Application Areas:

Mayer HoneyLam (MT-PUR 540) is a moisture-curing reactive polyurethane (PUR) hot melt adhesive engineered for flat lamination of wood, MDF, particleboard, and plywood with decorative finishes (CPL, HPL, veneers, foil, aluminum sheets), and core-bonding of honeycomb structures (paper and aluminum honeycomb cores) in lightweight panels and interior doors.

Felt, Foam & Acoustic Composite Lamination: Specially developed for bonding technical felts, acoustic sound-absorbing foams, polyurethane upholstery foams, and composite textiles onto wood, MDF, and metal backings in acoustic wall/ceiling panels, office partition screens, and mattress cores. Extensively utilized for automotive interior NVH sound and vibration dampening felt-to-board sandwich lamination. Its 6 – 7 minute extended open time window ensures stress-free, accurate placement of flexible substrates without wrinkling or pre-curing.

Characteristics & Directions for Use:

Low application viscosity (11,000 – 15,000 mPa·s at 120 °C) allows smooth, rib-free roller coating and uniform spread. Its controlled strike-through characteristics prevent excessive soak-in into porous foam or felt fibers, preserving the soft, resilient hand and acoustic damping properties of the foam.

High green strength instantly neutralizes the spring-back elasticity of compressed felts and high-density foams upon exiting calendar rolls or flat presses, preventing edge lift. Crosslinks via atmospheric and substrate moisture within approximately 3 days, forming a flexible, permanent bond resistant to water, solvents, and heat (> 140 °C). For non-porous substrates (e.g. PVC/PVC, PVC/Alu), ambient relative humidity must exceed 50%.

Processing Parameters & Operating Conditions:

Process Parameter	Specification / Operating Condition
Application Temperature Range	120 – 160 °C (248 – 320 °F)
Roller / Application Unit Temp	120 – 140 °C (At application roller)
Room & Materials Temperature	> 15 °C (> 59 °F) (Recommended: 18 – 24 °C)
Open Time Window	6 – 7 minutes (at 20 °C and 50% relative humidity)*
Full Curing Time	approx. 3 days (depending on temp and humidity)**
Recommended Coat Weight	50 – 90 g/m² (Substrate porosity and foam type dependent)
Ambient Humidity Requirement	Relative Humidity (RH) > 50% (for PVC/PVC, PVC/Alu)

Physical & Technical Specifications:

Technical Parameter	Test Method & Specification Value
Chemical Base	Moisture-Curing Reactive Polyurethane (PUR)
Viscosity (Brookfield ASTM D3236)	11,000 – 15,000 mPa·s @ 120 °C (Spindle 29 / 20 rpm)
Density (@ 20°C)	approx. 1.15 ± 0.05 g/cm³ (DIN 53479)
Solids Content	100 % (Solvent-free, 100% reactive polyurethane)
Appearance & Color	Natural / Translucent Light Yellowish Solid
Thermal & Water Resistance	> 140 °C Post-Cure / DIN EN 204 D4 & WATT 91

Performance Ratings & Quality Scores:

Honeycomb & Component Adhesion Strength	**99 / 100**
Felt & Foam Lamination Bond Strength	**98 / 100**
Initial Green Strength	**96 / 100**
Extended Open Time Tolerance (6-7 min)	**98 / 100**
Roller Coating Flow & Leveling Uniformity	**95 / 100**
Moisture, Water & Heat Resistance (Cured)	**99 / 100**

Ferhatpasa Mah. 15. Sok. No:88 Atasehir / Istanbul, Turkey
Tel: 0850 532 02 91 | info@mayertutkal.com.tr | www.mayertutkal.com.tr
ISO 9001:2015 / ISO 14001:2015 Certified Quality Management System
Mayer Industrial Adhesive Solutions Inc.

Cleaning & Maintenance:

During operational stops or end-of-shift maintenance, clean application reservoirs, hoses, and rollers with Mayer Non-Reactive PUR Flushing Wax (MT-CL 700 / MT-CL 740). The flushing agent chemically passivates free isocyanate groups, preventing unwanted polymerization and gelation. For fully cured residues, use mechanical scraping or MT-CL 730 solvent-based cleaner.

Shelf Life & Storage Conditions:

Store in original unopened, moisture-proof packaging in cool, dry conditions at 15 – 25 °C. STRICTLY PROTECT FROM MOISTURE! Exposure to humidity causes premature curing, rendering the adhesive permanently unusable. Shelf life is 12 months from date of manufacture under specified storage.

Packaging & Delivery Form:

1.8 kg Aluminum-foiled Cartridges (12 pcs per box) / 20 kg Sealed Pails (for platen melters) / 200 kg Drums (for industrial drum unloader systems).

Important Remarks & Legal Disclaimer:

Isocyanate Safety Notice: Contains monomeric isocyanates (MDI). A proper local exhaust suction system must be installed at heated melting and roller application zones to draw off vapors. Refer to the Material Safety Data Sheet (MSDS/SDS).

Substrates must be clean, dry, and free from dust, oil, and grease. Because of variable production materials and ambient plant conditions, preliminary trial bondings are strongly recommended prior to serial manufacturing.

Mayer Adhesive Engineering & Quality Standards:

Certified Quality Assurance: Manufactured under ISO 9001:2015 and ISO 14001:2015 certified processes with batch-wise viscosity and free NCO content validation.

Technical Application Support: On-site roller gap adjustment, line speed synchronization, coat weight calibration, and honeycomb press pressure optimization.

Standards & Environmental Compliance: 100% solvent-free reactive polyurethane formulation; fulfills DIN EN 204 D4 and WATT 91 (> 7 N/mm²) high-durability performance criteria.

Ferhatpasa Mah. 15. Sok. No:88 Atasehir / Istanbul, Turkey
Tel: 0850 532 02 91 | info@mayertutkal.com.tr | www.mayertutkal.com.tr
ISO 9001:2015 / ISO 14001:2015 Certified Quality Management System
Mayer Industrial Adhesive Solutions Inc.