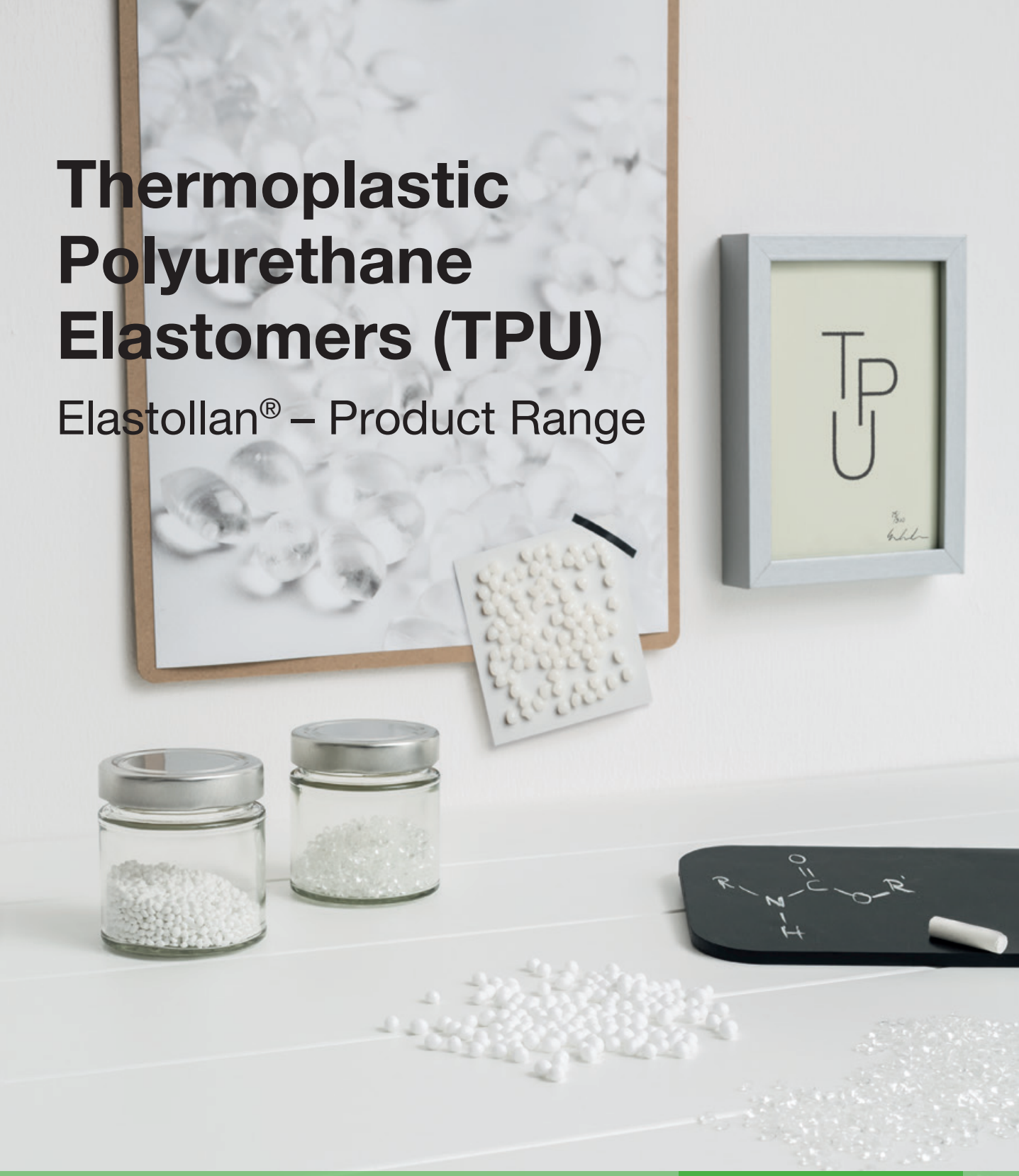
Thermoplastic Polyurethane Elastomers (TPU)

Elastollan® – Product Range



BASF
We create chemistry

Elastollan®

Elastollan® is the brand name for thermoplastic polyurethane (TPU) from BASF. It stands for maximum reliability, consistent product quality and cost efficiency. Elastollan® can be extruded into hoses, cable sheathing, belts, films and profiles, and can also be processed using blow molding and injection molding technologies. Over the last few decades, the numerous benefits of Elastollan® in all its forms – aromatic or aliphatic, very soft or glass fiber-reinforced, flame retardant or highly transparent – have been clearly demonstrated across every sector of industry.

This extensive product portfolio, which makes use of a variety of raw materials and formulations, is the starting point for successfully bringing innovative customer projects to fruition.

We thrive on creative ideas and complex challenges – come and talk to us!

Elastollan®

Nomenclature

Elastollan®	11	85 A	10	W	000
Elastollan® The registered trade mark of BASF for thermoplastic polyurethane **Elastollan® A and L** stand for aliphatic thermoplastic polyurethanes **Infinergy®** **Hotbond** **Bondura**	**Series** The letter or number characterizes the polyol base **B, C, S, Soft, 5, 6, 7, 8, 9** = polyester base **10, 11, 12, 13** = polyether base **R** = glass fiber-reinforced **SP** = special product **N** = based on renewable resources **EXP** = experimental grade	**Shore Hardness** **Shore hardness A (35 - 98)** **Shore hardness D (47 - 83)**	**Granule Shape** **1** = cylindrical or lentil-shaped **5** = diced granules	**Lubricant** **0, 1** = no added lubricants **2, 3, 5, 9** = added lubricants	**Additives** **ESD** = electronic sensitive devices **FC** = food contact **FHF/HFFR** = flame retardant. halogen-free **HPM** = high performance material **M** = mat surface **N** = non- stabilized **Q** = compounds **P/W** = contains plasticizers **T** = approved for drinking water applications **U** = UV-stabilized	**Additives** **000** = natural **TSG** = TPU for expansion

