



AC A118

Flexible UV-curable Adhesive

Features

- High viscosity
- Flexible
- Fast cure

Description

- UV-curable adhesive

APPLICATIONS

Shock absorption, strain relief and damping applications for optical components.

TYPICAL PROPERTIES

Liquid

Viscosity (cps, 25 °C)	60,000 – 70,000
Storage (°C)	15 – 25
Shelf life (15-25 °C)	6 months
Pot life (15-25 °C)	3 months

Cured film

Water absorption (% , 100 °C until saturation) 0.13

Shrinkage (linear, %) 0.6

Hardness – Shore D 35

Glass transition temperature (°C) 45

Coefficient of thermal expansion (TMA), 75 µm film
below Tg ($\times 10^{-6}$), °C⁻¹ 70
above Tg ($\times 10^{-6}$), °C⁻¹ 175

Physical properties tested at 25°C, 50% RH (ASTM D638)
Tensile strength, psi (Kgf/mm²) 1,112 (0.78)
Elongation (%) 78
Modulus, psi (Kgf/mm²) 6,384 (4.49)

UV curing conditions

Spot cure system – UV dose (J/cm²)

250 – 450 nm filter, air (in nitrogen or between 2 substrates) 5 – 6 (1 – 2)

Suggested curing set-up:

Intensity: 500 mW/cm², Cure time: 10 - 15 sec, Cure distance: 1 cm

Flood cure system – UV dose (J/cm²), air 0.6 – 1

* Minimum intensity recommended for Spot lamp system: 100 mW/cm²

** Intensity recommended for Flood lamp system: 49 WPCM or 125 WPI

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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