FAKOLITH®
Food Contact &
Hygienic Coatings

ADHELITH: THE NEW FRONTIER IN SAFE LAMINATION

Integrating High-Performance Adhesives into Fakolith's FoodContact & Hygienic Coatings Solutions Range

Lamination
Retorting

Trusted Engineering for Food Packaging.

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THE ADHELITH ECOSYSTEM: 3 TECHNOLOGIES, MAXIMUM PERFORMANCE

Lamination
Retorting

Developed with the ideal balance between functionality, sustainability, and safety.
Designed to solve the thermal, mechanical, and sustainability challenges of flexible packaging.

AdheLith Sol HR400

Maximum Resistance for the Most Extreme Conditions.

AdheLith Pure HR300

Unbeatable Performance with 100% Solids.

AdheLith Aqua M300

The Sustainable Future of Monomaterial Packaging.

Solvent-Based | High Retort	Solvent-Free | Total Versatility	Water-Based | Circular Recyclability

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AdheLith Sol HR400

Sterilization and the ‘Retort’ process (121°C) subject packaging to extreme thermal and mechanical stress.

If unwanted delamination occurs, the integrity of the packaging and food safety can be compromised.

Solvent Base | High Retort

The AdheLith Solution

Total cohesion for complex laminates. Prevents delamination under extreme sterilization conditions.

Excellent thermal and mechanical resistance. Maintains structural integrity at high temperatures.

Superior application flexibility. Versatile for various flexible packaging structures.

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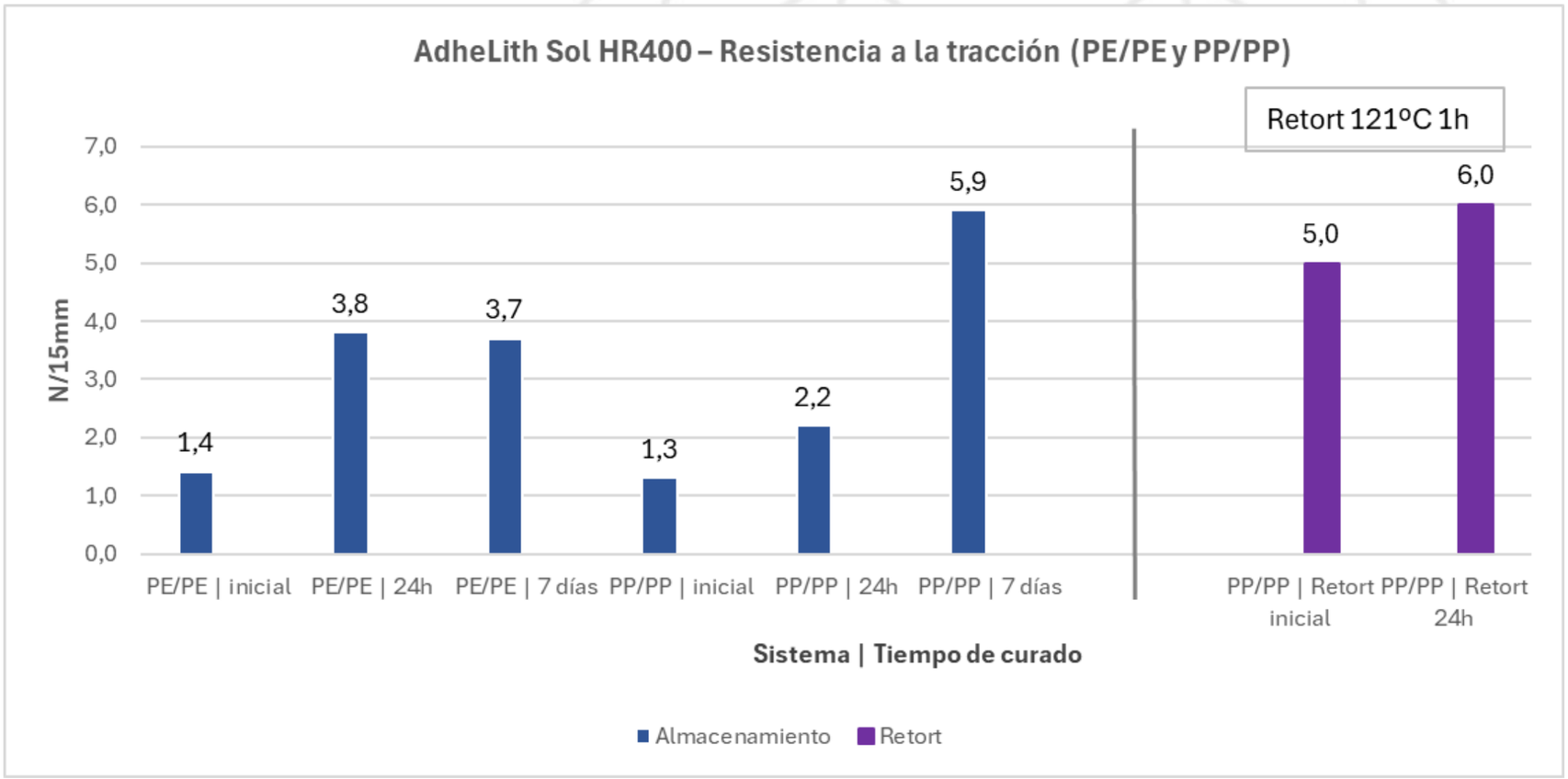
LABORATORY DATA: PERFORMANCE OF ADHELITH SOL HR400