Portfolio

Product Range	Chemistry	Shore Hardness	Range Properties
11	Ether	70 A - 75 D	Excellent hydrolysis resistance, cold flexibility, resistance to microorganisms
11 FHF	Ether flame retardant	75 A - 54 D	Non-halogen-based flame retardant, outstanding mechanical properties, excellent hydrolysis resistance, resistance to microorganisms
12	Ether	85 A - 83 D	Highly transparent, excellent hydrolysis resistance, cold flexibility, resistance to microorganisms
12 FHF	Ether flame retardant	70 D - 80 D	Non-halogen-based flame retardant, outstanding mechanical properties, high rigidity, excellent hydrolysis resistance, resistance to microorganisms
13	Ether	85 A - 90 A	Water-vapor permeable, good tear propagation strength, very good mechanical properties
C	Ester	80 A - 75 D	Excellent mechanical properties, very good damping behavior, good rebound, very good wear resistance
B	Ester	80 A - 65 D	Very good mechanical properties, good cold flexibility, good wear resistance
S	Ester	70 A - 65 D	Good mechanical properties, good wear resistance, good damping behavior and rebound
500	Ester	85 A - 65 D	Good mechanical properties, good abrasion resistance
600	Ester	70 A - 50 D	Transparent, good damping behavior and rebound
700	Ester	70 A - 65 D	Very good hydrolysis resistance, high wear resistance, very low compression set, very good mechanical properties
800	Ester	75 A - 95 A	Very good transparency, good abrasion resistance
A	Ether or ester aliphatic	65 A - 55 D	Color-fast, non-yellowing, hydrolysis-resistant (ether)
L	Ether or ester aliphatic	75 A - 80 D	Transparent, long-term UV-stability
Supersoft	Ester or ether	35 A - 65 A	Very good wet grip, very flexible, very soft in part, highly transparent in part, ESD grades with very good volume resistivity
HPM	Ester	60 A - 55 D	Very good damping behavior and rebound, high temperature resistance, improved setting behavior, good demolding properties, color-fast, soft touch
HFFR	Ether flame retardant	85 A - 92 A	Non-halogen-based flame retardant, increased flame retardancy, reduced smoke density and toxicity
CS	Ester	70 A - 65 D	Very good compression set, extremely low creep behavior
R	Ester-reinforced	E-modulus 1000 - 17000 MPa	Glass fiber-reinforced, very high stiffness, low thermal expansion coefficient, low shrinkage, very good impact resistance
Food Contact (FC)	Ester or ether	70 A - 75 D	Basic suitability for food contact applications in FDA and EU-regulated markets (see Food Contact Information)
Hotbond	Ester	See tech. product information	Excellent adhesive properties, good solubility with a broad viscosity range
Bondura	Ester	See tech. product information	Excellent adhesive properties, low activation temperature, good solubility with a broad viscosity range

Elastollan® 11 Series

Thermoplastic polyether polyurethane elastomer

Property	Unit of Measurement	Test Procedure
Hardness	Shore A	DIN ISO 7619-1 (3s)
Hardness	Shore D	DIN ISO 7619-1 (3s)
Density	g/cm³	DIN EN ISO 1183-1-A
Tensile strength	MPa	DIN 53504-S2
Elongation at break	%	DIN 53504-S2
Stress at 20 % elongation	MPa	DIN 53504-S2
Stress at 100 % elongation	MPa	DIN 53504-S2
Stress at 300 % elongation	MPa	DIN 53504-S2
E-modulus from tensile test	MPa	DIN EN ISO 527
Tear strength	kN/m	DIN ISO 34-1.B(b)
Abrasion	mm³	DIN ISO 4649-A
Compression set 23 °C / 72 hours	%	DIN ISO 815
Compression set 70 °C / 24 hours	%	DIN ISO 815
Tensile strength after storage in water at 80 °C for 42 days	MPa	DIN 53504-S2
Elongation at break after storage in water at 80 °C for 42 days	%	DIN 53504-S2
Notched impact resistance (Charpy) +23 °C Notched impact resistance (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1
Burning behavior (depending on wall thickness)		UL 94

Property	Unit of Measurement	Test Procedure
Hardness	Shore A	DIN ISO 7619-1 (3s)
Hardness	Shore D	DIN ISO 7619-1 (3s)
Density	g/cm³	DIN EN ISO 1183-1-A
Tensile strength	MPa	DIN 53504-S2
Elongation at break	%	DIN 53504-S2
Stress at 20 % elongation	MPa	DIN 53504-S2
Stress at 100 % elongation	MPa	DIN 53504-S2
Stress at 300 % elongation	MPa	DIN 53504-S2
E-modulus from tensile test	MPa	DIN EN ISO 527
Tear strength	kN/m	DIN ISO 34-1.B(b)
Abrasion	mm³	DIN ISO 4649-A
Compression set 23 °C / 72 hours	%	DIN ISO 815
Compression set 70 °C / 24 hours	%	DIN ISO 815
Tensile strength after storage in water at 80 °C for 42 days	MPa	DIN 53504-S2
Elongation at break after storage in water at 80 °C for 42 days	%	DIN 53504-S2
Notched impact resistance (Charpy) +23 °C Notched impact resistance (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1
Burning behavior (depending on wall thickness)		UL 94

For more detailed information, please refer to the product information and processing guidance.

- Excellent hydrolysis resistance
- Cold flexibility
- Resistance to microorganisms

1170 A 10	1175 A 10 W	1180 A 10	1185 A 10 W	1185 A 10	1185 A 59 U	1185 A 10 M	1185 A 12 WM
71	75	80	83	87	86	88	87
				36		39	39
1.08	1.14	1.11	1.16	1.12	1.12	1.11	1.13
30	40	45	40	45	50	45	30
850	700	650	700	600	480	600	650
1.5	2	2	2.5	2.5		3.5	4
3.5	4	4.5	6	6		7	7
6.3	8	8	8	10		12	13
45	40	55	50	70	65	60	55
45	45	30	45	25	35	60	65
20	20	25	20	25		35	25
39	40	45	35	45		45	43
20	28	30	30	32		30	30
900	750	700	700	600		650	600
nb nb	nb nb	nb nb	nb nb	nb nb		nb nb	nb nb
	V0 / V2	HB	V2	HB			V2

1190 A 10	1195 A 10	1195 A 55 U	1198 A 10	1154 D 10	1160 D 50	1164 D 11	1174 D 11
92	96						
42	48	43	52	53	60	69	75
1.13	1.15	1.15	1.17	1.17	1.18	1.18	1.2
50	55	50	50	50	50	50	65
550	500	500	420	450	400	350	380
5	6	6	9	11	13	16	25
9	10	10	15	17	19	25	30
16	18	18	28	38	41	45	450
				150	200	250	560
85	100	100	130	150	170	190	220
25	25	25	25	30	30	30	22
25	30	30	35	40	40	40	50
45	45	45	50	50	50	50	55
35	37	37	35	35	35	35	35
600	500	500	450	450	450	400	400
nb nb	nb nb	nb nb	nb 190	nb 18	nb 16	nb 12	nb 5
	HB						

Elastollan® 12 Series

Thermoplastic polyether polyurethane elastomer

Property	Unit of Measurement	Test Procedure
Hardness	Shore A	DIN ISO 7619-1 (3s)
Hardness	Shore D	DIN ISO 7619-1 (3s)
Density	g/cm³	DIN EN ISO 1183-1-A
Tensile strength	MPa	DIN 53504-S2
Elongation at break	%	DIN 53504-S2
Stress at 20 % elongation	MPa	DIN 53504-S2
Stress at 100 % elongation	MPa	DIN 53504-S2
Stress at 300 % elongation	MPa	DIN 53504-S2
E-modulus from tensile test	MPa	DIN EN ISO 527
Tear strength	kN/m	DIN ISO 34-1.B(b)
Abrasion	mm³	DIN ISO 4649-A
Compression set at 23 °C / 72 hours	%	DIN ISO 815
Compression set at 70 °C / 24 hours	%	DIN ISO 815
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1

For more detailed information, please refer to the product information and processing guidance.

