## EM +24

## High Elasticity Resin

$E M^{+} 24$ has ultra-high resilience, combined with LuxCreo's unique lattice structure, the energy return (Energy Return) can reach $83 \%$, exceeding Pebax foam material. At the same time, $\mathrm{EM}^{+} 24$ is extremely resistant to low temperatures and can still maintain super high resilience at $-30^{\circ} \mathrm{C}$. $\mathrm{EM}^{+} 24$ is an ideal material for rapid prototyping and elastic processing parts such as sports shoe midsoles, automotive interiors and industrial suspensions. Based on LEAP ${ }^{\text {TM }}$ nano-release technology, the component molding speed is fast, with excellent dimensional accuracy and detail resolution.


Resilience
Low Temp Resistant


## Black

EM ${ }^{+} 24$ Technical Data Sheet:

| Mechanical Properties | Metric | U.S. |
| :---: | :---: | :---: |
| Ultimate Tensile Strength, ISO 37 | 16.68 MPa | 2.42 ksi |
| Elongation at Break, ISO 37 | 210 \% | 210\% |
| Tear Strength, ASTM D624, Die-C (die cut) | $27.30 \mathrm{kN} / \mathrm{m}$ | $155.88 \mathrm{lb}_{\mathrm{f}} / \mathrm{in}$ |
| Rebound Resilience, ISO 4662 | 58\% | 58\% |
| Ross Flexing Fatigue (Notched), ASTM D1052 $23^{\circ} \mathrm{C}, 90$ degree bending, 100 cycles/minute | >125,000 | >125,000 |
| Thermal Properties, ASTM D648 | Metric | U.S. |
| Tg (DMA, $\tan (\mathrm{d})$ ), ASTM D4065 | $-34.7{ }^{\circ} \mathrm{C}$ | $-30.46{ }^{\circ} \mathrm{F}$ |
| $\tan (\mathrm{d})\left(\mathrm{DMA}, 25^{\circ} \mathrm{C}\right)$, ASTM D4065 | 0.0393 | 0.0393 |
| General Properties | Metric |  |
| Hardness, Shore A, ASTM D2240 | 70 A |  |
| Density (cured resin),ASTM D792 | $1.05 \mathrm{~g} / \mathrm{cm}^{3}$ |  |
| Density (liquid resin), ASTM D4052 | $1.02 \mathrm{~g} / \mathrm{cm}^{3}$ |  |
| Viscosity, $40^{\circ} \mathrm{C}$, ASTM D2196 | 2800 cps |  |

These data are typical values and were determined through testing on printers which are validated for use with Luxcreo's products. Mechanical properties will vary based on machine, part orientation, machine type, machine power, post curing of the printed parts, and cleaning. See product guide for post-processing procedure and best practices. Improper use or failure to adhere to the product guide may result in variations of color and mechanical properties. Luxcreo reserves the right to change material characteristics, and formulation without prior notification.

