

The Biodegradable Vinyl

 **HYPHYN™**

UNITED
SINCE *Fabrics* 1946

Engineered to Perform. Designed to Disappear.

Hyphyn™ reimagines what vinyl can be—luxuriously durable in life, yet destined to fade away when its journey ends. This first-of-its-kind biodegradable vinyl is crafted with a proprietary enzyme system, enabling it to biodegrade over 90% within two years in a landfill. Performance and sustainability don't just coexist—they thrive, beautifully.



Proven Biodegradability



Exceptional Durability



Bleach Cleanable



Superior Stain Resistance



Performance Without Compromise

Conventional vinyl lingers for generations. Hyphyn knows when to bow out. Its purpose doesn't end when its useful life does—that's when it truly begins. Designed to break down cleanly in landfill conditions, Hyphyn biodegrades efficiently and leaves no toxins or microplastics behind.

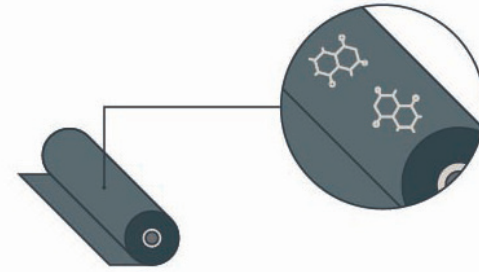
How Hyphyn Works

Unlike conventional vinyl, which persists in landfills for generations, Hyphyn is designed to biodegrade in landfill conditions.

- A patented enzyme system is embedded within both the PVC and polyester backing.
- When disposed of in a landfill, the enzyme interacts with microorganisms to accelerate biodegradation.
- As it biodegrades, Hyphyn converts into inert gases, which are often captured in modern landfills and converted into renewable energy—turning waste into a resource.

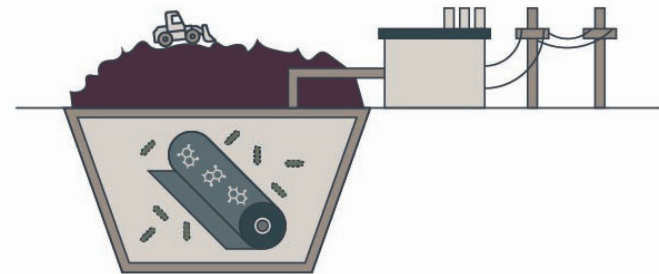
Safe & Sustainable Disposal

- No micro-plastics or toxic residues are released.
- Can be safely incinerated without emitting harmful dioxins.
- Leaves behind healthy, toxin-free soil post-biodegradation.



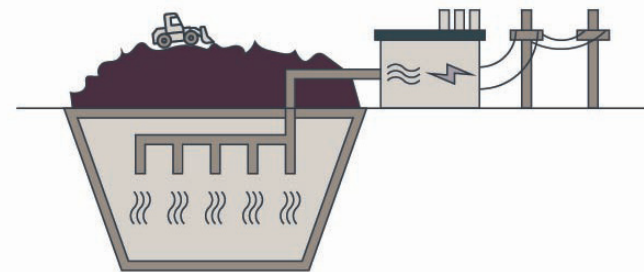
Patented Enzyme System

Embedded in Hyphyn is a patented enzyme system. The enzymes sit dormant while the material is in use.



Biodegradation Starts in a Landfill

Hyphyn will not degrade until it's in anerobic landfill conditions, where its enzymes interact with landfill-specific microorganisms to break the material down into organic matter.



There are No Toxins or Microplastics Left Behind

There are no toxins or microplastics left behind as Hyphyn biodegrades. Instead, Hyphyn converts into inert landfill gases (methane and carbon dioxide) that are reclaimed and can be transformed to energy.

Hyphyn Will
Biodegrade Over
90% Within 24
Months In
A Landfill
Environment.

