



TECHNOMELT PUR 270/5 ME

Clean Edge Banding at High-speed

Henkel

Henkel

Agenda

- 1. Market Trends in PUR Hotmelt Market**
2. Product Positioning: TECHNOMELT PUR 270/5 ME
3. Summary

TECHNOMELT PUR 270/5 ME for Edge Banding

Market Trends 1/2

Need for speed and highest performance:

- Ongoing trend to **switch to PUR hotmelt adhesives**:
 - High bond strength
 - Unbeatable heat and moisture resistance (in-use and during transport)
 - Outstanding appearance (low application weight)
- Most standard PUR hotmelts today **limited to machine speeds** of max. 30-35 m/min:
 - Limits in physical setting characteristics compared to non-reactive adhesives
 - Physical characteristics define machineability (initial tack, stringing, smearing, gap filling, trimming)
- Especially large-scale industry is moving towards **line speeds of 30 to 80 m/min**



TECHNOMELT PUR 270/5 ME for Edge Banding

TECHNOMELT PUR 270/5 ME for Edge Banding

Market Trends 2/2

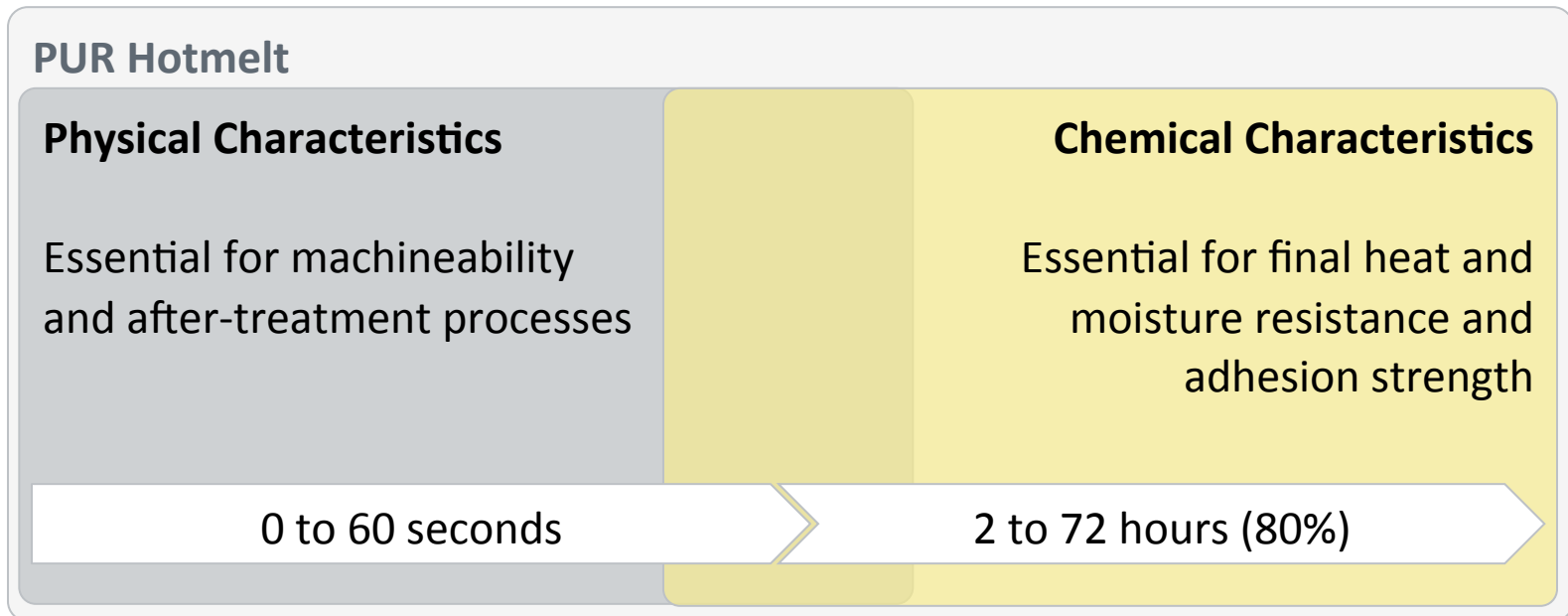
Stakeholders request highest standards in safety and health:

