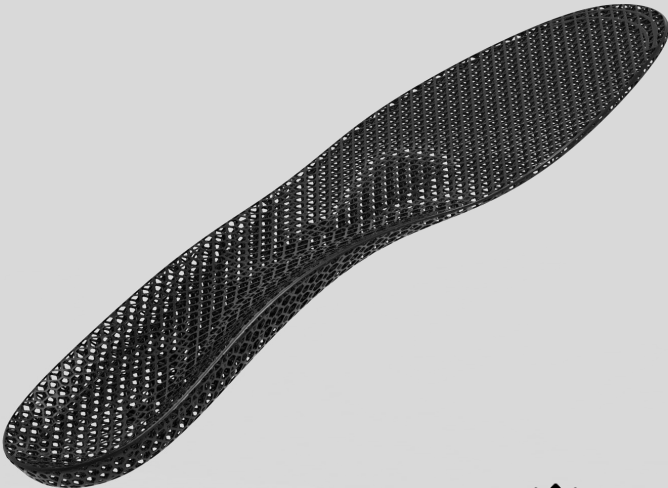


EM+23

High Elastic Resin

EM+23 is a polyurethane elastomer with superior energy return, strength, tear resistance and durability, which makes it ideal for applications such as sportswear and sports protective gears, buffer and seals, and medical rehabilitation devices.

ISO Standard	Tested Property	Test Result
EU REACH Regulation No. 1907/2006 211	Substances of Very High Concern (SVHC)	Pass
ISO 10993-10:2010	Irritation and Skin Sensitization	Pass
AFIRM RSL	Restricted Substances	Pass
California Rule 65	Chemicals that cause cancer, birth defects or other reproductive harm	Pass



Black



Energy Return



Tear resistance



Elastomer

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 ³	
Density (liquid resin), ASTM D4052	0.98 g/cm ³	
Viscosity, 40 °C, ASTM D2196	1860 cps	

The above TDS data is tested and verified in LuxCreo's 3D printing system. The mechanical properties of the material may vary based on print orientation, print settings and the choice of post-process technology. Please refer to LuxCreo's material "Application Guide" and "EM Design Guide" or consult aftersales to choose a suitable process. Improper use of materials or non-compliance with material "Application Guide" or "EM Design Guide" may result in changes in mechanical properties and colors. LuxCreo reserves the right to change material properties and formulations without notice.