F.G400.A60.B

PRODUCT DESCRIPTION

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
Density	0.89 g/cm³	0,89 g/cm³	ASTM D 792
Durometer Hardness, 3 sec (Shore A)	60.00	60,00	ASTM D 2240
Tensile Strength at Break	1160 Psi	8,00 MPa	ASTM D412, Method A
Mod.of Elasticity %100	247 Psi	1,70 MPa	ASTM D412, Method A
Mod.of Elasticity %300	392 Psi	2,70 MPa	ASTM D412, Method A
Elongation at break	1000.00 %	1000,00 %	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)	45.00 %	45,00 %	ASTM D 395, Type 2, Method B
Compression Set (at 212 °F, 22 h)	67.00 %	67,00 %	ASTM D 395, Type 2, Method B
Tear Resistance	228.40 lbf/in	40,00 N/mm	ASTM D624

Shrinkage

Property	Typical Value (English)	Typical Value (SI)	Test Method
Flow	2.30%	2.30%	ASTM D955
Across Flow	1.55%	1.55%	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	%

Notes

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