

P.G401.A45.N

PRODUCT DESCRIPTION

A soft , natural SEBS based thermoplastic elastomer (TPE) compound designed for use in medical applications.

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 Compliant with USP Class VI Requirements		
Certification	RoHS		
Appearance	Natural		
Form	Pellets		
Processing Method	Injection,Extrusion		

Property Typical Value (English) Typical Value (SI) Test Meth				
Property	Typical Value (English)	Typical Value (SI)	Test Method	
Density	0.88 g/cm ³	0,88 g/cm ³	ASTM D 792	
Durometer Hardness, 3 sec (Shore A)	45.00	45,00	ASTM D 2240	
Tensile Strength at Break	1015 Psi	7,00 MPa	ASTM D412, Method A	
Mod.of Elasticity %100	131 Psi	0,90 MPa	ASTM D412, Method A	
Mod.of Elasticity %300	232 Psi	1,60 MPa	ASTM D412, Method A	
Elongation at break	1200.00 %	1200,00 %	ASTM D412, Method A	
Compression Set (at 73 °F, 22 h)	13.00 %	13,00 %	ASTM D 395, Type 2, Method E	
Compression Set (at 158 °F, 22 h)	31.00 %	31,00 %	ASTM D 395, Type 2, Method E	
Compression Set (at 212 °F, 22 h)	ssion Set (at 212 °F, 22 h) 49.00 %		ASTM D 395, Type 2, Method E	
Tear Resistance	142.75 lbf/in	25,00 N/mm	ASTM D624	

Shrinkage				
Property	Typical Value (English)	Typical Value (SI)	Test Method	
Flow	2.08% 2.08%		ASTM D955	
Across Flow	1.69% 1.69%		ASTM D955	
ELS.FR.C01.07	·	Rev.00002	Page 1 / 3	



elas n ENGINEERING LIFE

P.G401.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 Value (English)		Typical V	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)		Extrusion MoldingTypical Value (English)Typical Value (SI)		alue (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	-	%	-	%	
ELS.FR.C01.07 Rev.00002			Page 2 / 3		



P.G401.A45.N

Page 3/3

The company name, the brand, the logo and all kinds of visuals and writings in this document are the property of Elastron. It cannot be copied, distributed, modified or reproduced without the express written permission of Elastron. Independently, these documents can only be printed for personal use. However, in any case, the visuals and writings contained here cannot be used in another document or web page.

All the visuals, texts, information and explanations and the like in this document are for promotional purposes, giving information and providing convenience to the user. The values presented in this document apply only to the product mentioned above and cannot be extended to other products in general. Elastron is not responsible for the results that may arise from tests outside the control of Elastron. Although Elastron bases the information and suggestions contained herein on reliable data, it does not guarantee that such information and suggestions are correct and that the product is suitable for its intended use. The user should know that Elastron must obtain the final information before taking any action by referring to the information and suggestions contained in this

document.

Elastron reserves the right, at its discretion, to change or terminate the content of the document at any time and in any way.

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



ELS.FR.C01.07