MY POLYMERS
The low refractive index company

DATA SHEET

LM-142-NI-10: Optical Coatings / Adhesives

LM-142-NI-10 is low modulus (highly flexible) low refractive index UV curable coating/adhesive which do not require inert atmosphere during the curing process. The material is optimized for curing by both UV LED and UV Mercury lamps. This experimental series contain products of different modulus. This product is characterized by excellent adhesion to silica type products and good retention of adhesion after exposure to water and 85°/85RH conditions.

Properties

	Liquid state
RI liquid at 589 nm	1.4039
Density, g/cm^3	1.38
Viscosity, cps @ 25°C	5400
color	Clear, yellow
	Cured state
RI cured at 589 nm	1.415
RI cured at 950 nm	1.407
Adhesion to silica, 90° Peel, g/cm * (@5cm/min)	650
Elastic modulus, MPa (@ 45% RH, 24º)	22
Tensile Strength, MPa	4
Elongation to Break	100

*** Very strong adhesion. Adhesion is reduced by slowing speed to avoid cohesive failure**

The product is supplied pre-filtered to below 1 micron particles.

Storage

1. Avoid unnecessary exposure to ambient light and moisture.
2. Long term storage should be at ambient conditions of 10-30°C.
3. The shelf life is 6 months in sealed bottles.

Application

Curing can be achieved by any source of UV at 300-400nm. Typically, a dose of 1000-2000 mJ/cm2 is necessary. Keep the bottle closed at all times when not in use. The material is sensitive to moisture. Absorption of moisture may cause haze.

Safety: Refer to the SDS

Note: The above information is believed to be reliable, but it is not to be taken as a representation, warrantee or guarantee. Customers should perform their own QC, QA and evaluation tests.

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