

BASF Wire & Cable Solutions

Product Range:

**Renewable
Energy**



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/cm ³	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	mm ³	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	kJ/m ²	DIN EN ISO 179-1
Notched impact resistance (Charpy) -30 °C		
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/cm ³	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	mm ³	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	kJ/m ²	DIN EN ISO 179-1
Notched impact resistance (Charpy) -30 °C		
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	73	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	100	28	38	41	45	450
				150	200	250	560
85	100	100	130	150	170	190	2220
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	nb
nb	nb	nb	190	18	16	12	5
	HB						

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/cm ³	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	mm ³	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	kJ/m ²	DIN EN ISO 179-1
Notched impact strength (Charpy) -30 °C		
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	60
1000	950	900	900	750	600	550	700	550
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	20	20	20	25	20	25
43	37	35	32	35	30	35	30	45
60	55	50	38	50	45	50	50	65
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