

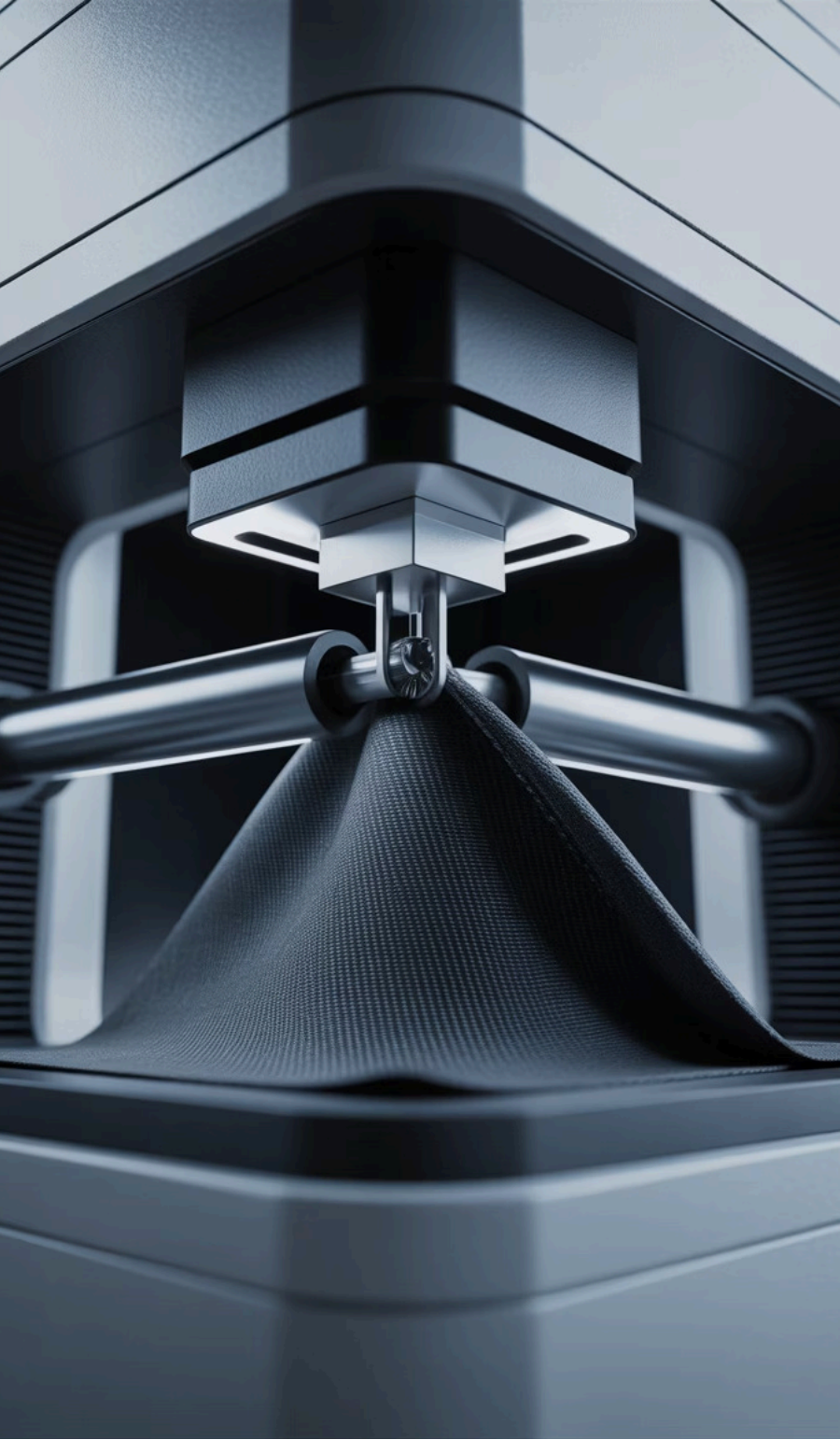
Beyond Greenwashing: The Realistic Path to Sustainable Neoprene

Engineering High-Performance Recycled Fabrics without Compromising
Durability

NEOPRENEX TECHNICAL SERIES

20 YEARS OF MATERIAL ENGINEERING

Neoprene **X**



Why "100% Recycled" Is Often a Technical Risk

Material Fatigue

Excessive recycled content introduces fiber degradation pathways that reduce tensile strength, accelerate pilling, and shorten product lifespan — the opposite of a sustainable outcome.