- Highly transparent
- Excellent hydrolysis resistance
- Cold flexibility
- Resistance to microorganisms

1285 A 10 U	1290 A 10 U	1295 A 13 U	1298 A 13 U	1254 D 13 U	1260 D 13 U	1264 D 13 U	1278 D 11 U	1283 D 11 U
86	89	95						
		45	50	57	61	64	77	83
1.13	1.13	1.15	1.16	1.17	1.18	1.18	1.2	1.22
36	50	59	60	60	45	50	50	67
710	500	560	460	470	350	350	350	170
2.5	4	6	9	17	14	17	29	56
6	8	11	16	23	23	25	33	47
9	11	18	28	35	37	35	43	0
	30	50	90	160	225	310	808	
60	80	116	130	165	165	170	220	310
45	25	35	23	30	40	40	40	
25	23	25	28	42	45	48	72	
40	35	45	45	54	52	48	60	
	nb 110	nb 160	nb 171	nb 14	nb 13	nb 12	nb 10	

Elastollan® FHF / HFFR Series

Thermoplastic polyether polyurethane elastomer

Property	Unit of Measurement	Test Procedure	1185 A 10 FHF	1190 A 10 FHF	1191 A 10 FHF
Hardness	Shore A	DIN ISO 7619-1 (3s)	89	90	91
Hardness	Shore D	DIN ISO 7619-1 (3s)	37		
Density	g/cm³	DIN EN ISO 1183-1-A	1.23	1.25	1.27
Tensile strength	MPa	DIN 53504-S2	35	25	25
Elongation at break	%	DIN 53504-S2	600	550	600
Stress at 20 % elongation	MPa	DIN 53504-S2	3.5	5	5
Stress at 100 % elongation	MPa	DIN 53504-S2	8	8	10
Stress at 300 % elongation	MPa	DIN 53504-S2	13	11	12
Tear strength	kN/m	DIN ISO 34-1.B(b)	60	60	65
Abrasion	mm³	DIN ISO 4649-A	35	30	40
Compression set at 23 °C / 72 hours	%	DIN ISO 815	25	26	
Compression set at 70 °C / 24 hours	%	DIN ISO 815	45	43	
Tensile strength after storage in water at 80 °C for 42 days	MPa	DIN 53504-S2	20	15	
Elongation at break after storage in water at 80 °C for 42 days	%	DIN 53504-S2	600	640	
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1	nb 120	nb 46	
Burning behavior (depending on wall thickness)		UL 94	V0	V0	

For more detailed information, please refer to the product information and processing guidance.

- Non-halogen-based flame retardant
- Outstanding mechanical properties
- Excellent hydrolysis resistance
- Resistance to microorganisms

1192 A 10 FHF	1147 D 10 FHF	1154 D 10 FHF	1185 A 10 HFFR	SP 3092 A 10 HFFR	1270 D 10 FHF	1280 D 10 FHF
91	94		86	95		
	48	58		52	69	80
1.25	1.29	1.27	1.42	1.62	1.29	1.32
17	13	30	23	15	27	49
550	400	400	580	400	300	10
	7	13	4	8	18	
	9	19	6	7	20	
	10	33	8	7	22	
55	60	110	55	42	156	96
80	55	30			85	220
	30	30				
	50	45				
	7	20	12			
	270	400	750			
	nb 21	50 3				
		V0 / V2			V0 (0.43-0.47 mm ALL)	V2 (0.4 mm) V2 (3.0 mm)

Elastollan® C Series

Thermoplastic polyester polyurethane elastomer

Property	Unit of Measurement	Test Procedure	C 78 A 10	C 80 A 10	C 85 A 10
Hardness	Shore A	DIN ISO 7619-1 (3s)	80	82	87
Hardness	Shore D	DIN ISO 7619-1 (3s)			36
Density	g/cm³	DIN EN ISO 1183-1-A	1.18	1.19	1.19
Tensile strength	MPa	DIN 53504-S2	50	50	50
Elongation at break	%	DIN 53504-S2	650	650	650
Stress at 20 % elongation	MPa	DIN 53504-S2	2	3	3
Stress at 100 % elongation	MPa	DIN 53504-S2	4	5	6
Stress at 300 % elongation	MPa	DIN 53504-S2	8	9	10
E-modulus from tensile test	MPa	DIN EN ISO 527			
Tear strength	kN/m	DIN ISO 34-1.B(b)	60	65	70
Abrasion	mm³	DIN ISO 4649-A	30	30	30
Compression set at 23 °C / 72 hours	%	DIN ISO 815	25	25	25
Compression set at 70 °C / 24 hours	%	DIN ISO 815	35	35	35
Tensile strength after storage in water at 80 °C for 21 days	MPa	DIN 53504-S2	35	35	38
Elongation at break after storage in water at 80 °C for 21 days	%	DIN 53504-S2	650	650	650
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1	nb nb	nb nb	nb nb
Burning behavior (depending on wall thickness)		UL 94		HB	HB

For more detailed information, please refer to the product information and processing guidance.

- Outstanding mechanical properties
- Very good damping behavior
- Good rebound
- Very good wear resistance

C 88 A 10	C 90 A 13	C 95 A 10	C 98 A 10	C 59 D 53	C 60 D 53	C 64 D 53	C 74 D 50
88	93	96					
37	42	47	52	57	60	62	73
1.19	1.2	1.21	1.22	1.23	1.23	1.23	1.25
50	45	55	50	50	50	45	45
600	550	550	550	500	450	400	350
3.5	6	8	11	12	16	17	28
6	9	11	14	17	20	24	30
13	15	22	26	30	35	35	35
			160	250	330	390	730
75	102	120	130	160	180	200	240
30	38	30	30	30	30	30	20
25	25	30	30	30	40	40	40
40	40	45	50	50	50	55	60
38	40	40	40	43	43	43	45
650	550	500	550	480	450	420	380
nb nb	nb nb	nb nb	nb 25	nb 12	nb 8	nb 7	120 4
HB	HB	HB	HB	HB	HB	HB	HB

Elastollan® B Series

Thermoplastic polyester polyurethane elastomer

Property	Unit of Measurement	Test Procedure
Hardness	Shore A	DIN ISO 7619-1 (3s)
Hardness	Shore D	DIN ISO 7619-1 (3s)
Density	g/cm³	DIN EN ISO 1183-1-A
Tensile strength	MPa	DIN 53504-S2
Elongation at break	%	DIN 53504-S2
Stress at 20 % elongation	MPa	DIN 53504-S2
Stress at 100 % elongation	MPa	DIN 53504-S2
Stress at 300 % elongation	MPa	DIN 53504-S2
E-modulus from tensile test	MPa	DIN EN ISO 527
Tear strength	kN/m	DIN ISO 34-1.B(b)
Abrasion	mm³	DIN ISO 4649-A
Compression set at 23 °C / 72 hours	%	DIN ISO 815
Compression set at 70 °C / 24 hours	%	DIN ISO 815
Tensile strength after storage in water at 80 °C for 21 days	MPa	DIN 53504-S2
Elongation at break after storage in water at 80 °C for 21 days	%	DIN 53504-S2
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1

For more detailed information, please refer to the product information and processing guidance.

