

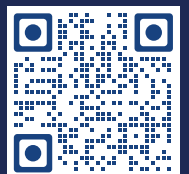


**INTRODUCING THE LEADING REEFER  
WALL PROTECTION SOLUTION**



**TRANSTEX<sup>®</sup>**

[transtex-llc.com](http://transtex-llc.com)





**UNTREATED TRAILER**



**TREATED WITH VERSITEX® AM**

## **Unmatched Protection and Compliance**

In the moist, humid environment inside a trailer, panel walls and surfaces can quickly become a breeding ground for bacteria, mold, mildew, and fungus – with microorganisms capable of doubling every 20 minutes.

That's why TRANSTEX developed Versitex® AM, an advanced solution engineered specifically to deliver antimicrobial protection for reefer fleet panels. Versitex® AM safeguards your cargo environment while ensuring compliance with strict industry regulatory standards.



## Advantages of Versitex® AM

**Antimicrobial Protection:** Proven to be highly effective in inhibiting the growth of bacteria, mold, mildew, fungi, and algae on wall liner surfaces, preventing stains, odors, and contamination.

**Continuous Activity:** Provides ongoing reduction of microbial growth, ensuring long-term cleanliness.

**Environmental and Consumer Safety:** Utilizes safe antimicrobial technology, compliant with environmental and consumer safety standards.

**Temperature Resilience:** Tested and proven effective under hot and cold conditions.

**Regulatory Compliance:** FDA compliant for incidental food contact.

## Proven Effectiveness

Versitex® AM panels are engineered to deliver powerful antimicrobial protection, effectively inhibiting bacterial and fungal growth on trailer surfaces. In laboratory testing, our antimicrobial technology demonstrated a 99.29% reduction in Gram-positive bacterial growth and a 99.9% reduction in Gram-negative bacterial growth after 24 hours, based on the ISO 22196 test method. In contrast, untreated surfaces showed little to no reduction in bacterial presence.

Versitex® AM panels provide defense against fungal growth, helping to maintain a cleaner, safer environment inside reefer trailers.

## Versitex AM at a Glance

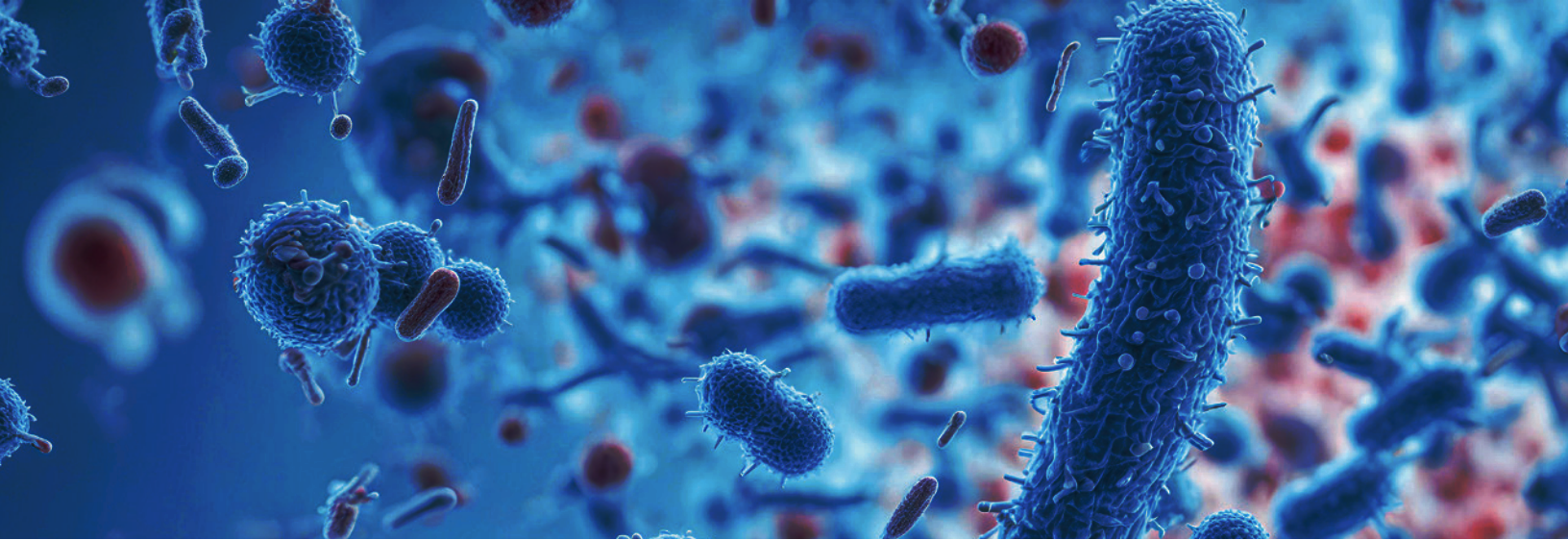
Versitex® AM refrigerated walls provides broad-spectrum, built-in antimicrobial protection that:

- Is environmentally and consumer-safe.
- Continuously inhibits microbial growth by acting as a proactive, built-in defense on panel surfaces.
- Contains a durable antimicrobial layer, delivering lasting protection throughout the product's service life.
- Supports regulatory compliance by helping meet the standards of the Food Safety Modernization Act (FSMA) and Sanitary Transportation of Food (STF) regulations.

## Key Applications

**Refrigerated Trailers:** Ideal for reefer fleet panels, maintaining hygiene in moist and humid environments where microorganisms can rapidly multiply.

**Food Transportation:** Ensures the highest safety standards for cargo by providing a hygienic surface that resists microbial growth.



## Antimicrobial Testing of Refrigerated Trailer Interior Linings

### Antibacterial performance (Gram negative) with test method ISO 22196

Sample	Bacterial count (CFU/cm <sup>2</sup> )		Log reduction*	% reduction*
	t = 0h	t = 24h		
Untreated control	1.1 x 10 <sup>4</sup>	2.2 x 10 <sup>5</sup>	-1.31	0.00
Versitex®AM	1.1 x 10 <sup>4</sup>	<1.00	≥2.98	≥99.90

\* Reduction calculated versus sample 1 at t=24h

### Antifungal performance with test method ASTM 2180

Sample	Fungal count (CFU/cm <sup>2</sup> )		% reduction*
	t = 0h	t = 48h	
Untreated control	5.27E+03	1.4 x 10 <sup>5</sup>	0.00
Versitex® AM	5.27E+03	3.5E+04	80.36

\* Reduction calculated versus sample 1 at t=48h

### Antibacterial performance (Gram positive) with test method ISO 22196

Sample	Bacterial count (CFU/cm <sup>2</sup> )		Log reduction*	% reduction*
	t= 0h	t=24h		
Untreated control	1.3 x 10 <sup>4</sup>	9.5 x 10 <sup>3</sup>	0.14	27.33
Versitex®AM	1.3 x 10 <sup>4</sup>	<1.00	≥2.15	≥99.29

\* Reduction calculated versus sample 1 at t=24h

### Conclusion

The antibacterial test ISO 22196 reveals excellent activity against both Gram-negative and Gram-positive bacteria for Versitex® AM-treated samples (~3 log reductions). The antifungal test ASTM 2180 also shows good activity for both Versitex® AM-treated samples (>80% reduction).

\*Test data provided by film supplier.

### Your Trusted Source

As a trusted source for FDA-compliant liners, TRANSTEX has been setting the standard for safe food transport for the past 20 years. It provides an effective and compliant solution for safeguarding your cargo.

### For More Information

To speak with one of our sales specialists about Versitex® AM, please call 1-877-332-3519 or email customerservice@transtex-llc.com. To learn more about our products, visit www.transtex-llc.com.

# TRANSTEX®

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TRANSTEX is a leading manufacturer of advanced, thermoplastic composite solutions for a broad range of applications in new and diverse markets. Their expanding range of glass-reinforced polypropylene composite materials have set the industry standard for toughness and durability in applications throughout industry worldwide.