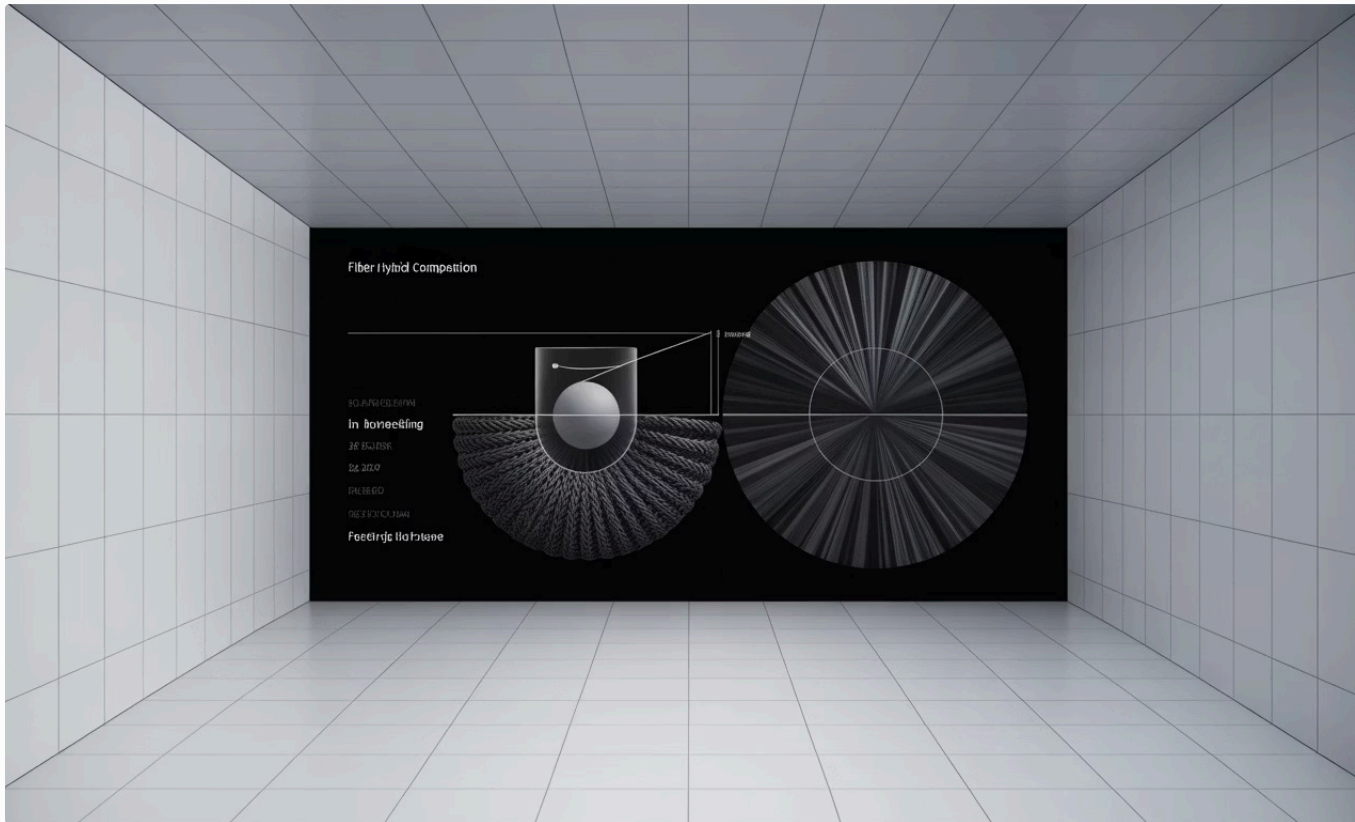
The NeopreneX Philosophy

We prioritize **structural integrity over green labels**. Every formula is engineered to last, because durability is itself a sustainability metric.

The Auditor's Standard

Our ISO-aligned review process demands **traceable evidence** — not marketing slogans. Claims must be supported by Transaction Certificates and verified batch data.

Optimized Recycled Content for Maximum Performance



THE SWEET SPOT

30%–50% RPET Blend

For luxury bags and high-end protective sleeves, this stability ratio delivers environmental credibility without sacrificing structural performance.