- Very good mechanical properties
- Good cold flexibility
- Good wear resistance

B 80 A 11	B 85 A 11	B 90 A 15	B 95 A 15	B 98 A 15	B 60 D 15	B 64 D 11
82	83	91	96			
		42	48	50	60	64
1.19	1.2	1.21	1.22	1.22	1.23	1.24
50	55	55	55	55	55	55
600	600	550	550	500	500	450
2	2	4	7	8	13	17
5	4	7	10	12	16	19
15	15	20	22	30	30	35
				140	240	320
85	75	90	100	130	150	180
35	35	30	30	25	25	25
20	25	25	30	35	35	35
30	35	40	40	45	45	50
40	40	40	40	40	40	40
600	600	550	500	500	450	400
nb nb	nb nb	nb nb	nb 200	nb 18	nb 10	nb 8

Elastollan® S Series

Thermoplastic polyester polyurethane elastomer

Property	Unit of Measurement	Test Procedure
Hardness	Shore A	DIN ISO 7619-1 (3s)
Hardness	Shore D	DIN ISO 7619-1 (3s)
Density	g/cm³	DIN EN ISO 1183-1-A
Tensile strength	MPa	DIN 53504-S2
Elongation at break	%	DIN 53504-S2
Stress at 20 % elongation	MPa	DIN 53504-S2
Stress at 100 % elongation	MPa	DIN 53504-S2
Stress at 300 % elongation	MPa	DIN 53504-S2
E-modulus from tensile test	MPa	DIN EN ISO 527
Tear strength	kN/m	DIN ISO 34-1.B(b)
Abrasion	mm³	DIN ISO 4649-A
Compression set at 23 °C / 72 hours	%	DIN ISO 815
Compression set at 70 °C / 24 hours	%	DIN ISO 815
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1

For more detailed information, please refer to the product information and processing guidance.

- Good mechanical properties
- Good wear resistance
- Good damping behavior and rebound

S 70 A 12	S 80 A 10	S 85 A 10	S 90 A 55	S 95 A 55	S 98 A 53	S 60 D 53	D 64 D 53
70	81	85	93	96			
			41	48	55	60	64
1.22	1.22	1.23	1.24	1.24	1.25	1.25	1.26
34	50	55	55	50	45	45	45
720	750	650	600	550	500	500	450
1	2	2	6	8	13	15	22
3	4	5	9	11	16	18	23
5	8	8	13	20	23	34	38
					200	250	410
55	60	70	95	120	150	170	200
42	40	35	30	30	25	25	25
	25	25	25	25	30	40	45
	35	35	45	45	45	50	55
nb nb	nb nb	nb nb	nb nb	nb 14	nb 13	nb 4	nb 4

Elastollan® 500 Series

Thermoplastic polyester polyurethane elastomer

- Good mechanical properties
- Good abrasion resistance

Property	Unit of Measurement	Test Procedure	585 A 11	590 A 53	598 A 53	598 A 10	560 D 53	560 D 59
Hardness	Shore A	DIN ISO 7619-1 (3s)	85	94				
Hardness	Shore D	DIN ISO 7619-1 (3s)		41	53	51	61	60
Density	g/cm³	DIN EN ISO 1183-1-A	1.25	1.25	1.26	1.26	1.28	1.26
Tensile strength	MPa	DIN 53504-S2	40	50	50	50	45	55
Elongation at break	%	DIN 53504-S2	600	600	500	500	450	510
Stress at 20 % elongation	MPa	DIN 53504-S2	3	5	9		15	
Stress at 100 % elongation	MPa	DIN 53504-S2	6	8	12		18.5	
Stress at 300 % elongation	MPa	DIN 53504-S2	10	13	16		23	
Tear strength	kN/m	DIN ISO 34-1.B(b)	95	100	150	130	180	170
Abrasion	mm³	DIN ISO 4649-A	35	35	30	40	30	30
Compression set at 23 °C / 72 hours	%	DIN ISO 815	17	24	26		24	
Compression set at 70 °C / 24 hours	%	DIN ISO 815	35	36	40		46	

For more detailed information, please refer to the product information and processing guidance.

Elastollan® 800 Series

Thermoplastic polyester polyurethane elastomer

- Very good transparency
- Good abrasion resistance

Property	Unit of Measurement	Test Procedure	880 A 13 N	890 A 10
Hardness	Shore A	DIN ISO 7619-1 (3s)	77	93
Hardness	Shore D	DIN ISO 7619-1 (3s)		
Density	g/cm³	DIN EN ISO 1183-1-A	1.2	1.22
Tensile strength	MPa	DIN 53504-S2	40	45
Elongation at break	%	DIN 53504-S2	700	480
Stress at 20 % elongation	MPa	DIN 53504-S2	1.8	6
Stress at 100 % elongation	MPa	DIN 53504-S2	4.2	10
Stress at 300 % elongation	MPa	DIN 53504-S2	7.6	23
Tear strength	kN/m	DIN ISO 34-1.B(b)	60	110
Abrasion	mm³	DIN ISO 4649-A	35	45
Compression set at 23 °C / 72 hours	%	DIN ISO 815	32	32
Compression set at 70 °C / 24 hours	%	DIN ISO 815	54	43

For more detailed information, please refer to the product information and processing guidance.

