Orthotite® LIFT™ ATPU

SUPERCRITICAL FOAMING

Lightweight | Performance-Level Resilience | Hydrophobic | Chemical-Free Foaming | Elevated Performance

Critical Performance. Elevated Comfort.

OrthoLite® LIFT™ ATPU combines the proven performance of aliphatic TPU with supercritical fluid (SCF) foaming. The result is a lightweight, highly resilient insole material from OrthoLite, the global leader in insole and material innovation.

The polymer is expanded with a supercritical fluid rather than chemical blowing agents. That makes for a cleaner process and a material with excellent mechanical performance and lasting comfort. For footwear brands, it's a high-performance way to improve comfort without adding weight.



PRODUCT SUMMARY

OrthoLite® LIFT™ ATPU is built on an aliphatic TPU polymer. The SCF process creates a fine, uniform cell structure that delivers consistent cushioning and long-term durability. The result is a lightweight, hydrophobic insole that provides responsive comfort underfoot.

- Low-density, lightweight construction
- High energy return, with rebound resilience of ≥65%
- Compression set resistance for long-term resilience
- Superior abrasion resistance
- Hydrophobic polymer that resists water uptake

It's a trusted OrthoLite materials solution, engineered through an innovative process and a high-performance material platform.

APPLICATION & PERFORMANCE

OrthoLite® LIFT™ ATPU is built for high-demand categories like road and trail running, hiking and elite athletic performance. It delivers exceptional lightness and rebounds without compromise. Its hydrophobic, closed-cell structure resists water absorption, so the insole keeps its structure and cushioning in wet and dry conditions, mile after mile.

The LIFT collection is a platform-level innovation and reflects OrthoLite's ongoing commitment to material science. Because the platform includes several formulations, brand partners can choose the material that best fits their performance priorities.

Formulation
SCF Aliphatic TPU Foam

MOQ
Standard

Density: 0.07D

Hardness: 30°+/-4° Asker C

Compression Set: ≤55

Resilience: ≥65

Process: Supercritical Foam

Protection: Hydrophobic

Testing: Performed at OrthoLite in-house labs, utilizing ASTM testing standards

Finished Goods Only—Molded and Die Cut: Not available in sheets

Thickness: 2mm-10mm*

Color Available: White

Ideal for:

The trademarks, brands, slogans and logos referenced herein are registered or unregistered trademarks owned by O2 Partners, LLC and may be used solely under permission or license by us.