- **Legislators and authorities increase pressure on the industry:**
 - With the **implementation of the European Chemical Legislation REACH**, processes were established to minimize health risks through chemicals
 - Following a **restriction of diisocyanates additional measures will be required** for products containing more than 0,1% of free diisocyanates soon
- **Customers are looking for products to comply with future legislation already today:**
 - ME technology offers a **REACH-compliant solution and thus provides reliability**
- **End-consumers are getting more conscious about materials used in their products**



Polyurethane Hotmelts

Combining Characteristics of two Adhesives

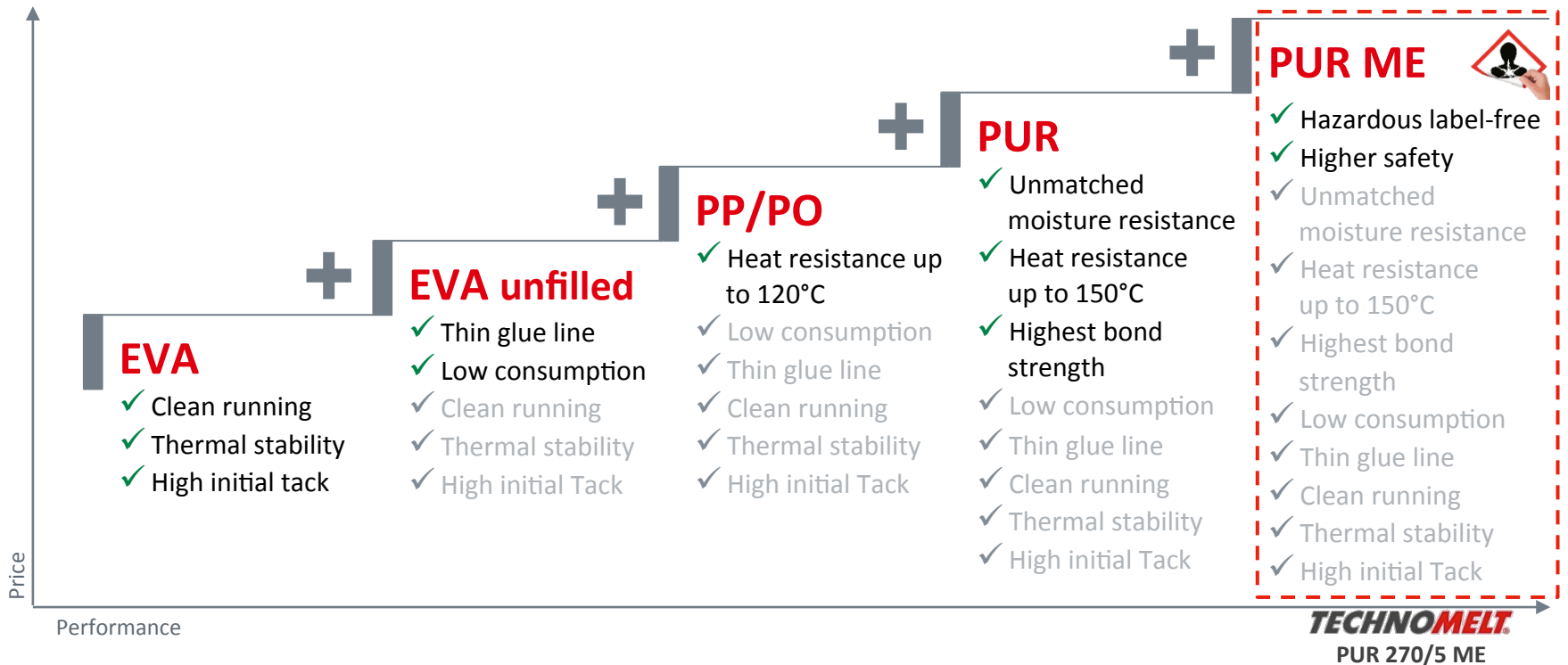


TECHNOMELT PUR 270/5 ME for Edge Banding

Agenda

1. Market Trends in PUR Hotmelt Market
- 2. Product Positioning: TECHNOMELT PUR 270/5 ME**
3. Summary

Hotmelt Technologies for Edge Banding Performance Comparison



TECHNOMELT PUR 270/5 ME for Edge Banding

Value Proposition

With TECHNOMELT PUR 270/5 ME, Henkel introduces a PUR hotmelt adhesive that combines proven **benefits of the PUR technology** for edge banding with **excellent machineability at high machine speeds** while ensuring **ultra low emissions of free isocyanates (<0,1 %)** known as **MicroEmission** technology.

Meeting high PUR Market Standards

- ✓ Highest bond strength
- ✓ Universal applicability
- ✓ Unmatched resistance to moisture, heat and chemicals
- ✓ Thin glue line

Setting new Benchmarks

- + Clean running at machine speeds of up to 80 m/min
- + Very low stringing
- + Fast setting
- + MicroEmission (<0,1% of free MDI)

TECHNOMELT PUR 270/5 ME for Edge Banding

Area of Application

Recommended End-Use

- Office Furniture
- Living Room Furniture
- Kitchen Furniture
- Bath Furniture

Suitable Applications

- Straight Edges
- Softforming
- CNC Processing Center (BAZ)
- Slow Machine Speed
- Medium Machine Speed (20-50m)
- Fast Machine Speed

Suitable Edge Materials

- Solid Wood
- Veneer
- Melamine
- Polyester
- PVC, ABS, PP (thin)
- PVC, ABS, PP (thick)
- HPL (depending on quality)

TECHNOMELT PUR 270/5 ME for Edge Banding Performance Profile