Elastollan® A Series

Thermoplastic aliphatic polyether/-ester polyurethane elastomer

- Color-fast
- Non-yellowing
- Hydrolysis resistant (ether)

Property	Unit of Measurement	Test Procedure	Aliphatic Ethers			Aliph. Esters
			A 1182 A 10 N	A 1185 A 10 N	A 1154 D 10 N	A C 88 A 12
Hardness	Shore A	DIN ISO 7619-1 (3s)	81	86		88
Hardness	Shore D	DIN ISO 7619-1 (3s)			54	
Density	g/cm³	DIN EN ISO 1183-1-A	1.06	1.05	1.11	1.14
Tensile strength	MPa	DIN 53504-S2	15	18	30	17
Elongation at break	%	DIN 53504-S2	600	650	600	640
Stress at 20 % elongation	MPa	DIN 53504-S2	3	4	12	3.1
Stress at 100 % elongation	MPa	DIN 53504-S2	6	7.8	20	7
Stress at 300 % elongation	MPa	DIN 53504-S2	12	10	24	10.6
Tear strength	kN/m	DIN ISO 34-1.B(b)	45	35	110	40
Abrasion	mm³	DIN ISO 4649-A	67	107	24	110
Compression set at 23 °C / 72 hours	%	DIN ISO 815	30	23	27	42
Compression set at 70 °C / 24 hours	%	DIN ISO 815	55	52	46	44
Vicat softening temperature at 10 N and 120 °C/h (Proc. A120)	°C	DIN EN ISO 306			140	

For more detailed information, please refer to the product information and processing guidance.

Elastollan® L Series

Thermoplastic aliphatic polyether/-ester polyurethane elastomer

- Superior transparency
- Long-term UV-stability

Property	Unit of Measurement	Test Procedure	Aliphatic Ethers			Aliphatic Esters		
			L 1185 A 12	L 1160 D 12	L 1275 A 10	L 785 A 10	L 765 D 10	L 780 D 10
Hardness	Shore A	DIN ISO 7619-1 (3s)	85		70	86		
Hardness	Shore D	DIN ISO 7619-1 (3s)		56			63	80
Density	g/cm³	DIN EN ISO 1183-1-A	1.08	1.1	1.08	1.12	1.13	1.13
Tensile strength	MPa	DIN 53504-S2	17	30	35	28	30	46
Elongation at break	%	DIN 53504-S2	550	400	550	500	350	320
Stress at 20 % elongation	MPa	DIN 53504-S2	3	9	1	2	11	
Stress at 100 % elongation	MPa	DIN 53504-S2	7	11	2.5	4	12	
Stress at 300 % elongation	MPa	DIN 53504-S2	11	16	6	10	18.6	
Tear strength	kN/m	DIN ISO 34-1.B(b)	70	70	42	65	130	

For more detailed information, please refer to the product information and processing guidance

Elastollan® Soft Products

Thermoplastic polyether/-ester polyurethane elastomer

Property	Unit of Measurement	Test Procedure
Hardness	Shore A	DIN ISO 7619-1 (3s)
Density	g/cm³	DIN EN ISO 1183-1-A
Tensile strength	MPa	DIN 53504-S2
Elongation at break	%	DIN 53504-S2
Stress at 20 % elongation	MPa	DIN 53504-S2
Stress at 100 % elongation	MPa	DIN 53504-S2
Stress at 300 % elongation	MPa	DIN 53504-S2
Tear strength	kN/m	DIN ISO 34-1.B(b)
Abrasion	mm³	DIN ISO 4649-A
Compression set at 23 °C / 72 hours	%	DIN ISO 815
Compression set at 70 °C / 24 hours	%	DIN ISO 815
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1
Volume resistivity	Ohm*cm	DIN IEC 60093

Property	Unit of Measurement	Test Procedure
Hardness	Shore A	DIN ISO 7619-1 (3s)
Density	g/cm³	DIN EN ISO 1183-1-A
Tensile strength	MPa	DIN 53504-S2
Elongation at break	%	DIN 53504-S2
Stress at 20 % elongation	MPa	DIN 53504-S2
Stress at 100 % elongation	MPa	DIN 53504-S2
Stress at 300 % elongation	MPa	DIN 53504-S2
Tear strength	kN/m	DIN ISO 34-1.B(b)
Abrasion	mm³	DIN ISO 4649-A
Compression set at 23 °C / 72 hours	%	DIN ISO 815
Compression set at 70 °C / 24 hours	%	DIN ISO 815
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1
Volume resistivity	Ohm*cm	DIN IEC 60093

For more detailed information, please refer to the product information and processing guidance.

- Very good wet grip
- Very flexible
- Highly transparent in part
- Very soft in part
- ESD grades with very good volume resistivity

SP 1145 A 12 PU	SP 1150 A 19 P	SP 1155 A 12 PU	1160 A 10 P	C 60 A 10 P	S 60 A 12 P
46	50	55	63	60	63
1.08	1.08	1.08	1.07	1.15	1.19
17	22	22	26	38	35
1080	1000	860	950	850	750
	0.6		1.0	1.2	1.0
	1.3		2.5	2.7	3.0
	3.4		4.5	5.1	6.5
30	30	41	40	40	45
83	50	50	45	50	35
	48		25	21	24
	75		40	34	42
					nb nb

Soft 35 A 12 P	Soft 45 A 12 P	Soft 45 A 12 ESD	565 A 12 P	560 A 13 P TSG	565 A 12 ESDM	B 60 A 12 ESD
37	46	47	66	60	63	63
1.18	1.18	1.18	1.22	1.22	1.22	1.17
12	25	30	30	24	30	30
1150	950	900	850	850	850	800
0.5	0.6	0.5	1.1	1.0	1.0	1.0
1.0	1.5	1.2	2.7	2.5	2.4	2.5
2.5	3.0	2.7	6.5	6.0	5.2	6.5
27	42	35	65	50	60	50
165	39	60	55	90	60	60
30	34	36	22	29		20
70	53	49	37	45		30
nb nb	nb nb					nb nb
		$5*10^7$			$8*10^7$	$5*10^7$

Elastollan® HPM Series (aliphatic)

Thermoplastic aliphatic polyester polyurethane elastomer

Property	Unit of Measurement	Test Procedure
Hardness	Shore A	DIN ISO 7619-1 (3s)
Hardness	Shore D	DIN ISO 7619-1 (3s)
Density	g/cm³	DIN EN ISO 1183-1-A
Tensile strength	MPa	DIN 53504-S2
Elongation at break	%	DIN 53504-S2
Stress at 20 % elongation	MPa	DIN 53504-S2
Stress at 100 % elongation	MPa	DIN 53504-S2
Stress at 300 % elongation	MPa	DIN 53504-S2
Tear strength	kN/m	DIN ISO 34-1.B(b)
Abrasion	mm³	DIN ISO 4649-A
Compression set at 23 °C / 72 hours	%	DIN ISO 815
Compression set at 70 °C / 24 hours	%	DIN ISO 815
Compression set at 100 °C / 24 hours		
Vicat softening temperature at 10 N and 120 °C/h (Proc. A120)	°C	DIN EN ISO 306

For more detailed information, please refer to the product information and processing guidance.

