

F.G400.A80.B

A soft , black SEBS based thermoplastic elastomer (TPE) compound designed for contact with non-fatty foods. The monomers and additives used to produce this product are listed in the Union List of Authorized Substances of Regulation 10/2011/EC and meets the FDA requirements contained in the Code of Federal Regulations, 21 CFR.

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 can be used in food contact applications in USA, use limitations may apply	
Certification	RoHS	
Appearance	Black	
Form	Pellets	
Processing Method	Injection	

Physical Properties				
Property	Typical Value (English)	Typical Value (SI)	Test Method ASTM D 792	
Density	0.90 g/cm ³	0,90 g/cm ³		
Durometer Hardness, 3 sec (Shore A)	80.00	80,00	ASTM D 2240	
Tensile Strength at Break	1740 Psi	12,00 MPa	ASTM D412, Method A	
Mod.of Elasticity %100	450 Psi	3,10 MPa	ASTM D412, Method A	
Mod.of Elasticity %300	653 Psi	4,50 MPa	ASTM D412, Method A	
Elongation at break	850.00 %	850,00 %	ASTM D412, Method A	
Compression Set (at 73 °F, 22 h)	28.00 %	28,00 %	ASTM D 395, Type 2, Method B	
Compression Set (at 158 °F, 22 h)	55.00 %	55,00 %	ASTM D 395, Type 2, Method B	
Compression Set (at 212 °F, 22 h)	72.00 %	72,00 %	ASTM D 395, Type 2, Method B	
Tear Resistance	285.51 lbf/in	50,00 N/mm	ASTM D624	

Shrinkage					
Property	Typical Value (English)	Typical Value (SI)	Test Method		
Flow	2.10%	2.10%	ASTM D955		
Across Flow	1.76%	1.76%	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					

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

Processing					
Injection Molding	Typical Va	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	%	
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ISO 9001: 2015 & IATF16949: 2016 & ISO 14001: 2015 REGISTERED QUALITY SYSTEMS



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