Fast curing: high performance after 24h of curing
Thermal resistance: high tensile strength after sterilization process (retort)

Mono-material PE/PE and PP/PP- Retort PP

Tensile strength results (N/15mm) after 24h and 7 days of curing:



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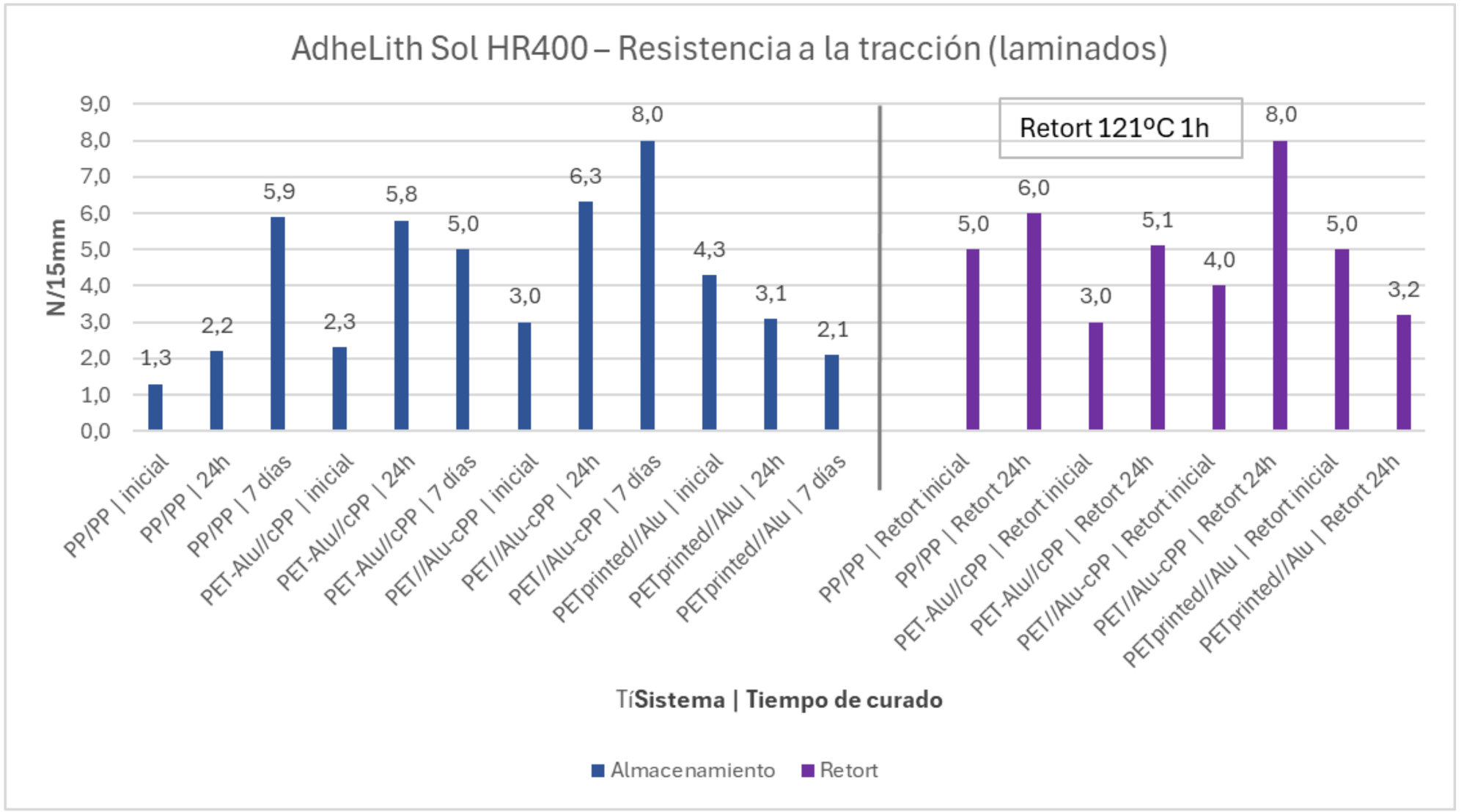
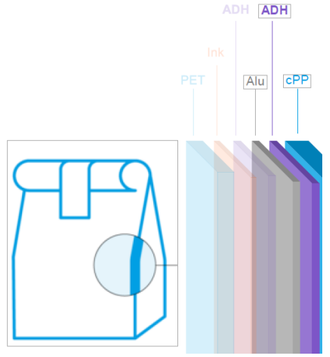
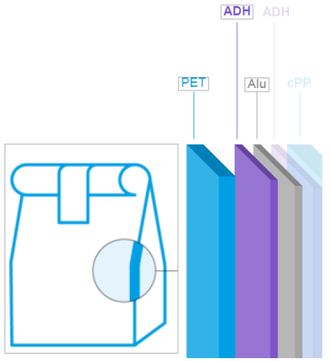
LABORATORY DATA: PERFORMANCE OF ADHELITH SOL HR400