- Color-fast
- Soft touch

		Aliphatic HPM			
LP 9277 10	**LP 9307 10**	**A C 65 A 12 HPM**	**A C 70 A 10 HPM**	**A C 85 A 10 HPM**	**A C 55 D 10 HPM**
68	79	64	68	85	
					56
1.17	1.18	1.17	1.17	1.19	1.25
14	15	7	14	18	31
1300	1080	1640	1300	1100	690
		1.2	1.6		17
		2.1	2.8		17
		3.3	4.5		17
40	45	30	40	48	130
		450	350		
25	22	30	25	23	30
35	30	40	35	30	45
50	45			50	
70	90				

Elastollan® HPM Series (aromatic)

Thermoplastic aromatic polyester polyurethane elastomer

Property	Unit of Measurement	Test Procedure
Hardness	Shore A	DIN ISO 7619-1 (3s)
Hardness	Shore D	DIN ISO 7619-1 (3s)
Density	g/cm³	DIN EN ISO 1183-1-A
Tensile strength	MPa	DIN 53504-S2
Elongation at break	%	DIN 53504-S2
Stress at 20 % elongation	MPa	DIN 53504-S2
Stress at 100 % elongation	MPa	DIN 53504-S2
Stress at 300 % elongation	MPa	DIN 53504-S2
Tear strength	kN/m	DIN ISO 34-1.B(b)
Abrasion	mm³	DIN ISO 4649-A
Compression set at 23 °C / 72 hours	%	DIN ISO 815
Compression set at 70 °C / 24 hours	%	DIN ISO 815
Compression set at 100 °C / 24 hours	%	DIN ISO 815
Tensile strength after storage in water at 80 °C for 21 days	MPa	DIN 53504-S2
Elongation at break after storage in water at 80 °C for 21 days	%	DIN 53504-S2
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1
Vicat softening temperature at 10 N and 120 °C/h (Proc. A 120)	°C	DIN EN ISO 306

For more detailed information, please refer to the product information and processing guidance.

- Very good damping behavior and rebound
- High temperature resistance
- Improved setting behavior
- Good demolding properties

	Aromatic HPM								
	C 60 A 15 HPM	**C 65 A 15 HPM**	**C 70 A 15 HPM**	**C 75 A 15 HPM**	**C 85 A 15 HPM**	**C 90 A 15 HPM**	**C 95 A 15 HPM**	**785 A 10 HPM**	**754 D 15 HPM**
	63	67	71	75	85	91	96	85	
									54
	1.17	1.18	1.18	1.18	1.2	1.21	1.23	1.18	1.23
	35	37	40	42	45	45	50	45	35
	1000	950	900	900	750	600	550	700	440
	0.9	1.5	1.5	2	3.5	4	8.4	3.5	13
	1.5	2	2.5	3.5	6	8	12	6	17
	2	4	5	6	11	13	16	11	19
	40	44	45	50	70	80	110	70	150
	55	55	50	50	40	45	21	40	25
	25	25	25	25	20	20	25	20	25
	43	37	35	35	35	30	35	30	36
	60	55	50	35	50	45	50	50	42
	20	35	30	35	35	38	46	40	55
	1100	900	850	800	800	740	650	750	550
	nb nb	nb nb	nb nb	nb nb	nb nb	nb nb	nb nb	nb nb	nb nb
	70	80	90	100	120	150	170	120	155

Elastollan® R Series

Glass fiber-reinforced thermoplastic polyurethane elastomer

Property	Unit of Measurement	Test Procedure
E-modulus from tensile test	MPa	DIN EN ISO 527
Density	g/cm³	DIN EN ISO 1183-1-A
Hardness	Shore D	DIN ISO 7619-1 (3s)
Glass fiber content	%	
Tensile strength (sample grade 1A) test speed 50 mm/min	MPa	DIN EN ISO 527
Elongation at break (sample grade 1A) test speed 50 mm/min	%	DIN EN ISO 527
Impact strength (Charpy) +23 °C Impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1
HDT determination at 1.8 MPa	°C	DIN EN ISO 75-2/A
HDT determination at 0.45 MPa	°C	DIN EN ISO 75-2/B
Average linear thermal expansion coefficient between 23 °C and 80 °C	$10^{-6} \cdot K^{-1}$	DIN 53752-A
Color		

For more detailed information, please refer to the product information and processing guidance.

- Glass fiber-reinforced
- Very high rigidity
- Low thermal expansion coefficient
- Low shrinkage
- Very good impact strength

R 1001	R 1000	R 2000	R 3000	R 3001	R 6000	R 17000 (LGF)
350	1000	2000	2800	3000	6400	17000
1.27	1.36	1.37	1.38	1.32	1.4	1.65
50	60	67	73	75		
10	20	20	20	15	26	52.5
30	50	65	80	65	130	300
65	40	25	10	25	5	2.5
nb 160	nb 130	140 110	120 70	100 70	95 70	105 100
70 30	70 20	50 10	30 10	30 6	21 12	48 55
65	90	115	125	110	125	185
125	120	138	160	155	170	> 200
28	20	20	20	30		
natural	natural	natural	natural	black	natural	natural

Elastollan® Food Contact Series

Thermoplastic polyether/-ester polyurethane elastomer

Property	Unit of Measurement	Test Procedure	1170 A 10 FC	1180 A 10 FC
Hardness	Shore A	DIN ISO 7619-1 (3s)	71	80
Hardness	Shore D	DIN ISO 7619-1 (3s)		
Density	g/cm³	DIN EN ISO 1183-1-A	1.08	1.11
Tensile strength	MPa	DIN 53504-S2	30	45
Elongation at break	%	DIN 53504-S2	850	650
Stress at 20 % elongation	MPa	DIN 53504-S2	1.5	2
Stress at 100 % elongation	MPa	DIN 53504-S2	3.5	4.5
Stress at 300 % elongation	MPa	DIN 53504-S2	6.3	8
Tear strength	kN/m	DIN ISO 34-1.B(b)	45	55
Abrasion	mm³	DIN ISO 4649-A	45	30
Compression set at 23 °C / 72 hours	%	DIN ISO 815	20	25
Compression set at 70 °C / 24 hours	%	DIN ISO 815	39	45
Tensile strength after storage in water at 80 °C for 42 days	MPa	DIN 53504-S2	20	30
Elongation at break after storage in water at 80 °C for 42 days	%	DIN 53504-S2	900	700
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1	nb nb	nb nb

Property	Unit of Measurement	Test Procedure	B 80 A 11 FC	B 85 A 11 FC
Hardness	Shore A	DIN ISO 7619-1 (3s)	82	83
Hardness	Shore D	DIN ISO 7619-1 (3s)		
Density	g/cm³	DIN EN ISO 1183-1-A	1.19	1.2
Tensile strength	MPa	DIN 53504-S2	50	45
Elongation at break	%	DIN 53504-S2	60	600
Stress at 20 % elongation	MPa	DIN 53504-S2	2.4	
Stress at 100 % elongation	MPa	DIN 53504-S2	4.6	
Stress at 300 % elongation	MPa	DIN 53504-S2	11.6	
Tear strength	kN/m	DIN ISO 34-1.B(b)	85	75
Abrasion	mm³	DIN ISO 4649-A	35	35
Compression set at 23 °C / 72 hours	%	DIN ISO 815	17	
Compression set at 70 °C / 24 hours	%	DIN ISO 815	39	
Tensile strength after storage in water at 80 °C for 42 days	MPa	DIN 53504-S2		
Elongation at break after storage in water at 80 °C for 42 days	%	DIN 53504-S2		
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1		

For more detailed information, please refer to the product information and processing guidance.

