Technical Data Sheet





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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
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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/mm²): 8 Tensile Modulus (N/mm²): 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/mm²) Anodised Aluminium: 7.1

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

4.8

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)

PC/ABS

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All information is given in good faith but without warranty. Properties are given as a guide only and should not be taken as a specification.

Electrolube cannot be held responsible for the performance of its products within any application determined by the customer, who must satisfy themselves as to the suitability of the product.

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<u>Description</u>	<u>Packaging</u>	Order Code	Shelf Life
Hot Melt Polyurethane	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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