

HMP Hot Melt Polyurethane

HMP is a hot-melt and secondary moisture cure adhesive. The cured product has excellent elongation and structural durability. The adhesive has a relatively long open time and is suited to automated dispensing techniques.

- Secondary moisture cure
- Relatively long open time
- Good green strength
- Excellent elongation and structural durability

Approvals	RoHS Compliant (2015/863/EU):	Yes
Typical Properties	Appearance:	Light Yellow Solid
	Density @ 25°C (g/ml):	1.1
	Application Temperature (°C)	90 to 110
	Viscosity @ 100°C (cps):	5,000
	Open Time @ 25°C (minutes):	4 minutes, 1mm bead
Cured Properties	Shore Hardness:	D30
	Thermal Conductivity (W/m.K):	0.21
	Elongation at break (%):	860
	Tensile Strength (N/mm ²):	8
	Tensile Modulus (N/mm ²):	90
	Glass Transition Temperature (°C):	-39
	Coefficient of Thermal Expansion	
	Pre Tg, alpha 1 (ppm/K):	132
	Post Tg, alpha 2 (ppm/K):	340
	Dielectric Constant @ 1000 KHz:	3.47
	Lap Shear Strength, 7 day (N/mm ²)	
	Anodised Aluminium:	7.1
	PC/ABS	4.8

Crossbond tensile loading strength, N/mm ²	Cured for 7 days at 23°C	After 7 days at 85°C/85% RH	After thermal shock	After moisture heating
Anodised Aluminium	4.9	3.9	7.2	6.1
PC/ABS	5.7	4.6	6.3	5.3

Thermal Shock: 27 cycles: 25°C/95%RH to 65°C (1.5 hour ramp), dwell 4 hours, 65°C/95%RH to 30°C/95%RH (1.5 hour ramp), dwell 1 hour

Moisture Heating: 20 cycles: 1 hour 85°C then 1 hour at -40°C (ramp < 3 min)

<u>Description</u>	<u>Packaging</u>	<u>Order Code</u>	<u>Shelf Life</u>
<u>Hot Melt Polyurethane</u>	30 ml	EHMP30S	6 Months

Directions for Use

Surfaces must be clean, dry and free from grease, dust and contaminants; Electrolube offer a range of cleaning products, including Ultrasolve (ULS), for such applications. Ensure that all solvents have completely evaporated prior to application. Heat HMP to 90 to 110°C prior to use to ensure the adhesive flows. Once applied do not move parts until the adhesive is adequately set. For high strength, allow to cure at 23 °C for 24 hours.

Storage

Store HMP in a dry location between 10 to 25 °C. Once opened use immediately.

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