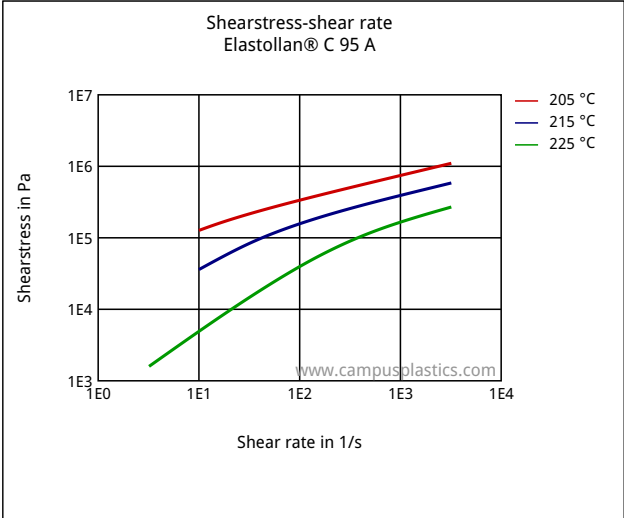
Comparative tracking index	600	-	IEC 60112
Other properties	Value	Unit	Test Standard
Density	1210	kg/m³	ISO 1183
Test specimen production	Value	Unit	Test Standard
Injection molding, melt temperature	220	°C	ISO 294
Injection molding, mold temperature	60	°C	ISO 294