▪ Basic suitability for food contact applications in FDA and EU-regulated markets (see food contact information)

1185 A 10 FC	1190 A 10 FC	1195 A 10 FC	1198 A 10 FC	1154 D 10 FC	1164 D 11 FC	1174 D 11 FC
87	92	96				
36	42	48	52	53	69	75
1.12	1.13	1.15	1.17	1.17	1.18	1.2
45	50	55	50	50	50	65
600	550	500	420	450	350	380
2.5	5	6	9	11	16	25
6	9	10	15	15	25	30
10	16	18	28	38	45	450
70	85	100	130	150	190	220
25	25	25	25	30	30	22
25	25	30	35	40	40	50
45	45	45	50	50	50	55
32	35	37	35	35	35	35
600	600	500	450	450	400	400
nb nb	nb nb	nb nb	nb 190	nb 18	nb 12	nb 5

B 90 A 11 FC	B 95 A 11 FC	B 98 A 11 FC	685 A 10 FC	890 A 10 FC	892 A 11 FC	991 A 10 FC
92			86	93	92	91
	53	53				
1.21	1.21		1.21	1.22	1.23	1.22
50	55	45	55	45	50	45
550	550	400	600	480	550	560
4.8	7.8	11	2.9	6		5
7.4	10.6	14	6.2	10		10
11.8	17	21.6	10.8	23		19
93	100	120	75	110	105	95
35	30	40	35	45	45	36
	25	31		32		25
	38	55		43		48
	nb nb			nb 200		

Elastollan® Special Products

Thermoplastic polyether/-ester polyurethane special product

Property	Unit of Measurement	Test Procedure
Applications		
Hardness	Shore A	DIN ISO 7619-1 (3s)
Density	g/cm³	DIN EN ISO 1183-1-A
Tensile strength	MPa	DIN 53504-S2
Elongation at break	%	DIN 53504-S2
Stress at 20 % elongation	MPa	DIN 53504-S2
Stress at 100 % elongation	MPa	DIN 53504-S2
Stress at 300 % elongation	MPa	DIN 53504-S2
Tear strength	kN/m	DIN ISO 34-1.B(b)
Abrasion	mm³	DIN ISO 4649-A
Compression set at 23 °C / 72 hours	%	DIN ISO 815
Compression set at 70 °C / 24 hours	%	DIN ISO 815
Notched impact strength (Charpy) +23 °C Notched impact strength (Charpy) -30 °C	kJ/m² kJ/m²	DIN EN ISO 179-1 DIN EN ISO 179-1

For more detailed information, please refer to the product information and processing guidance.

1085 A 15	1385 A 12	SP 806 10	SP 883 10	SP 9109 10	SP B 85 A 15	SP B 87 A 15	SP B 92 A 19
alternative ether base with very good mechanics	ether base with extremely high water-vapor permeability	ether base for opaque films	ester base for opaque films	ether base, high water-vapor permeable	ester base i.a. for films	ester base i.a. for TPU blends	ester base i.a. for toothed belts
87	85	87	85	81	85	88	92
1.15	1.21	1.12	1.19	1.17	1.2	1.2	1.21
35	35	45	42	40	40	30	40
700	850	550	630	700	650	570	570
5	3	3	2		3		5
7	5	6	5		5		8
17		12	105		10		15
55	45	60	72	40	85	78	100
50	70	30	40		40	59	45
22	26	26	22				
34	46	43	37				
nb nb	nb nb	nb nb	nb nb				

Elastollan® Special Products Infinergy®

Property	Unit of Measurement	Test Procedure
Bulk density	kg/m³	Determined according to BASF-method EPP01
Average particle weight	mg	-
Color	-	-
Material density	kg/m³	DIN EN ISO 845
Tensile strength	kPa	DIN EN ISO 1798
Elongation at break	%	DIN EN ISO 1798
Compressive stress at 10 % Compression at 25 % Compression at 50 % Compression	kPa	Similar to DIN EN ISO 844
Rebound resilience	%	DIN 53512
Compression set (50 %, 22 h, 23 °C), 24 h after release	%	DIN EN ISO 1856 (Test C)
Thermal stability (linear dimensional change after 4d) 60 °C 110 °C	%	Similar to DIN ISO 2796
Heat conductivity	$W*m^{-1}*K^{-1}$	DIN EN 12667
Water absorption (1 day)	Vol.-%	Similar to DIN 53428
Fire behavior, sample thickness: 13 mm	-	FMVSS 302

For more detailed information, please refer to the product information and processing guidance.

Infinergy® X 1125-130 U 000			Infinergy® 32-100 U10		
120 - 140			85 - 135		
26 ± 3			32 ± 8		
white			white		
220	250	280	200	250	300
600	600	600	700	700	700
80	70	60	120	90	60
25 65 180	40 95 230	50 115 290	40 100 200	55 130 275	70 160 350
> 68	> 68	> 68	> 60	> 60	> 60
< 4	< 4	< 4	< 6	< 5	< 4
< 1 < 5	< 1 < 5	< 1 < 5	< 1 < 10	< 1 < 10	< 1 < 10
0.05	0.054	0.057	0.049	0.056	0.062
< 2	< 2	< 2	< 2	< 2	< 2
Met according to MD 220 [kg/m³]			Met according to MD 200 [kg/m³]		

Elastollan® Bondura Series

Thermoplastic polyurethane elastomer for solvent-based adhesives

Physical Property	Unit of Measurement	General Grades AS-626SH	AS-626H	AS-626	AS-626L
Viscosity range SC%: 15 % in MEK	cps/25 °C	3600 ~ 4200	2600 ~ 3200	1600 ~ 2200	800 ~ 1200
Max. Toluol % in solvent	%	15 ~ 20	25 ~ 30	30 ~ 35	30 ~ 35
Crystallization rate		very fast	very fast	very fast	very fast
Activation temperature	°C	55 ~ 65	55 ~ 65	55 ~ 65	55 ~ 65
tack free time, PVC with PVC	min	5 ~ 10	5 ~ 10	5 ~ 10	5 ~ 10
Initial tack free time, PVC with PVC after 5 min.	kg/3 cm	10 ~ 16	10 ~ 16	10 ~ 16	10 ~ 16
Heat resistance at 70 °C	mm	≤ 10	≤ 15	≤ 20	≤ 25

