



AC L2002-C36

UV-Curable, High Refractive Index Optical Material for Lens Applications

Features

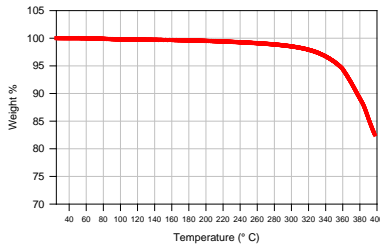
- High Tg
- High Refractive Index
- Good flow properties
- High Hardness

Description

- UV-Curable, High RI material

Thermogravimetric analysis

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



APPLICATIONS

Optical Lens Applications

TYPICAL PROPERTIES

Liquid

Viscosity (cps, 25 °C)	1,500 to 1,700
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)	149
Hardness – Shore D	83-84
Refractive index of cured film (25°C) @ 589 nm	1.518 (+0.001, -0.000)
Coefficient of thermal expansion (TMA), 75 µm film below Tg (x10 ⁻⁶), °C ⁻¹	25
above Tg (x10 ⁻⁶), °C ⁻¹	120
Physical properties tested at 25°C, 50% RH (ASTM D638)	
Elongation (%)	7
Modulus, psi (kgf/mm ²)	285,000 (200)
Extractable Ionic Content	
Chloride (Cl-), ppm	10
Sodium (Na+), ppm	8
Potassium (K+), ppm	10
Operating temperature (°C)	-40 to 140
UV curing conditions	
<u>Spot cure system – UV dose (J/cm²), air</u> 250 – 450 nm filter	2.0 to 2.5
<u>Flood cure system – UV dose (J/cm²), air (nitrogen)</u>	1.0

* Minimum intensity recommended for Spot lamp system: 500 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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