Technical Data Sheet

Softflex 0470

Thermoplastic Elastomer
LyondellBasell Industries
Engineering Plastics

Product Description
Softflex 0470 is suitable for overmolding ABS, PC, ABS/PC and PPO.

General		
Forms	• Pellets	
Processing Method	• Coating	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	0.972	0.970 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (235°c/1.0 Kg)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Flexural Modulus	859 psi	5.92 MPa	ASTM D790
Taber Abrasion Resistance			ASTM D3389
1000 Cycles, 1000 G, H-22 Wheel	1640 mg	1640 mg	
Elastomers	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Set (100% Strain)	105 %	105 %	ASTM D412
Tensile Stress			ASTM D412
50% Strain	121 psi	0.834 MPa	
100% Strain	171 psi	1.18 MPa	
300% Strain	311 psi	2.14 MPa	
Tensile Strength (Yield)	610 psi	4.21 MPa	ASTM D412
Tensile Elongation (Break)	680 %	680 %	ASTM D412
Tear Strength	93.0 lbf/in	16.3 kN/m	ASTM D624
Compression Set (73°f (23°c))	24 %	24 %	ASTM D395
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Gardner Impact (-22°f (-30°c))	> 320 in·lb	> 36.2 J	ASTM D5420
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Durometer Hardness			ASTM D2240
Shore A	42 to 48	42 to 48	
Shore A, 10 Sec	37 to 43	37 to 43	

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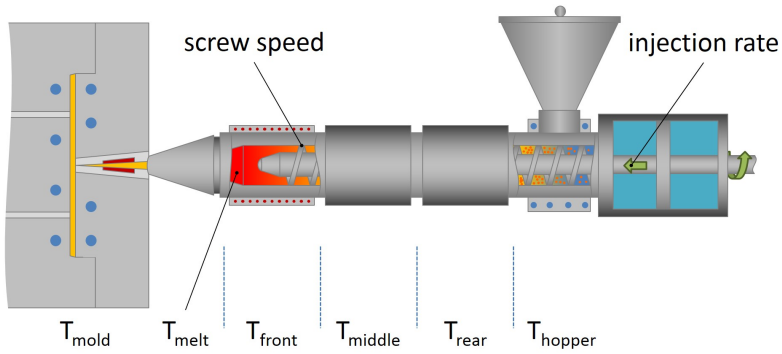

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	130 to 140 °F	54 to 60 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Shot Size	40 to 80 %	40 to 80 %
Rear Temperature	320 to 360 °F	160 to 182 °C
Middle Temperature	340 to 380 °F	171 to 193 °C
Front Temperature	410 to 430 °F	210 to 221 °C
Nozzle Temperature	390 to 420 °F	199 to 216 °C
Mold Temperature	80 to 120 °F	27 to 49 °C
Injection Pressure	5000 to 6000 psi	34.5 to 41.4 MPa
Holding Pressure	4000 to 4500 psi	27.6 to 31.0 MPa
Back Pressure	75.0 to 150 psi	0.517 to 1.03 MPa
Screw Speed	20 to 40 rpm	20 to 40 rpm

Notes

These are typical property values not to be construed as specification limits.