

DATA SHEET

OF-138: Optical Fiber Primary Coating

OF-138 is a low refractive index primary coating material, developed for the cladding of optical fibers. The material is designed to be compatible with Optical fiber Drawing Towers.

OF-138 includes a proprietary adhesion promoter that improves adhesion to the silica core of the fiber, especially under wet conditions (e.g. hot water immersion test). It was designed to enable significantly longer shelf life, compared to previously available adhesion promoters.

Properties

	Liquid state
RI liquid at 589 nm	1.374
Density, g/cm ³	1.51
Viscosity, cps @ 25°C	3300
	Cured state
RI cured at 589 nm	1.384
RI cured at 950 nm	1.379
Adhesion to glass, 90° Peel, g/cm	120
Elastic modulus, MPa	230

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 coating is supplied in glass bottles. Keep container closed to avoid moisture penetration.
4. The shelf life is 6 months.

Application

OF-138 is intended to be used in optical fiber drawing towers. The UV curing is done under nitrogen. Typically, a dose of 1000-2000 mJ/cm² is necessary. Any UV source in the range 300-400 nm can be used. When properly cured under nitrogen, the surface should be non-tacky.

Keep the bottle closed at all times when not in use. The material is sensitive to both light and moisture.

Safety: Refer to the SDS

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

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