

## **TPE 310**

### **ELASTOMERS**

This TPU is 84 ShoreA and is an excellent choice for Digital Foam™ applications. ALM has extensive experience processing this powder, and it has excellent recyclability.

#### **HIGHLIGHTS**

- → Soft, white parts out of the machine
- → Extreme elongations achievable without permanent deformation
- → Easier processing than TPE 300
- → 100% recyclable

#### **APPLICATIONS**

- → Footwear prototyping
- → Automotive gaskets and seals
- → Cushioning applications
- → Ideal for rugged applications requiring stiffness at elevated temperatures
- → Ideal for applications requiring softer parts with excellent ductility and surface finish



#### **HEADQUARTERS**

ALM - Advanced Laser Materials

3115 Lucius McCelvey, Temple, TX 76504

P: 1.254.773.3080 FAX: 1.254.773.3084

E: info@advancedlasermaterials.com



# **TPE 310**



## **ELASTOMERS**

This TPU is 84 ShoreA and is an excellent choice for Digital Foam™ applications. ALM has extensive experience processing this powder, and it has excellent recyclability.

TYPICAL PHYSICAL PROPERTIES			
PROPERTY	TEST METHOD	IMPERIAL	METRIC
Color/Appearance	Visual	White	White
Bulk Density	ASTM D1895	0.016 PCI	0.45 g/cc
Average Particle Size (D50)	Laser Diffraction	-	70-85 μm
Particle Size Range (D10-D90)	Laser Diffraction	-	40-125 μm
Melt Flow Rate	MFR - 210°C, 1kg	-	12-20 g/10 min
Sintered Color/ Appearance	Visual	White/Semi Translucent	White/Semi Translucent
Sintered Density	ASTM D792	0.04 PCI	1.14 g/cc
Tensile Strength X	ASTM D638	2750 psi	19 Mpa
Tensile Modulus X	ASTM D638	1595 psi	11 MPa
Elongation at Break X	ASTM D638	-	>800%
Tensile Strength Z	ASTM D638	2180 psi	15 Mpa
Tensile Modulus Z	ASTM D638	2320 psi	16 MPa
Elongation at Break Z	ASTM D638	-	>600%
Flexural Modulus	ASTM D790	-	70 MPa
Shore Hardness, Shore "A/D"	ASTM D2240	-	84A