Physical Property	Unit of Measurement	Hydrolysis-Resistant Grades AS-632H	AS-632	AS-632L	AS-632A
Viscosity range SC%: 15 % in MEK	cps/25 °C	2600 ~ 3200	1600 ~ 2200	800 ~ 1200	1600 ~ 2200
Max. Toluol % in solvent	%	25 ~ 30	25 ~ 30	25 ~ 30	25 ~ 30
Crystallization rate		fast	fast	fast	fast
Activation temperature	°C	55 ~ 65	55 ~ 65	55 ~ 65	55 ~ 65
tack free time, PVC with PVC	min	25 ~ 50	25 ~ 50	25 ~ 50	25 ~ 50
Initial tack free time, PVC with PVC after 5 min.	kg/3 cm	12 ~ 18	12 ~ 18	12 ~ 18	12 ~ 18
Heat resistance at 70 °C	mm	≤ 15	≤ 20	≤ 25	≤ 20

For more detailed information, please refer to the product information and processing guidance.

- Excellent adhesion to TPU, PVC, PA, polyester fabrics and leather
- Activation temperature 55 - 65 °C
- High initial tack free time
- Good solubility across a broad viscosity range

AS-626SL	AS-690H	AS-690	AH-620
300 ~ 600	2600 ~ 3200	1600 ~ 2200	1600 ~ 2000 (25 % S.C.)
30 ~ 35	25 ~ 30	30 ~ 35	30 ~ 35
very fast	very fast	very fast	very fast
55 ~ 65	55 ~ 65	55 ~ 65	55 ~ 65
5 ~ 10	5 ~ 10	5 ~ 10	5 ~ 10
10 ~ 16	10 ~ 16	10 ~ 16	10 ~ 16
≤ 30	≤ 15	≤ 20	≤ 50

		Aliphatic Grades			Max. Toluol-Solubility, MC Soluble		
AS-632B	AS-420	AS-731	AS-733	AS-736	AS-120H	AS-120	AS-120L
1600 ~ 2200	1600 ~ 2200	1600 ~ 2000	1600 ~ 2000	1600 ~ 2000	1000 ~ 2000	70 ~ 130	70 ~ 130 (in MC)
25 ~ 30	25 ~ 30	25 ~ 30	30 ~ 35	30 ~ 35	40 ~ 60	50 ~ 70	50 ~ 70
fast	very slow	very fast	very fast	fast	fast	fast	fast
55 ~ 65	55 ~ 65	55 ~ 65	55 ~ 65	55 ~ 65	55 ~ 65	55 ~ 65	55 ~ 65
25 ~ 50	over 8 h	5 ~ 10	5 ~ 10	7 ~ 15	5 ~ 10	15 ~ 25	15 ~ 25
12 ~ 18	9 ~ 15	8 ~ 12	8 ~ 12	3 ~ 5	10 ~ 16	0.5 ~ 1.0	0.1 ~ 0.3
≤ 20	≤ 25	≤ 15	≤ 30	≤ 50	≤ 15	> 65	> 65

Elastollan® Hotbond Series

Thermoplastic polyurethane elastomer for hotmelt adhesives

Physical Property	Unit of Measurement	Soft TPU Melt Adhesive Grades					
		AH-530	AH-535	AH-560	AH-560T	AH-562	AH-567
Hardness	Shore A	72 ± 2	80 ± 2	75 ± 2	75 ± 2	75 ± 2	69 ± 2
Initial flowability temperature	°C	95 ± 10	85 ± 10	95 ± 10	90 ± 10	90 ± 10	110 ± 10
Melting index	2.16 kg. 150 °C. g/10 min	10 ± 5	20 ± 5	20 ± 5	20 ± 5	20 ± 5	7 ± 2 (177 °C)
Tack free time	min	3 ± 1	3 ± 1	15 ± 5	15 ± 5	3 ± 1	12 ± 3

Physical Property	Unit of Measurement	Aliphatic TPU Melt Adhesive Grades			
		AH-780	AH-781	AH-782	AH-810
Hardness	Shore A	90 ± 2	85 ± 2	87 ± 2	98 ± 2
Initial flowability temperature	°C	110 ± 10	110 ± 10	118 ± 10	60 ± 10
Melting index	2.16 kg. 150 °C. g/10 min	20 ± 5	20 ± 5	5 ± 2	10 ± 5
Tack free time	min	3 ± 1	3 ± 1	3 ± 1	4 ± 1

For more detailed information, please refer to the product information and processing guidance.

- Excellent adhesion to TPU, PVC, PA, polyester fabrics and leather
- Shore hardness range 70 A to 98 A
- Flow beginnning at temperatures of 60 - 140 °C
- Tack free time of 2 - 25 min.
- Wide range of products
- Can be adapted quickly to suit the needs of customers

AH-571	AH-571E	AH-573	AH-576	AH-579	AH-580	AH-582	AH-583	AH-588	AH-591
80 ± 2	80 ± 2	78 ± 2	79 ± 2	80 ± 2	75 ± 2	79 ± 2	80 ± 2	85 ± 2	90 ± 2
110 ± 10	110 ± 10	140 ± 10	119 ± 10	110 ± 10	90 ± 10	119 ± 10	118 ± 10	115 ± 10	110 ± 10
4 ± 2	4 ± 2	20 ± 5 (190 °C)	7 ± 2 (177 °C)	5 ± 2	20 ± 5	10 ± 5 (177 °C)	7 ± 2 (177 °C)	3 ± 1 (190 °C)	30 ± 10
8 ± 3	8 ± 3	2 ± 1	8 ± 3	3 ± 1	15 ± 5	8 ± 3	2 ± 1	2 ± 1	6 ± 2

Hard TPU Melt Adhesive Grades

AH-620	AH-650	AH-652	AH-660	AH-661	AH-670
95 ± 2	97 ± 2	97 ± 2	97 ± 2	97 ± 2	97 ± 2
80 ± 10	60 ± 10	60 ± 10	80 ± 10	65 ± 10	85 ± 10
10 ± 5	10 ± 5	10 ± 3	10 ± 5	40 ± 10	10 ± 5
25 ± 5	6 ± 2	4 ± 2	8 ± 3	7 ± 2	8 ± 3

Selected product literature:

- Elastollan® – Main brochure
- Ultramid® – Main brochure
- Ultradur® – Main brochure
- Ultraform® – Main brochure
- Ultrason® – Main brochure

Note

The data contained in this publication are based on our current knowledge and experience. In view of 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; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. 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. (September 2016)

Please also visit our website:
www.elastollan.de

Brochure requests:
PM/K, F 204
Fax: + 49 621 60-49497

If you have any technical questions about the products please get in touch via the Elastollan®-Infopoint.

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