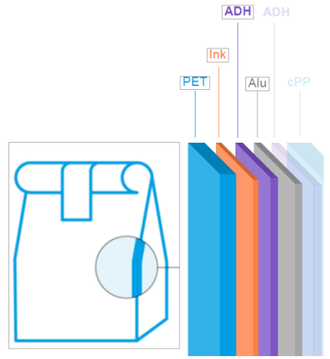
Double and triplex multi-material laminates

Tensile strength results (N/15mm), initially and after 24h and 7 days of curing:









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AdheLith Pure HR300

The **reduction of emissions** and the **elimination of solvents in the factory** are regulatory and environmental imperatives.

However, traditional ‘Solvent-free’ systems often sacrifice mechanical strength, hydrolytic resistance, or compatibility with Retort processes.

Solvent-Free | Total Versatility

The AdheLith Solution

Zero Solvents, High Retort: Thermal and hydrolytic resistance on par with the best solvent-based systems.

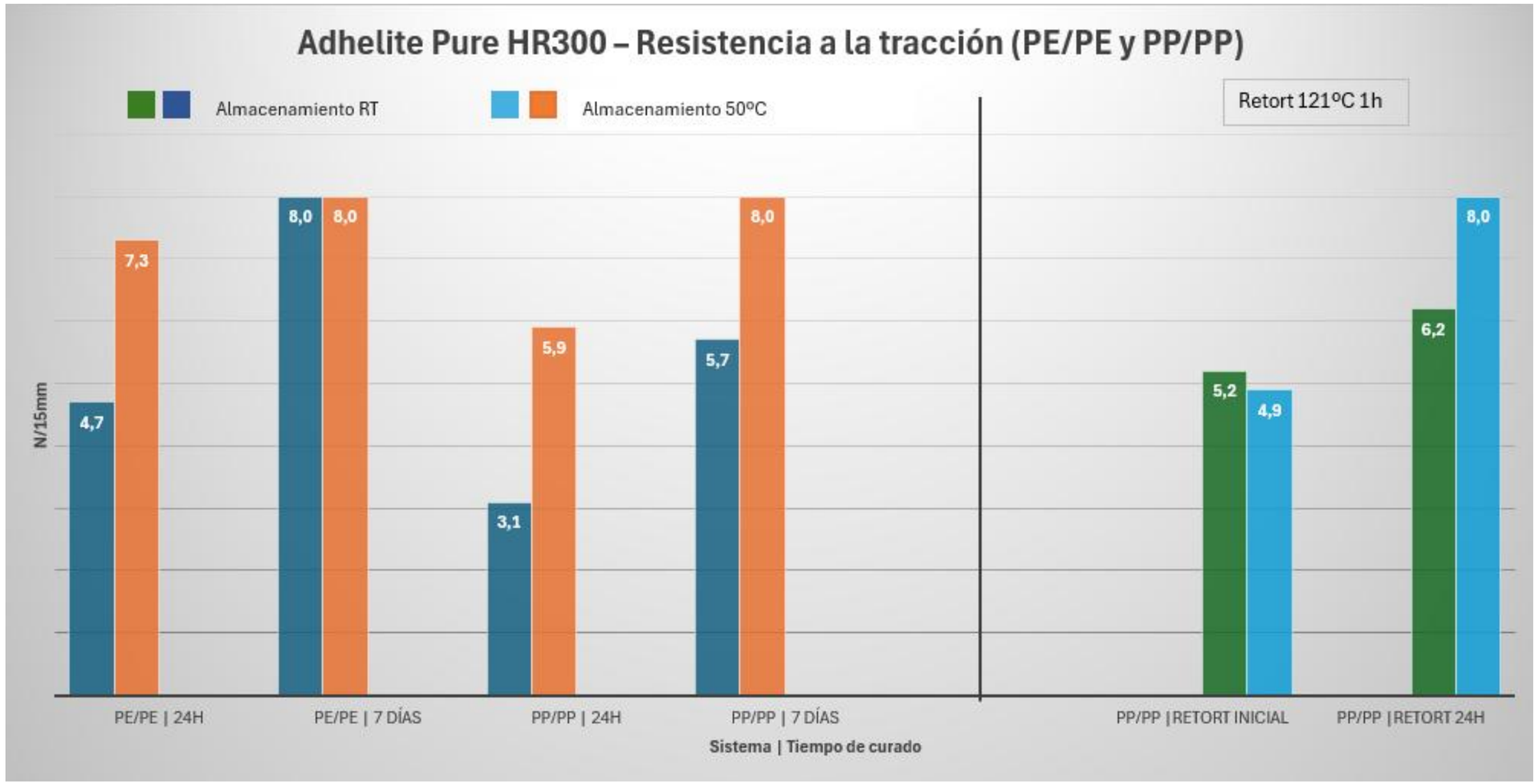
High Mechanical Strength: Develops high performance in tensile forces, guaranteeing the integrity of flexible packaging subjected to physical stress.

