



AC A200

UV-Curable, Low Modulus Adhesive

PRODUCT DESCRIPTION:

- Base chemistry: acrylate, radical polymerization
- One component resin ready for use, solvent-free, UV curing

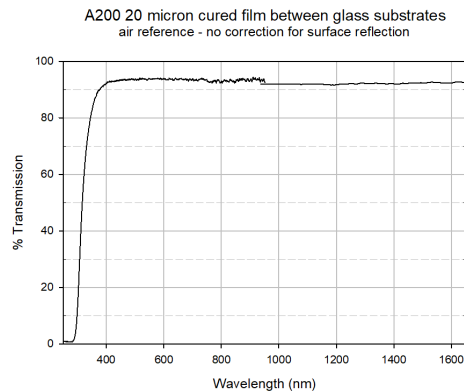
PRODUCT USE:

- Optical adhesive for fiber coupling bonding or bare fiber bonding
- Optical adhesive for bonding glass to glass, plastic to plastic or plastic to glass

FEATURES:

- Stress absorbance
- Low modulus
- Excellent adhesion
- Silicon like flexibility

UV-VIS NIR spectra:



GENERAL USAGE INFORMATION:

Shipment: no restriction on shipment

Storage: After receipt in black syringes or amber HDPE bottles, room temperature storage (15-30°C) in the original container is required.

SAFETY AND HANDLING

The uncured adhesive can be cleaned with isopropyl alcohol (IPA), methyl ethyl ketone (MEK), acetone, or xylene. Avoid direct skin and eye contact. Use only in well ventilated areas. Use protective clothing, **gloves and safety goggles**. Read [Safety Data Sheet](#) before handling.

TDS was updated 2/27/2021

UV CURING CONDITIONS: AC A200 is required to cure in nitrogen or in the absence of air.

- *Metal halide/Mercury UV: UV-A (320-400 nm), intensity: 50-1,000 mW/cm²
- *or LED-365 nm, UV light intensity: 100 to 1,000 mW/cm²

LED-365 nm		Metal Halide/Mercury(UV-A: 320-400 nm)	
UV intensity(mW/cm ²)	time (sec)	UV intensity(mW/cm ²)	time (sec)
100	20 sec or more	50	50 sec or more
or 200	10 sec or more	or 100	15 sec or more
or 300	7 sec or more	or 200	10 sec or more
or 400	5 sec or more	or 500	3 sec or more
or 500	4 sec or more	or 1,000	2 sec or more
or 1,000	2 sec or more		

For obtaining the best cured adhesive, the adhesive is recommended to be cured between two substrates or in the absence of air (cure in nitrogen or an inert atmosphere).

Depth of cure >1.5 mm
At depth of cure of ≥ 1 mm, a UV dose of ≥ 4 J/cm² (200 mW/cm² x 20 sec) is recommended

TYPICAL PROPERTIES

Uncured resin

Viscosity at 25 °C, mPa.s or cps 6,500 to 7,500
Density (g/mL) 1.1
Shelf life (20 - 30°C): 6 months
Pot life or working life (20 - 30°C): 3 months

Cured film

Appearance of cured adhesive optically clear
Shrinkage (volume, %) <1
Hardness – Shore D 15-25
Outgas, weight % (per MIL-STD 883/5011) 0.31
Glass transition temperature (DMA, °C) 42

Refractive index of cured film (25 °C)

@ 589 nm (D) 1.502
@ 1320 nm 1.489
@ 1550 nm 1.486

Coefficient of thermal expansion (DMA)

below T_g (x10⁻⁶), °C⁻¹ 90
above T_g (x10⁻⁶), °C⁻¹ 220

Physical properties tested at 25°C, (ASTM D638)

Tensile strength, MPa 28
Elongation (%) 300
Young's Modulus, MPa 10

Operating temperature, °C -40 to 140

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