

# Elastron

P.V101.A40.B

## TECHNICAL DATASHEET

### PRODUCT DESCRIPTION

A soft , black thermoplastic vulcanizate, TPV (EPDM/PP) in the thermoplastic elastomer family designed for use in medical applications. This grade is capable of sterilization with steam at 134°C, Gamma (25KGy/50KGy) and EtO.

### GENERAL PROPERTIES

<b>Color</b>	Black
<b>Certifications</b>	RoHS
<b>Processing Method</b>	Injection                      Extrusion
<b>Available Standards</b>	ASTM
<b>USP Class VI Compliance</b>	USP Class VI Compliance

### Physical Properties

Property	Unit	Standard	Value
Density	g/cm <sup>3</sup>	ASTM D 792	0.90
Durometer Hardness, 3 sec	Shore A	ASTM D 2240	40.00
Tensile Strength at Break	MPa	ASTM D412, Method A	3.50
Mod.of Elasticity %100	MPa	ASTM D412, Method A	1.00
Mod.of Elasticity %300	MPa	ASTM D412, Method A	2.10
Elongation at break	%	ASTM D412, Method A	550.00
Compression Set	% at 23°C, 22 h	ASTM D 395, Type 2, Method B	12.00
Compression Set	% at 70°C, 22 h	ASTM D 395, Type 2, Method B	28.00
Compression Set	% at 100°C, 22 h	ASTM D 395, Type 2, Method B	46.00
Tear Resistance	N/mm	ASTM D624	18.00

## Elastron

P.V101.A40.B

Ageing Tests			
Property	Unit	Standard	Value
Ozone Resistance	Stressed	ASTM D 1149	No cracks
Bondable to			
PE-PP-EVA			
Processing			
Injection	Unit	Value	
Drying temperatures	°C	90	
Drying time	hours	2	
Rear Zone temp.	°C	155- 175	
Middle Zone temp.	°C	165- 185	
Front Zone temp.	°C	170- 190	
Nozzle Temperature	°C	180- 210	
Injection Speed	-	Moderate	
Injection Time	sec.	2- 4	
Injection Pressure	bar	10- 40	
Hold Pressure	bar	5- 20	
Back Pressure	bar	5- 40	
Screw Speed	rpm	50- 200	
Mold Temperature	°C	25- 50	
Screw Comp. ratio	-	1.5:1- 2.0:1	
Screw L/D ratio	-	18- 24	
Residence time	-	1-2 shot	
Cushion size	mm	8	
Suggested Max Regrind	%	20	
Extrusion	Unit	Value	
Drying temperatures	°C	90	
Drying time	hours	2	
Screw Comp. Ratio	-	1.5:1- 2.0:1	
Screw L/D	-	18- 30	
Feed Zone temp.	°C	155- 165	
Rear Zone temp.	°C	160- 180	
Center Zone temp.	°C	165- 185	
Front Zone temp.	°C	170- 190	
Head temp.	°C	180- 210	
Die temp.	°C	185- 215	
Suggested Max Regrind	%	20	

## Elastron

P.V101.A40.B

### Additional Information

Elastron products are not compatible with PVC and Acetal.

Regrinding level up to %20 is recommended with minimum property loss.

Shrinkage	Unit	Standard	Value
Flow	%	ASTM D955	2.58
Across Flow	%	ASTM D955	1.00

### Notes

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