Application Flexibility: Excellent wet-out and versatility on combined structures (COPP, BOPP, PE, PET, Alu).

LABORATORY DATA: PERFORMANCE OF ADHELITH PURE HR300

Mono-material PE/PE and PP/PP- Retort PP

Tensile strength results (N/15mm) after 24h and 7 days of curing:



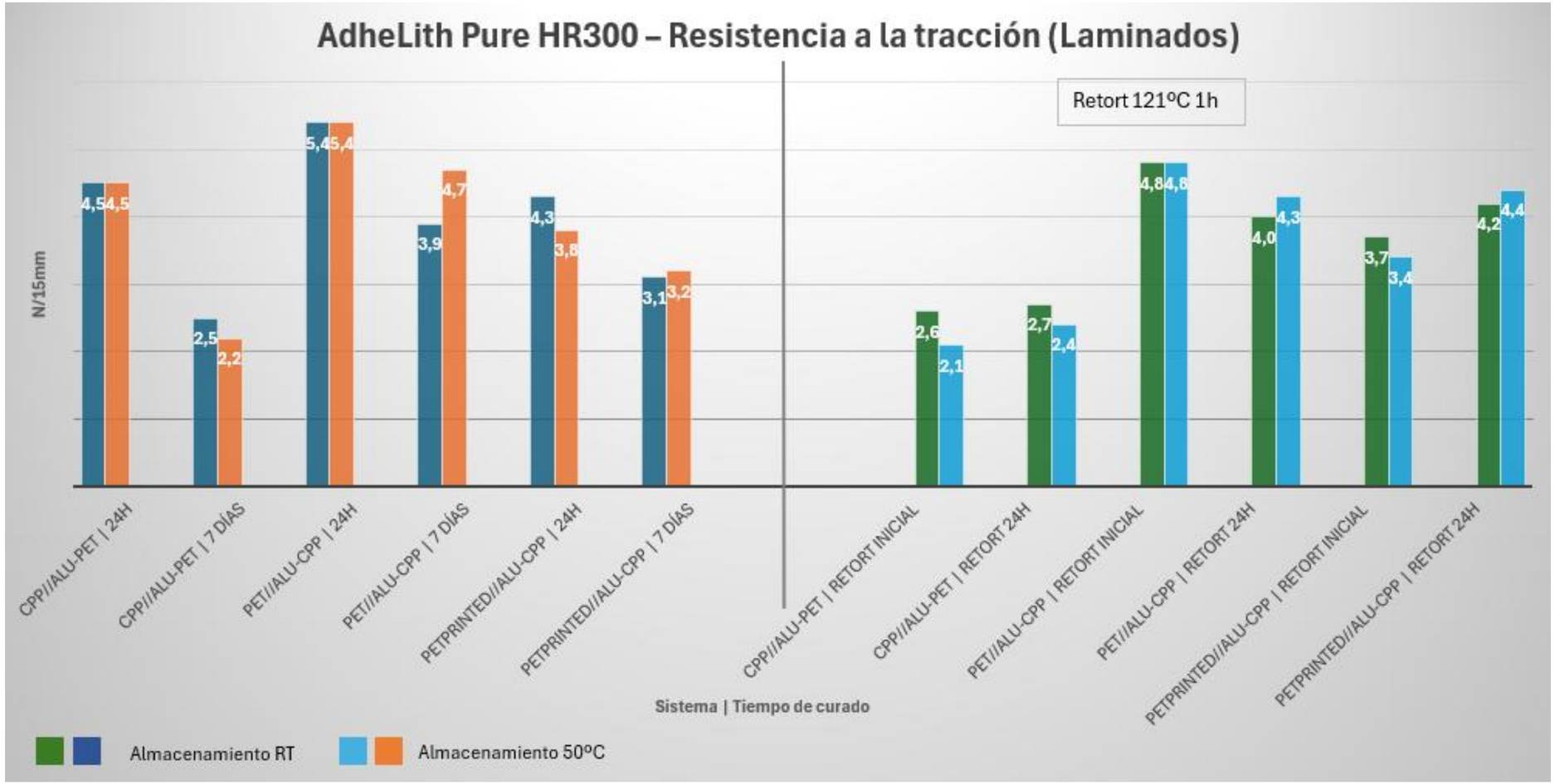
FAKOLITH® Food Contact & Hygienic Coatings