Fiber Hybridization

RPET blended with high-tenacity virgin polyester ensures pilling resistance at Grade 4.0+

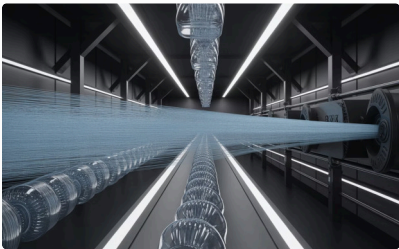
Color Consistency

Minimizes batch-to-batch variance — a chronic failure point in 100% recycled stocks

NeopreneX

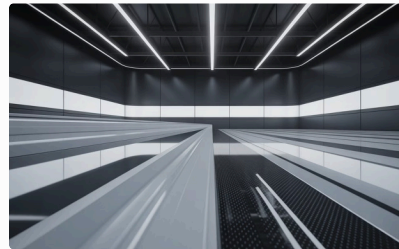
Multi-Layer Sustainability: More Than Just the Fabric

True eco-performance requires every layer of the composite to be engineered responsibly — from face fabric to foam core.



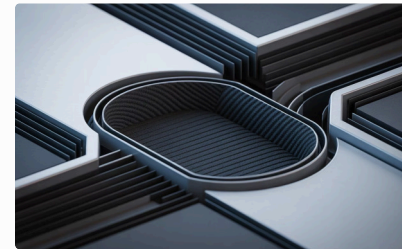
RPET Face Fabric

GRS-certified yarns derived directly from post-consumer plastic bottles, traceable from bale to bolt.



Water-Based Bonding

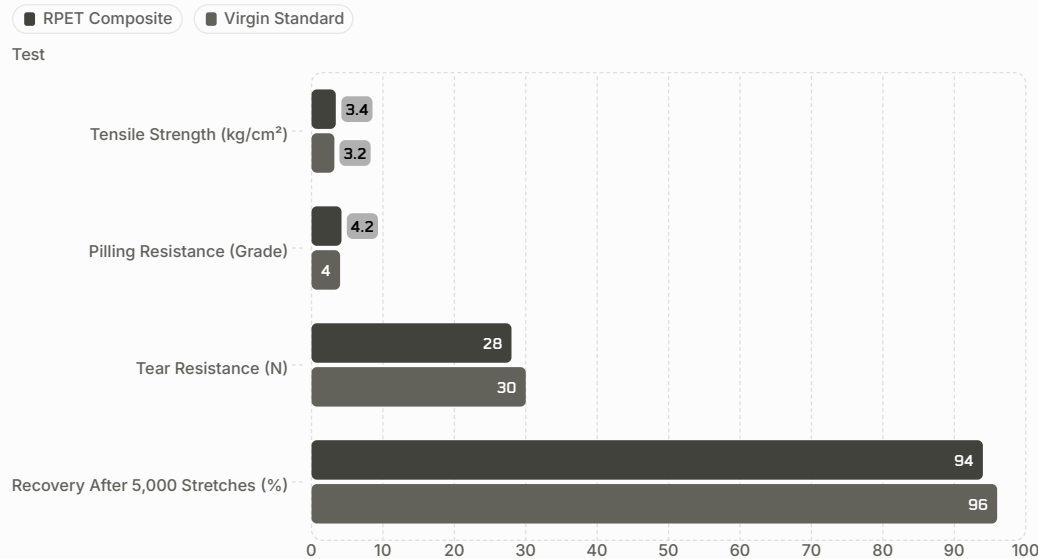
Eco-friendly adhesives replace solvent-based alternatives, significantly reducing VOC emissions during the lamination process.



Carbon-Reduced Core

Optional integration of **Recycled Carbon Black** — recovered from scrap tires — into the SBR/SCR foam core reduces virgin material dependency.

Proving the Quality: RPET vs. Virgin Material



Performance That Doesn't Compromise

Our engineered RPET composites meet or approach industry benchmarks across all critical mechanical tests:

- **Tensile Strength** ≥ 3.0 kg/cm² — the industrial minimum for load-bearing accessories
- **Elongation & Recovery** — "spring-back" feel maintained after 5,000+ stretch cycles
- **Tear Resistance** — validated for high-load fashion bags and protective gear applications

The Auditor's Seal: Traceability You Can Trust



GRS & Transaction Certificates

Full TCs issued per shipment – verifying recycled content claims at every link in the supply chain.



REACH & RoHS Compliance

All recycled inputs are screened against EU chemical safety standards – no restricted substances, no hidden toxicity risk.



Audit-Ready Documentation

Pre-formatted technical data packages simplify your brand's sustainability reporting and third-party audit preparation.



Smart Choices for Conscious Brands

Our RPET composites are spec'd and validated across three high-demand application categories:



Designer Totes

Achieve vibrant deep blacks and rich, consistent color on RPET textures — meeting luxury aesthetic standards without virgin material dependency.



