

# EM+23

## High Elasticity Resin

EM+23 is a PU like material with high resilience, tear resistance and low temperature resistance. EM+23 is suitable for elastic cushioning applications such as insole, insole, cushion, neck pillow and protector. It is the preferred material for mass production of elastic parts.

EM+23 passed the "ISO 10993-10:2010 Biological evaluation of medical devices-Part 10:Tests for irritation and skin sensitisation", "AFIRM RSL", "California Rule 65" and "EU REACH Regulation No. 1907/2006 210 Substances of Very High Concern (SVHC) for Screening Test".



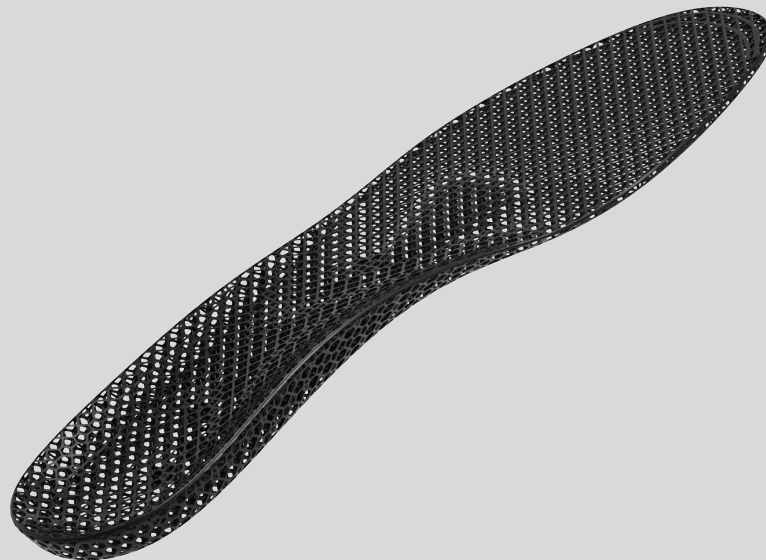
Resilience



Tear resistance



Flexibility



Black

Orange

US:

940 Old County Rd, Belmont, CA, 94002, USA

MAT #EM232101-01 Rev1.4

## EM+23 Technical Data Sheet :

Mechanical Properties	Metric	U.S.
Ultimate Tensile Strength, ISO 37, Type II, 500 mm/min	21.59 MPa	3.13 ksi
Elongation at Break, ISO 37, Type II, 500 mm/min	560%	560 %
Tensile modulus, ISO 37, Type II, 500 mm/min	5.79 MPa	0.84 ksi
Tear Strength, ASTM D624, Die C, 500 mm/min	22.38 kN/m	127.79 lbf/in
Rebound Resilience, ISO 4662	35%	35 %
Ross Flexing Fatigue (Notched), ASTM D1052 23°C, 90 degree bending, 100 cycles/minute	>250,000	>250,000
Thermal Properties,	Metric	U.S.
Tg (DMA, tan(d)), ASTM D4065	-17.98 °C	-0.36 °F
Storage modulus (25°C) ,ASTM D4065	7.58 MPa	1.10 ksi
tan δ, 25°C, (DMA), ASTM D4065	0.1100	0.1100
General Properties	Metric	
Hardness, Shore A, ASTM D2240	70A	
Density (cured resin),ASTM D792	1.01 g/cm <sup>3</sup>	
Density (liquid resin), ASTM D4052	0.98 g/cm <sup>3</sup>	
Viscosity, 40°C, ASTM D2196	1860 cps	

The above TDS value of EM+23 is tested and verified in LuxCreo's 3D printing system.

The mechanical properties of the material may be different due to the placement direction of the 3D printing model on the forming table, the optical power of the 3D printing system and other parameters, as well as the selection of the post-process technology of the 3D printed parts. Please refer to LuxCreo's "Product Design and Printing Guide" or consult after-sales to choose a suitable process. Improper use of materials or non-compliance with "Product Design and Printing Guidelines" may result in changes in mechanical properties and colors.

LuxCreo reserves the right to change material properties and formulations without notice.