

MY-139

Optical Adhesive and Coating Material

Updated: January 2010

MY-139 is one of a series of low refractive index UV curable adhesives and encapsulants. Its main feature is the low refractive index of 1.386 in the near IR. It is a tough and flexible polymer.

Properties

n ^D liquid	1.379
n ^D cured (@589 nm)	1.391
Refractive index cured @ 1µ	1.386
Density, g/cm ³	1.50
Viscosity, cps @25°C	2300
Tensile strength, MPa	11.3
Elongation at break, %	38
Young modulus, MPa	190

The product is supplied pre-filtered to below 0.5 micron particles. It is a clear fluid. It forms a tough flexible polymer upon irradiation.

Storage

- 1. Avoid unnecessary exposure to ambient light.
- 2. The product should be stored at ambient conditions of 15-30°C. Do not refrigerate.
- 3. Do not store under nitrogen. Oxygen is an essential inhibitor against premature gelation.

The product is specified to be useful for 12 months if stored properly.

Application

The adhesive is supplied in dark glass bottles.

To achieve good curing, it is recommended to irradiate under nitrogen. Curing can be achieved by any source of UV at 300-400nm. Typically, a dose of 1000-2000 mJ/cm2 is necessary.

Safety: Although safer than most UV adhesives, this adhesive is a chemical and must be handled by professional workers and after review of the MSDS