ENGI-
NEERING
LIFE

elastron
ENGINEERING LIFE

G500.A70.B.PA

PRODUCT DESCRIPTION

A soft , black SEBS based thermoplastic elastomer (TPE) compound specially designed for excellent adhesion to PA.

GENERAL PROPERTIES	
Material Status	Active
Availability	Europe North America Asia- Pasific Africa & Middle East
Features	Designed for Excellent Adhesion to PA Insert Molding or 2K Molding Possible Designed for Soft Touch Applications Ozone Resistance Compliant with RoHS Directive 2011/65/EU
Certification	RoHS
Appearance	Black
Form	Pellets
Processing Method	Injection

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 A)	70.00	70,00	ASTM D 2240
Tensile Strength at Break	653 Psi	4,50 MPa	ASTM D412, Method A
Mod.of Elasticity %100	348 Psi	2,40 MPa	ASTM D412, Method A
Mod.of Elasticity %300	522 Psi	3,60 MPa	ASTM D412, Method A
Elongation at break	500.00 %	500,00 %	ASTM D412, Method A
Compression Set (at 73 °F, 22 h)	18.00 %	18,00 %	ASTM D 395, Type 2, Method B
Compression Set (at 158 °F, 22 h)	46.00 %	46,00 %	ASTM D 395, Type 2, Method B
Compression Set (at 212 °F, 22 h)	76.00 %	76,00 %	ASTM D 395, Type 2, Method B
Tear Resistance	171.30 lbf/in	30,00 N/mm	ASTM D624

Shrinkage

Property	Typical Value (English)	Typical Value (SI)	Test Method
Flow	1.50%	1.50%	ASTM D955
Across Flow	1.15%	1.15%	ASTM D955

Flammability

Property	Typical Value (English)	Typical Value (SI)	Test Method
Flammability Rating	HB	HB	UL 94

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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

PA

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	194	°F	90	°C
Drying time	2	hours	2	hours
Rear Zone temp.	356-392	°F	180- 200	°C
Middle Zone temp.	374-410	°F	190- 210	°C
Front Zone temp.	401-428	°F	205- 220	°C
Nozzle Temperature	428-446	°F	220- 230	°C
Injection Speed	Mod/ High	-	Mod/ High	-
Injection Time	1- 4	sec.	1- 4	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	2.0:1- 4.0:1	-	2.0:1- 4.0:1	-
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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Notes

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