

AC L2007

High RI, Optically Clear, High Hardness UV-curable Material

Features

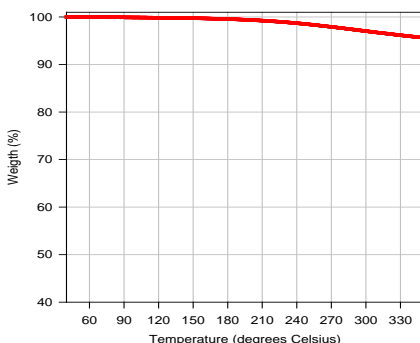
- High RI
- Optically Clear
- High Hardness
- High temperature resistance
- Good adhesion to glass and good release from metal molds, suitable for plastic lens replication.
- Good Flow properties

Description

- UV-Curable Material

Thermogravimetric analysis

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



APPLICATIONS

High RI material for lenses and optical applications

TYPICAL PROPERTIES

Liquid

Viscosity (cps, 25 °C)	8,000 to 10,000
Storage (°C)	15 to 25 °C
Shelf life (15 - 25 °C)	6 months
Pot life (15 - 25 °C)	3 months

Cured film

Shrinkage (linear, %) < 0.3

Glass transition temperature (°C, DMA) 109

Hardness – Shore D 87

Refractive index of cured film (25°C)

@ 589 nm	1.567
@ 1310 nm	1.552
@ 1550 nm	1.548

Coefficient of thermal expansion (TMA), 75 µm film

below Tg (x10 ⁻⁶), °C ⁻¹	37
above Tg (x10 ⁻⁶), °C ⁻¹	171

Physical properties tested at 25°C, 50% RH (ASTM D638)

Elongation (%)	4.6
Modulus, MPa	2100

Operating temperature (°C) -40 to 140

UV curing conditions

Spot cure system – UV dose (J/cm²), air
 250 – 450 nm filter 2.0 to 4.0

Flood cure system – UV dose (J/cm²), air 0.6 to 1.0

* 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.

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 ensure 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.