Laptop Sleeves

Balance impact absorption and structural rigidity with a measurably reduced carbon footprint — no performance trade-off required.



Promotional Gear

Cost-effective eco-options engineered to feel premium — because sustainable shouldn't mean sacrifice in hand-feel or durability.

Transition to Sustainable Materials with Technical Confidence

Three Ways to Start

01

Custom Blending Consultation

We determine the ideal recycled percentage for your specific product load requirements and durability targets.

02

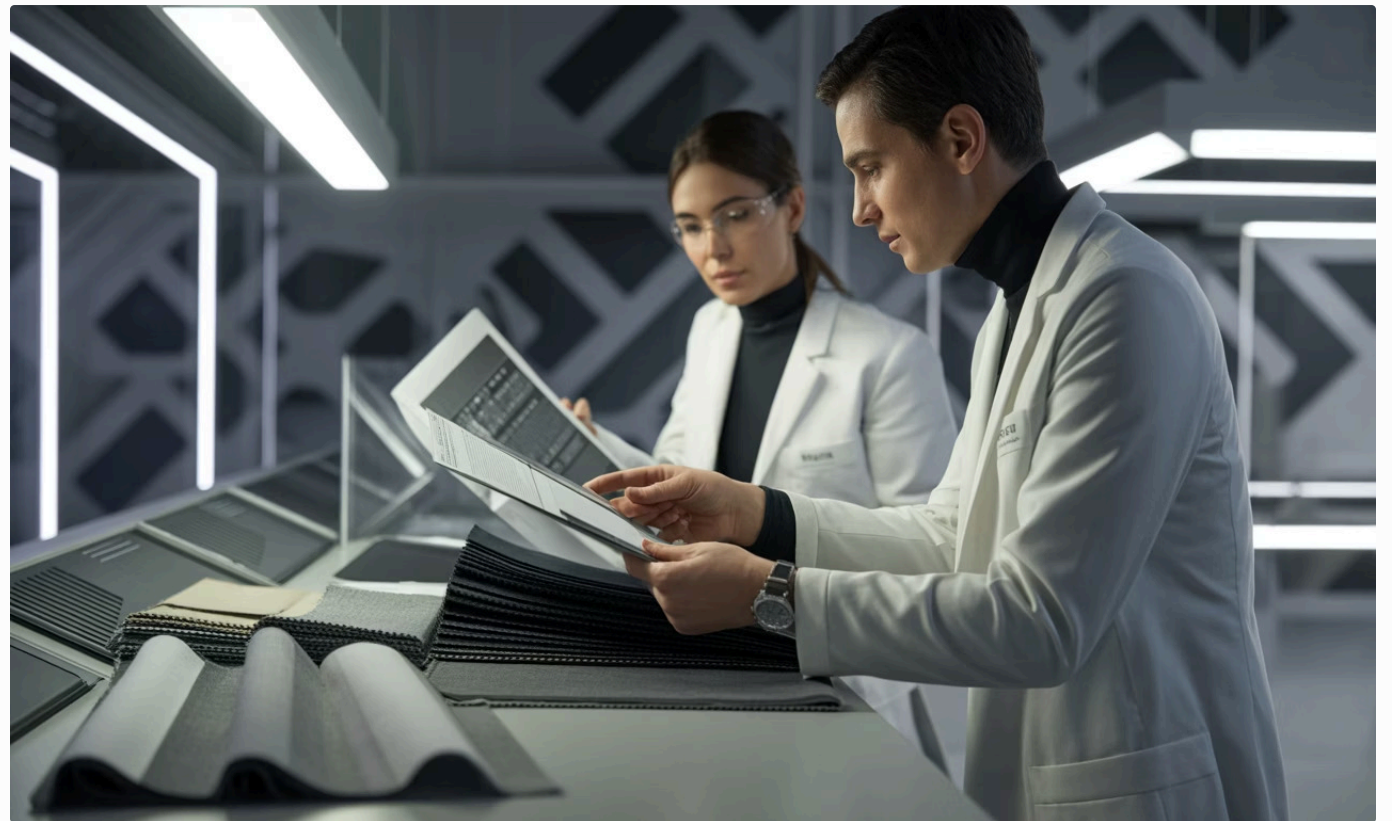
Request the "Reality-Check" Eco-Pack

A physical sample kit comparing different RPET blends — feel the difference before you spec.

03

Connect with Our Engineering Team

Every inquiry is managed by material specialists and backed by auditable technical documentation.



✉ support@neoprenex.com

Managed by experts. Verified by audits. Backed by 20 years of material engineering.