MY POLYMERS
The low refractive index company

DATA SHEET

LM-136-EA : Low Modulus Optical Coating / Adhesive

LM-136-EA is a low refractive index UV curable coating/adhesive. It includes MY Polymer's proprietary adhesion promoter, that improves its adhesion, especially under wet conditions. A typical application is re-coating a stripped optical fiber that was originally produced with our Primary Coating OF-136. The material index was designed to perfectly match OF-136.
LM-136-EA is a far better recoating material, compared to OF-136. Its adhesion is more than 3 times higher and its modulus is 5 times lower, compared to OF-136. The combination of these 2 properties ensure a much higher endurance under thermal cycling.
Note: Due to the need for stripping capability, MY Polymers intentionally limited the adhesion of OF-136. Due to fiber robustness requirements, the modulus of OF-136 was set to a relatively high value. The requirements from a Primary Coating are in contradiction to the requirements from a first class RE-Coating material.

Properties

	Liquid state
RI liquid at 589 nm	1.359
Density, g/cm^3	1.52
Viscosity, cps @ 25°C	1400
	Cured state
RI cured at 589 nm	1.369
RI cured at 950 nm	1.363
Adhesion to glass, 90° Peel, g/cm	225
Elastic modulus, MPa	17
Tensile Strength, MPa	4
Elongation at Break, %	80
Hardness, Shore A	70

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 10-30ºC.
3. The coating is supplied in glass bottles. Keep container closed to avoid moisture penetration.
4. The shelf life is 9 months.

Application

Curing can be achieved by any source of UV at 300-400nm. Typically, a dose of 1000-2000 mJ/cm2 is necessary.
To prevent tackiness on exposed surfaces, it is recommended to cure in an inert atmosphere (e.g. under nitrogen). There is no need for inert atmosphere when curing between two layers or in a mold (more on inert curing in the Technical Support page on our web site).
Keep the bottle closed in all times when not in use. The material is sensitive to light.
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.

Updated: March 4, 2018

MY Polymers Ltd. 3 Golda Meir St., Ness-Ziona 7403648, Israel. Tel:972-8-9350101, Fax: 972-8-9351767
E-mail: info@mypolymers.com