Diagrams

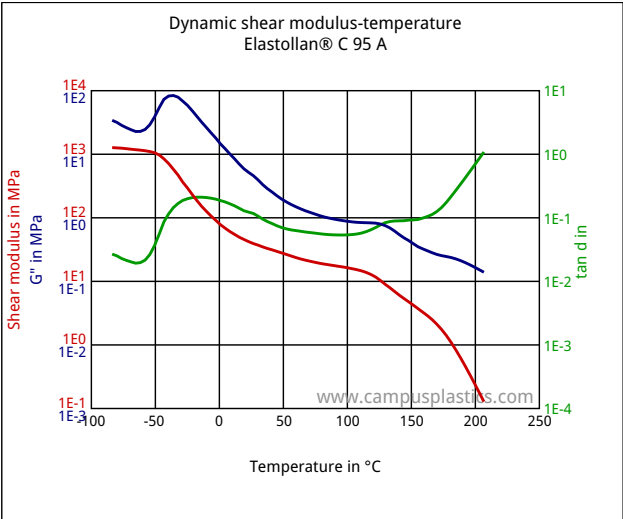
Viscosity-shear rate



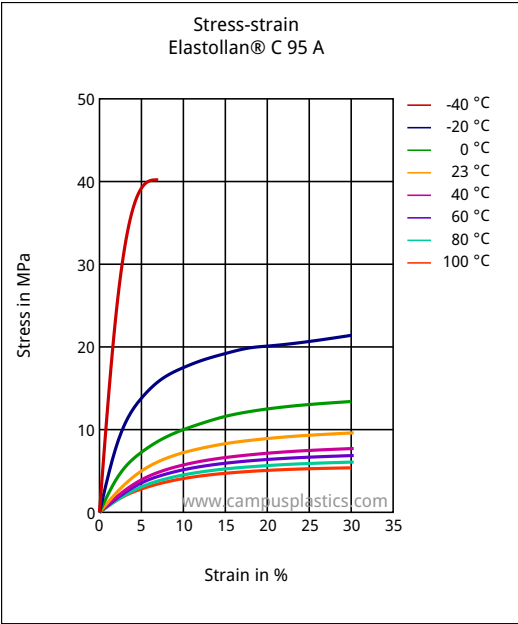
Shearstress-shear rate



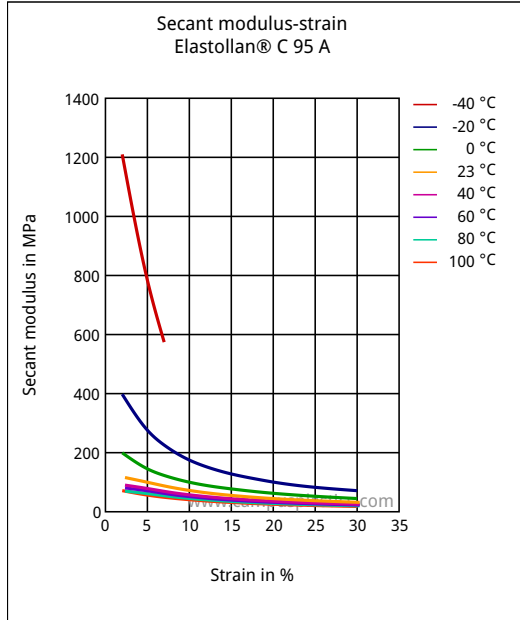
Dynamic shear modulus-temperature



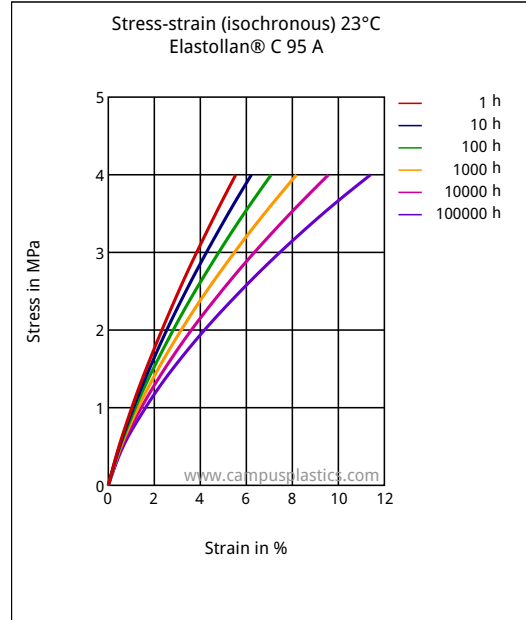
Stress-strain



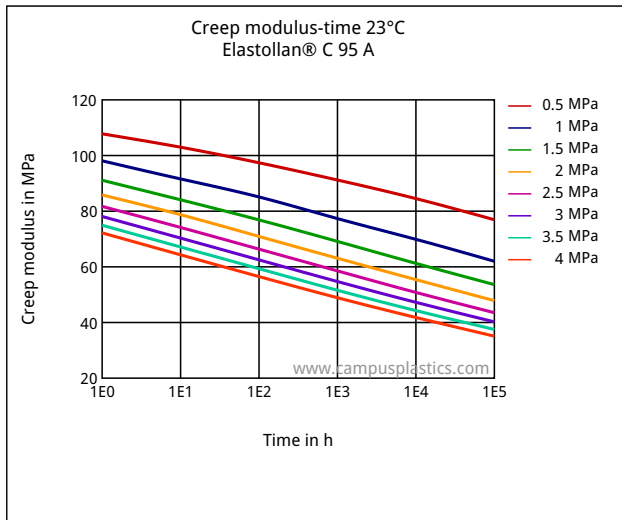
Secant modulus-strain



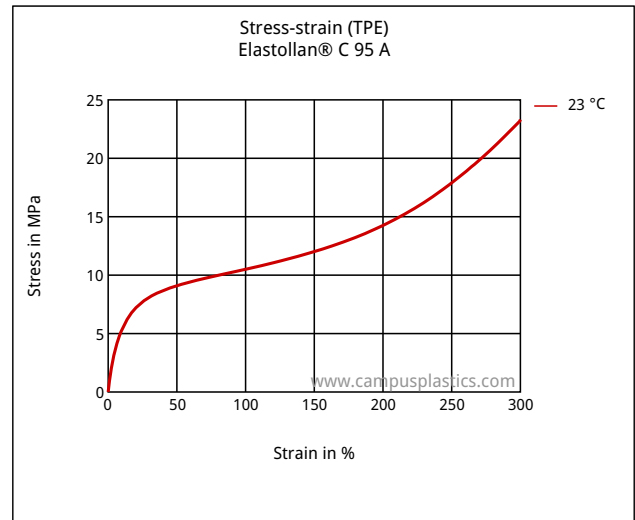
Stress-strain (isochronous) 23°C



Creep modulus-time 23°C



Stress-strain (TPE)



Characteristics

Processing

Injection Molding, Profile Extrusion

Delivery form

Pellets

Other text information

Injection molding

Barrel temperature : 205 - 225 °C

Melt temperature : 225 °C

Mold temperature: 25 - 40 °C

Regional Availability

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

Elastollan® C 95 A - (TPU-ARES)

BASF Polyurethanes GmbH

Profile extrusion

Barrel temperature : 170 - 205 °C

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS.

In order to check the availability of products please contact us or our sales agency.

For more information about our products contact your local BASF representative or

BASF Polyurethanes GmbH
European Business Management
Thermoplastische Polyurethane
Elastogranstraße 60
D-49448 Lemförde
Deutschland
Phone: 49 5443 12 3456
Fax: 49 5443 12 2555
e-mail:
elastollan-infopoint@basf.com
www.pu.basf.de

CAMPUS® is a registered trademark of CWFG (Chemie Wirtschaftsfoerderungsgesellschaft GmbH, Frankfurt)