ENGI-
NEERING
LIFE

elastron
ENGINEERING LIFE

P.G401.A70.B

PRODUCT DESCRIPTION

A soft , black SEBS based thermoplastic elastomer (TPE) compound designed for use in medical applications.

GENERAL PROPERTIES

Material Status	Active
Availability	Europe North America Asia- Pasific Africa & Middle East
Features	Ozone Resistance Adhesion to Polyolefins Recyclable Compliant with RoHS Directive 2011/65/EU Compliant with USP Class VI Requirements
Certification	RoHS
Appearance	Black
Form	Pellets
Processing Method	Injection,Extrusion

Physical Properties

Property	Typical Value (English)	Typical Value (SI)	Test Method
Density	0.89 g/cm³	0,89 g/cm³	ASTM D 792
Durometer Hardness, 3 sec (Shore A)	70.00	70,00	ASTM D 2240
Tensile Strength at Break	1450 Psi	10,00 MPa	ASTM D412, Method A
Mod.of Elasticity %100	377 Psi	2,60 MPa	ASTM D412, Method A
Mod.of Elasticity %300	595 Psi	4,10 MPa	ASTM D412, Method A
Elongation at break	950.00 %	950,00 %	ASTM D412, Method A
Compression Set (at 73 °F, 22 h)	19.00 %	19,00 %	ASTM D 395, Type 2, Method B
Compression Set (at 158 °F, 22 h)	43.00 %	43,00 %	ASTM D 395, Type 2, Method B
Compression Set (at 212 °F, 22 h)	68.00 %	68,00 %	ASTM D 395, Type 2, Method B
Tear Resistance	256.95 lbf/in	45,00 N/mm	ASTM D624

Shrinkage

Property	Typical Value (English)	Typical Value (SI)	Test Method
Flow	2.41%	2.41%	ASTM D955
Across Flow	1.18%	1.18%	ASTM D955

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Ageing Tests			
Additional Information	Typical Value (English)	Typical Value (SI)	Test Method
Ozone Resistance-Stressed	No cracks	No cracks	ASTM D 1149

Bondable to

PE-PP-EVA

Additional Information

Elastron products are not compatible with PVC and Acetal.
Regrinding level up to %20 is recommended with minimum property loss.

Processing				
Injection Molding	Typical Value (English)		Typical Value (SI)	
Drying temperatures	-	°F	-	°C
Drying time	No need	hours	No need	hours
Rear Zone temp.	293-347	°F	145- 175	°C
Middle Zone temp.	311-365	°F	155- 185	°C
Front Zone temp.	320-374	°F	160- 190	°C
Nozzle Temperature	347-401	°F	175- 205	°C
Injection Speed	Low/ Mod	-	Low/ Mod	-
Injection Time	3- 5	sec.	3- 5	sec.
Injection Pressure	10- 40	bar	10- 40	bar
Hold Pressure	5- 20	bar	5- 20	bar
Back Pressure	5- 40	bar	5- 40	bar
Screw Speed	50- 200	rpm	50- 200	rpm
Mold Temperature	77-122	°F	25- 50	°C
Screw Comp. ratio	1.5:1- 2.0:1	-	1.5:1- 2.0:1	-
Screw L/D ratio	18- 24	-	18- 24	-
Residence time	1- 2 shot	-	1- 2 shot	-
Cushion size	0.3120	inc	8	mm
Suggested Max Regrind	20	%	20	%

Extrusion Molding	Typical Value (English)		Typical Value (SI)	
Drying temperatures	-	°F	-	°C
Drying time	No need	hours	No need	hours
Screw Comp. Ratio	1.5:1- 2.0:1	-	1.5:1- 2.0:1	-
Screw L/D	18- 30	-	18- 30	-
Feed Zone temp.	302-338	°F	150- 170	°C
Rear Zone temp.	311-347	°F	155- 175	°C
Center Zone temp.	329-365	°F	165- 185	°C
Front Zone temp.	347-401	°F	175- 205	°C
Head temp.	356-410	°F	180- 210	°C
Die temp.	374-410	°F	190- 210	°C
Suggested Max Regrind	20	%	20	%

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Notes

ISO 9001: 2015 & IATF16949: 2016 & ISO 14001: 2015 REGISTERED QUALITY SYSTEMS