

V861.A70.B(Preliminary Data)

PRODUCT DESCRIPTION

A soft , black thermoplastic vulcanizate, TPV in the thermoplastic elastomer (TPE) family which offers higher temperature resistance and excellent compression set with superior UV resistance.

GENERAL PROPERTIES

Material Status	Active
Availability	Europe North America Asia- Pasific Africa & Middle East
Features	Excellent UV Resistance Excellent Compression Set Ozone Resistance Compliant with RoHS Directive 2011/65/EU Adhesion to Polyolefins
Certification	RoHS
Appearance	Black
Form	Pellets
Processing Method	Injection, Extrusion

Physical Properties

Property	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.10 g/cm ³	1,10 g/cm ³	ASTM D 792
Durometer Hardness, 3 sec (Shore A)	70.00	70,00	ASTM D 2240
Tensile Strength at Break	1015 Psi	7,00 MPa	ASTM D412, Method A
Mod.of Elasticity %100	319 Psi	2,20 MPa	ASTM D412, Method A
Mod.of Elasticity %300	609 Psi	4,20 MPa	ASTM D412, Method A
Elongation at break	500.00 %	500,00 %	ASTM D412, Method A
Compression Set (at 73 °F, 22 h)	22.00 %	22,00 %	ASTM D 395, Type 2, Method B
Compression Set (at 158 °F, 22 h)	42.00 %	42,00 %	ASTM D 395, Type 2, Method B
Compression Set (at 212 °F, 22 h)	53.00 %	53,00 %	ASTM D 395, Type 2, Method B
Tear Resistance	159.88 lbf/in	28,00 N/mm	ASTM D624

Shrinkage

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

Extrusion Molding	Typical Value (English)		Typical Value (SI)	
Drying temperatures	-	°F	-	°C
Drying time	No need	hours	No need	hours
Screw Comp. Ratio	1.5:1- 2.0:1	-	1.5:1- 2.0:1	-
Screw L/D	18- 30	-	18- 30	-
Feed Zone temp.	302-338	°F	150- 170	°C
Rear Zone temp.	311-347	°F	155- 175	°C
Center Zone temp.	329-365	°F	165- 185	°C
Front Zone temp.	347-401	°F	175- 205	°C
Head temp.	356-410	°F	180- 210	°C
Die temp.	374-410	°F	190- 210	°C
Suggested Max Regrind	20	%	20	%

Notes

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