ENGI-
NEERING
LIFE

elastron
ENGINEERING LIFE

G100.D43.B

PRODUCT DESCRIPTION

A hard , black SEBS based thermoplastic elastomer (TPE) compound that offers good physical properties and chemical resistance.

GENERAL PROPERTIES

Material Status	Active
Availability	Europe North America Asia- Pasific Africa & Middle East
Features	Good Mechanical Properties Good Chemical Resistance Ozone Resistance Adhesion to Polyolefins Compliant with RoHS Directive 2011/65/EU
Certification	RoHS
Appearance	Black
Form	Pellets
Processing Method	Injection

Automotive Specifications

GM/ QK007000

Physical Properties

Property	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.12 g/cm³	1,12 g/cm³	ASTM D 792
Durometer Hardness, 3 sec (Shore D)	43.00	43,00	ASTM D 2240
Tensile Strength at Break	1740 Psi	12,00 MPa	ASTM D412, Method A
Mod.of Elasticity %100	943 Psi	6,50 MPa	ASTM D412, Method A
Mod.of Elasticity %300	1189 Psi	8,20 MPa	ASTM D412, Method A
Elongation at break	550.00 %	550,00 %	ASTM D412, Method A
Compression Set (at 73 °F, 22 h)	42.00 %	42,00 %	ASTM D 395, Type 2, Method B
Compression Set (at 158 °F, 22 h)	65.00 %	65,00 %	ASTM D 395, Type 2, Method B
Compression Set (at 212 °F, 22 h)	77.00 %	77,00 %	ASTM D 395, Type 2, Method B
Tear Resistance	405.42 lbf/in	71,00 N/mm	ASTM D624

Shrinkage

Property	Typical Value (English)	Typical Value (SI)	Test Method
Flow	1.60%	1.60%	ASTM D955
Across Flow	1.37%	1.37%	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.

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