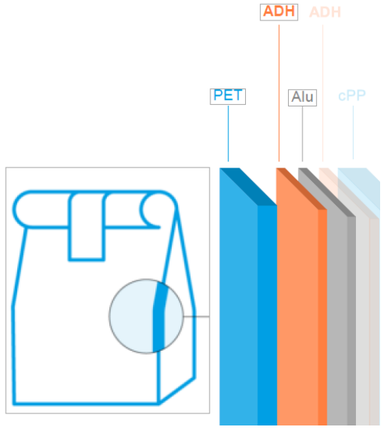
LABORATORY DATA: PERFORMANCE OF ADHELITH PURE HR300

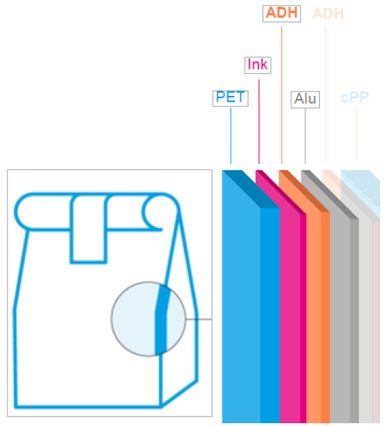
Double and triplex multi-material laminates

Fast curing: high performance after 24h of curing
Thermal resistance: high tensile strength after sterilization process (retort)

Tensile strength results (N/15mm), initially and after 24h and 7 days of curing:







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ADHELITH AQUA M300

The industry demands an urgent transition towards recyclable “Monomaterial” packaging.

Traditional adhesives contaminate the polyolefin recycling stream and increase Volatile Organic Compound (VOC) emissions in the plant.

Water-Based | Circular Recyclability

The AdheLith Solution

Zero Solvents, High Retort: Thermal and hydrolytic resistance on par with the best solvent-based systems.

