



G500.A45.B.PS

### PRODUCT DESCRIPTION

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

GENERAL PROPERTIES		
Material Status	Active	
Availability	Europe North America Asia- Pasific Africa & Middle East	
Features	Designed for Excellent Adhesion to PS 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	1.18 g/cm³	1,18 g/cm³	ASTM D 792	
Durometer Hardness, 3 sec (Shore A)	45.00	45,00	ASTM D 2240	
Tensile Strength at Break	290 Psi	2,00 MPa	ASTM D412, Method A	
Mod.of Elasticity %100	116 Psi	0,80 MPa	ASTM D412, Method A	
Mod.of Elasticity %300	203 Psi	1,40 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)	80.00 %	80,00 %	ASTM D 395, Type 2, Method B	
Tear Resistance	119.91 lbf/in	21,00 N/mm	ASTM D624	

	Shrinkage		
Property	Typical Value (English)	Typical Value (SI)	Test Method
Flow	1.58%	1.58%	ASTM D955
Across Flow	1.23%	1.23%	ASTM D955

**ELS.FR.C01.07** Rev.00002 Page 1/3





# G500.A45.B.PS

Ageing Tests			
Additional Information	Typical Value (English)	Typical Value (SI)	Test Method
Ozone Resistance-Stressed	No cracks	No cracks	ASTM D 1149

Bondable to

PS

### 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
Orying time	2	hours	2	hours
ear Zone temp.	356-392	°F	180- 200	°C
liddle Zone temp.	374-410	°F	190- 210	°C
ront Zone temp.	401-428	°F	205- 220	°C
lozzle Temperature	428-446	°F	220- 230	°C
njection Speed	Mod/ High	-	Mod/ High	-
njection Time	1- 4	sec.	1- 4	sec.
njection Pressure	10- 40	bar	10- 40	bar
lold 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	-
ushion size	0.3120	inc	8	mm
uggested Max Regrind	20	%	20	%

ELS.FR.C01.07 Rev.00002 Page 2 / 3



G500.A45.B.PS

### 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









**ELS.FR.C01.07** Rev.00002 Page 3 / 3