

AC M60-7

Dual Curable, High Temperature and Moisture Resistance Adhesive

Features

- High temperature resistance
- One-component resin
- Low shrinkage
- Low moisture permeability

Description

- Dual curable adhesive

APPLICATIONS

AC M60-7 was designed for applications where high adhesion to substrates is required.

TYPICAL PROPERTIES

Liquid

Viscosity (cps, 25 °C)	10,000-15,000
Storage (°C)	15 – 23
Shelf life (15-25 °C)	3 months
Pot life (15-25 °C)	1 month

Cured film

Water absorption (% , 100 °C until saturation)	0.30
Shrinkage (linear, %)	<0.3
Hardness – Shore D	95
Glass transition temperature (°C)	140
Water permeability (g/m 24 hrs (50 °C/95% RH, 75 µm film)	3 x 10 ⁻⁴
Coefficient of thermal expansion (TMA), 75 µm film	
below Tg (x10 ⁻⁶), °C ⁻¹	29
above Tg (x10 ⁻⁶), °C ⁻¹	125
Physical properties tested at 25°C, 50% RH (ASTM D638)	
Elongation (%)	7
Modulus, psi (kgf/mm ²)	178,000 (125)
Heat curing conditions:	
@ 150 °C	12 - 20 hrs (if thermal is the only curing method) 5 – 8 hrs (if both UV and thermal curing are used)
@ 180 °C	3-5 hr (if thermal is the only curing method) 2-3 hrs (if both UV and thermal curing are used)
UV curing conditions	
<u>Spot cure system – UV dose (J/cm²), air</u>	
250 – 450 nm filter	10 to 20
<u>Flood cure system – UV dose (J/cm²), air</u>	2 to 4
Operating temperature (°C)	-40 to 200

For achieve optimal adhesive properties the adhesive needs to be cured by heat OR thermal post cure after UV curing is required.

The cured film has a yellow to amber color

SAFETY AND HANDLING

The un-cured adhesive can be cleaned from apparatus with isopropyl alcohol (IPA), methyl ethyl ketone (MEK), or commercial alcohol based cleaning solution. Use caution in handling this material. Avoid direct skin and eye contact. Use only in well ventilated areas. Use protective clothing, **gloves and safety goggles**. Read Material Safety Data Sheet before handling.

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