

F.G100.A45.N

A soft, colorable 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	Natural	
Form	Pellets	
Processing Method	Injection	

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Property	Typical Value (English)	Typical Value (SI)	Test Method	
Density	1.17 g/cm ³	1,17 g/cm ³	ASTM D 792	
Durometer Hardness, 3 sec (Shore A)	45.00	45,00	ASTM D 2240	
Tensile Strength at Break	508 Psi	3,50 MPa	ASTM D412, Method A	
Mod.of Elasticity %100	160 Psi	1,10 MPa	ASTM D412, Method A	
Mod.of Elasticity %300	247 Psi	1,70 MPa	ASTM D412, Method A	
Elongation at break	800.00 %	800,00 %	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)	44.00 %	44,00 %	ASTM D 395, Type 2, Method B	
Compression Set (at 212 °F, 22 h)	65.00 %	65,00 %	ASTM D 395, Type 2, Method B	
Tear Resistance	125.62 lbf/in	22,00 N/mm	ASTM D624	

Shrinkage				
Property	Typical Value (English)	Typical Value (SI)	Test Method	
Flow	1.78%	1.78%	ASTM D955	
Across Flow	1.50%	1.50%	ASTM D955	
ELS.FR.C01.07		Rev.00001	Page 1 / 3	

ELS.FR.C01.07



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F.G100.A45.N

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	%	
ELS.FR.C01.07			Rev.00001	Page 2 / 3	



F.G100.A45.N

Page 3/3

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



ELS.FR.C01.07