



AC A535-A

UV-curable, Polishable, Medium Viscosity Epoxy Adhesive

Features

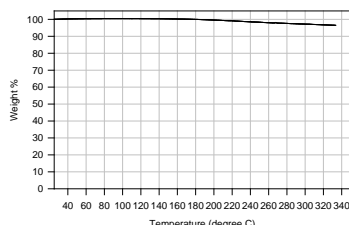
- Medium viscosity
- High Tg
- Low shrinkage
- High temperature resistance

Description

- UV-curable epoxy adhesive

Thermogravimetric analysis

- Thermal stability of cured adhesive was studied by thermogravimetric analysis in nitrogen at a scan rate of 20 °C/min



APPLICATIONS

Bonding V-groove to optical fiber, glass to glass or glass to metal. No outgas – suitable for hermetically seal applications.

TYPICAL PROPERTIES

Liquid

Viscosity (cps, 25 °C)	900 – 1,100
Storage (°C)	15 - 25
Shelf life (15 - 25 °C)	6 months
Pot life (15 - 25 °C)	3 months

Cured film

Shrinkage (linear, %) < 0.5

Outgas (125°C, 120hrs) 0.1%

Hardness – Shore D 90

Glass transition temperature (DMA, °C) 155

Refractive index of cured film (25°C)
 @ 589 nm 1.572
 @ 1310 nm 1.556
 @ 1550 nm 1.553

Coefficient of thermal expansion (TMA), 75 µm film
 below Tg (x10⁻⁶), °C⁻¹ 42
 above Tg (x10⁻⁶), °C⁻¹ 86

Physical properties tested at 25°C, 50% RH (ASTM D638)
 Elongation (%) 4
 Modulus, psi (kgf/mm²) 245,000 (172)

UV curing conditions
Flood curing system – UV dose (J/cm²), air 3.5 – 4.0

UV curing conditions
Spot cure system – UV dose (J/cm²), air
 250 – 450 nm filter 30 – 50
 320 – 500 nm filter 35 – 50

***Minimum intensity recommended for Spot lamp system: 300 mW/cm²

***Minimum intensity recommended for Flood lamp system: 125 WPI or 49 WPCm

***If a low intensity Spot lamp is used, intensity of 70 – 100 mW/ cm², we recommend a cure time of 7 to 10 minutes

***Post cure can enhance adhesion strength. Post cure conditions: 60 to 100 °C for 30 to 60 minutes

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.

The information presented here represents our best available information and is believed to be reliable, but it and does not constitute any guarantee or warranty. Inasmuch as Addison Clear Wave has no control over the exact manner in which others may use this information, it does not guarantee the results to be obtained. Nor does the company make any expressed or implied warranty of merchantability, or fitness for a particular purpose concerning the effects or results of such use. Purchasers are further responsible for determining the suitability of the product for its intended use and the appropriate manner of utilizing the production processes and applications so as to insure safety, quality and effectiveness. Addison Clear Wave makes no warranties and assumes no liability in connection with the use or inability to use this product.