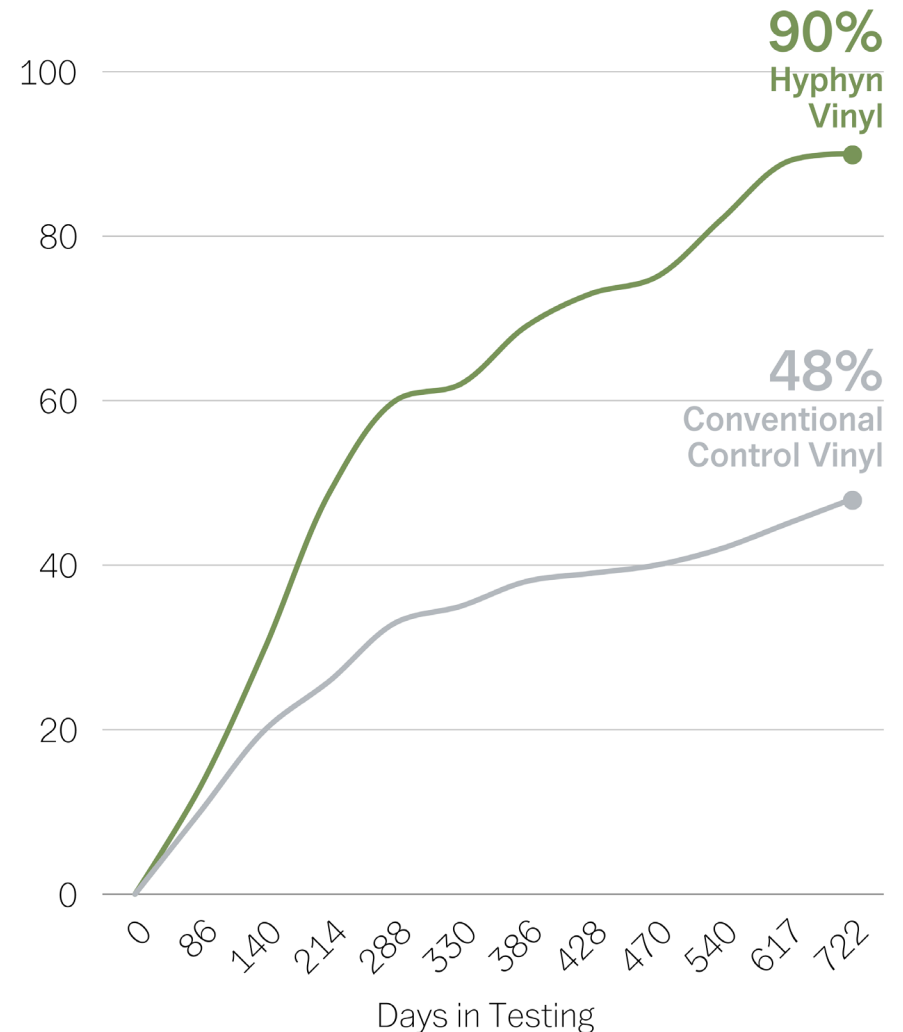
**Proven To Perform, Certified To Disappear:
Five Part Testing For A More Sustainable Future**

Hyphyn has undergone a series of five rigorous third-party tests to ensure both environmental and human safety.

Biodegradation Testing

ASTM D5511

Hyphyn is proven to biodegrade over 90% within 24 months in a landfill environment.



Material Safety

Eurofins - Chem ST

Before degradation, Hyphyn is tested for chemical content to confirm responsible production. It is free of lead, heavy metals, PFAS, and formaldehyde and meets Prop 65, RoHS, and REACH compliance standards.

Post-Biodegradation Soil Testing

Eurofins - Chem ST

The remnant soil was analyzed for over 1,000 potentially toxic chemicals. Result: No harmful chemicals detected.

Indoor Air Quality Testing

California Department of Public Health Section 01350

Hyphyn is tested for VOC emissions to ensure low-VOC performance and safe indoor air quality.



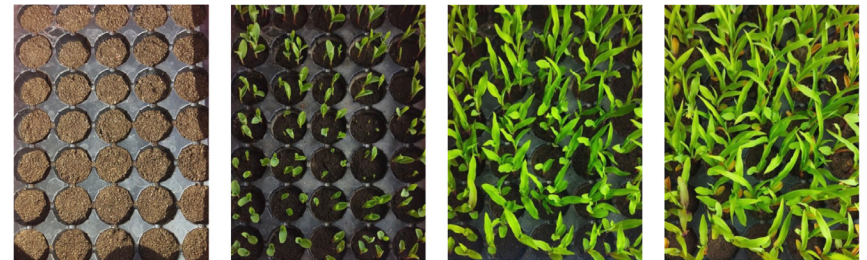
Soil Health Test

ASTM E1963 Plant Germination and Soil Toxicity Analysis

A side-by-side germination study compared soil samples from Hyphyn degradation with those from conventional vinyl.

The result? 100% seed germination in Hyphyn-treated soil—confirming healthy, toxin-free soil.

Germination After Hyphyn Biodegradation



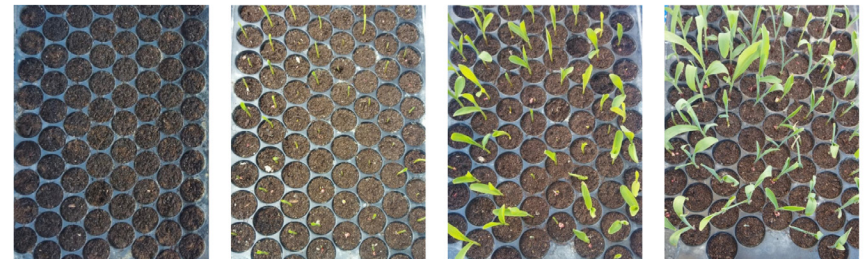
Day 1

Day 7

Day 14

Day 21

Germination After Control Conventional Vinyl Degradation (Control)



Day 1

Day 7

Day 14

Day 21

Performance Without Compromise

Hyphyn is designed for commercial upholstery, including in contract, healthcare, hospitality and other high traffic locations. It is engineered for performance, meeting or surpassing ACT performance guidelines:



Flammability



Wet & Dry Crocking



Colorfastness to Light



Physical Properties



Abrasion - High Traffic

Effortless Cleanability & Built For Disinfection

Designed for high-traffic environments:

- Features Resilience Stain protection
- Easily cleanable with soap, water
- Resistant to bleach and many commercial disinfectants
- Ideal for healthcare and hospitality applications

What's In A Name?

A hyphen is a connector between two words. There's always something that comes before and after it.

Hyphyn is a connection between the present and the future. It's an invitation to be mindful about a product's journey beyond its useful life.

The Future of Vinyl is Now

With Hyphyn, vinyl performance and sustainability are no longer at odds.

Choose durability
without the guilt.
Choose innovation
without compromise.
Choose Hyphyn.