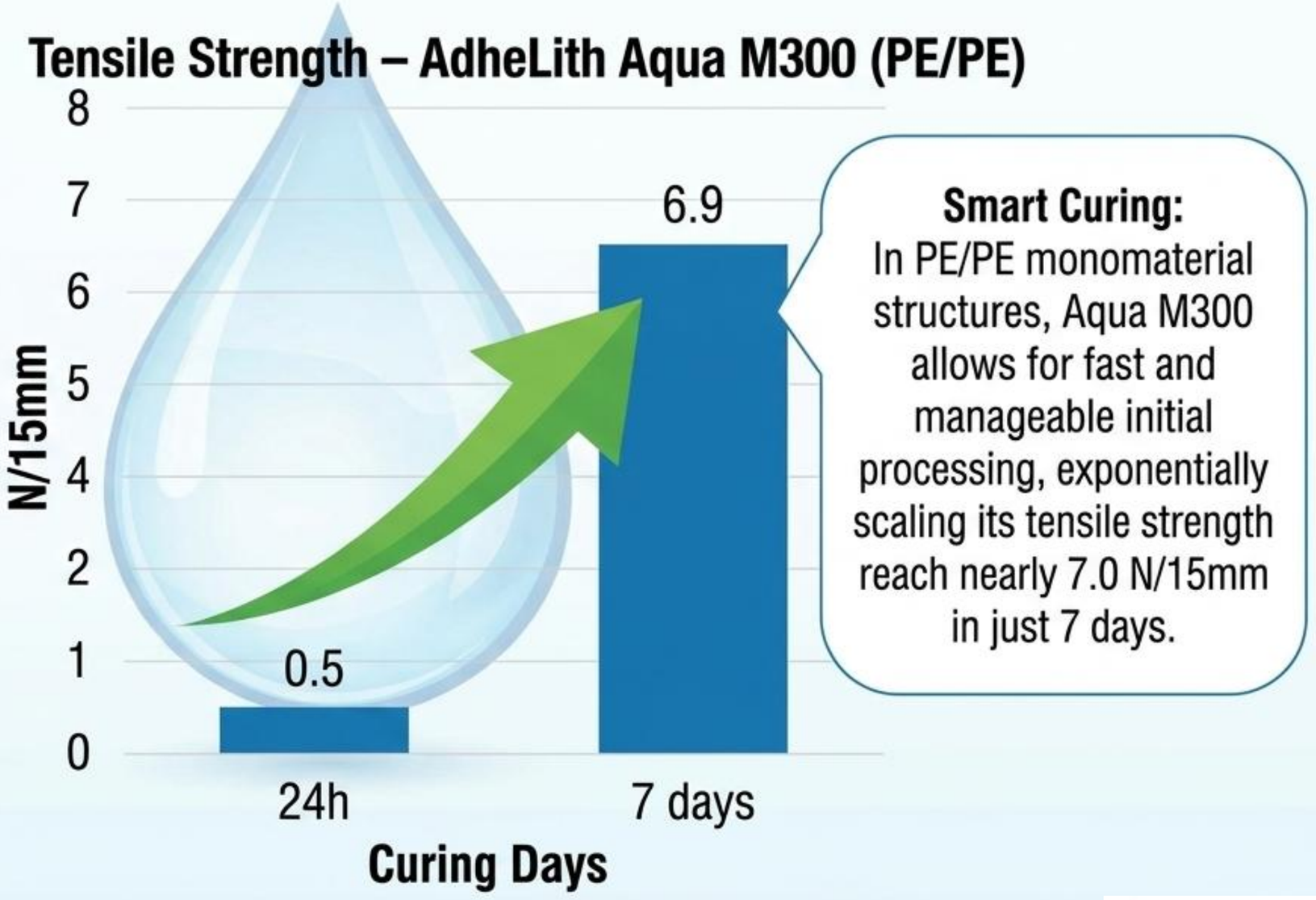
High Mechanical Resistance: Develops high performance in tensile forces, guaranteeing the integrity of flexible packaging subjected to physical stress.

Application Flexibility: Excellent wettability and versatility on combined structures (COPP, BOPP, PE, PET, Alu).

LABORATORY EVIDENCE: AQUA M300 PERFORMANCE

Specifications

- **Technology:** 2K Water-Based (PU Dispersion).
- **Bond Strength (7 days):** 6 - 7 N.
- **Ecological Profile:** Low VOC, High PE Compatibility.
- **Optimal Application:** Monomaterial - Recyclable.



Smart Curing:
In PE/PE monomaterial structures, Aqua M300 allows for fast and manageable initial processing, exponentially scaling its tensile strength reach nearly 7.0 N/15mm in just 7 days.

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SMART TABLE: ADHELITH SELECTION MATRIX

Lamination Retorting

Technical Criteria	AdheLith Sol HR400	AdheLith Pure HR300	AdheLith Aqua M300
Thermal Resistance	Maximum (Retort 121°C)	High (Retort 121°C)	Standard (No Retort)
Sustainability / VOC	Solvent-Based	100% Solids (Zero VOC)	Water-Based (Zero VOC)
Curing Speed	Rapid (5-7N in 24h)	Medium	Exponential (Optimal at 7 days)
Star Application	Complex laminates (PET/Alu) with extreme requirements	Multimaterial Retort without solvents in plant	Monomaterial (PE/PE) focused on circular recycling

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