TECHNOMELT PUR 270/5 ME for Edge Banding

Product Comparison

	TECHNOMELT[®] PUR 270/5 ME	Standard PUR
Polymer Technology	PUR	PUR
Viscosity (mPa.s @ 150°C)	Approx. 100.000	Approx. 40.000
Initial Tack	High	Medium
Stringing	Low	Medium
Joint Hardness	High	Medium
Aftertreatment	Very Good	Medium
Line Speed	30-80 m/min	10-35 m/min

TECHNOMELT PUR 270/5 ME for Edge Banding

Product Advantages and Customer Benefits

Product Advantages

Production Efficiency	
✓	Very fast setting and high joint hardness , combined with high initial tack and very low stringing
✓	Highest bond strength on all common substrates
Occupational Safety	
✓	MicroEmission technology ensuring <0,1% free MDI
End-Product Quality	
✓	All PUR advantages at high machine speeds (moisture, heat and chemical resistance, glue line appearance, cold flexibility)
Cost	
✓	Higher output rate with decreasing unit cost

lead to

Customer Benefits

Production Efficiency	
✓	Allowing very high line speed of up to 80 m/min
✓	Less cleaning of application station, trimming devices and final work pieces
✓	Enables lacquering within short times (3 hours)
✓	Save processing at high ambient temperature
✓	Universal application – no switchover
Occupational Safety	
✓	Being REACH-compliant and increasing on-site safety
End-Product Quality	
✓	All PUR customer benefits at high machine speeds (highest end-product quality and durability)
Cost	
✓	Better economies of scale

Agenda

1. Market Trends in PUR Hotmelt Market
2. Product Positioning: TECHNOMELT PUR 270/5 ME
- 3. Summary**

TECHNOMELT PUR 270/5 ME

Clean Edge Banding at High-Speed with ME Technology

- Enables **clean processing on very high machine speeds** of up to 80 m/min
 - Very fast setting
 - High joint hardness
 - Highest initial tack
 - Very low stringing and smearing
- **Highest bond strength** on all common edge band materials
- Unmatched **moisture and heat resistance**
- **MicroEmission** technology: <0,1% of free MDIs – fully REACH-compliant

> **TECHNOMELT PUR 270/5 ME** – Designed for maximum output rates with PUR quality and highest standards in occupation safety

Thank You!



Henkel

Henkel