



# AC A535-AN

## High Tg and Polishable UV-curable Sealant

### Features

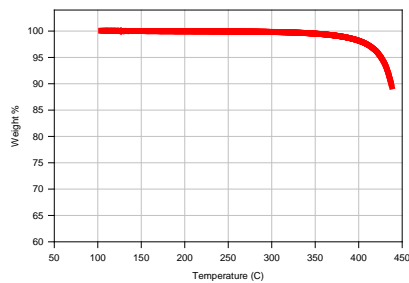
- High Tg
- UV-curable
- Excellent temperature resistance
- High hardness
- Polishable adhesive

### Description

- UV-curable epoxy sealant

### TGA

Conditions: scan rate 20°C/min, in air



### APPLICATIONS

Bonding glass to glass or glass to metal.  
Suitable for hermetically seal applications and active alignment applications.

### TYPICAL PROPERTIES

#### Liquid

Viscosity (cps, 25 °C)	3,000 to 4,100
Storage (°C)	15 – 25
Shelf life (15 - 25 °C)	6 months
Pot life (15 - 25 °C)	3 months

#### Cured film

Outgas, weight % (125°C, 120 hr, air)	0.10
Water absorption (% , 100 °C until saturation)	0.2
Water permeability (g/m 24 hrs) (50 °C/95% RH, 75 µm film)	2.7 x 10 <sup>-4</sup>
Shrinkage (linear, %)	< 0.2
Hardness – Shore D	95
Glass transition temperature (DMA, °C)	165 to 175
Refractive index of cured film (25°C)	
@ 589 nm	1.578
@ 1310 nm	1.562
@ 1550 nm	1.558
Coefficient of thermal expansion (TMA), 75 µm film	
below Tg (x10 <sup>-6</sup> ), °C <sup>-1</sup>	28
above Tg (x10 <sup>-6</sup> ), °C <sup>-1</sup>	82
Physical properties tested at 25°C, 50% RH (ASTM D638)	
Tensile strength, psi (Kg/mm <sup>2</sup> )	8,900 (6)
Elongation (%)	4
Modulus, psi (Kgf/mm <sup>2</sup> )	340,000 (239)

### UV curing conditions

#### Spot cure system – UV dose (J/cm<sup>2</sup>)

250 – 450 nm filter	30 – 50
320 – 500 nm filter	35 – 55

#### Flood cure system – UV dose (J/cm<sup>2</sup>)

2.0 – 4.0

\*\*\*Minimum intensity recommended for Spot lamp system: 300 mW/cm<sup>2</sup>

\*\*\*If a low intensity Spot lamp is used, intensity of 70 – 100 mW/ cm<sup>2</sup>, we recommend a cure time of 7 to 10 minutes

\*\*\*Minimum intensity recommended for Flood lamp system: 125 WPI or 49 W/cm<sup>2</sup>

\*\*\*A light source producing 220 to 380 nm is best match for this sealant. Cure speed or tack free time depends on the intensity of the UV source, thickness of adhesive layer, and transmission of the substrates.

\*\*\*Relative humidity for curing should be < 40%

\*\*\*Post cure at 80 to 100 °C for 60 minutes can improve adhesion

### STORAGE

This product is light sensitive. It should be stored in the original container in a cool and dry place. It should be kept away from heat and light to obtain the maximum shelf life. Improper storage may result in gelation of the product.

### 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 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.