

## DATA SHEET

### OF-HC-14: Secondary Hard Coat for Optical Fibers

**OF-HC-14** is a hard coat material which was designed to be coated over the OF primary coating materials, such as OF-133, OF-136, etc. Its main feature is the strong adhesion to the OF cladding materials, which is about an order of magnitude higher compared to conventional hard coat materials. The material is designed to be compatible with Optical fiber Drawing Towers.

#### Properties

	Liquid state
RI liquid at 589 nm	1.446
Density, g/cm <sup>3</sup>	1.25
Viscosity, cps @ 25°C	3700
	Cured state
RI cured at 589 nm	1.468
RI cured at 950 nm	na
Adhesion to OF Primary Coatings	High
Elastic modulus, MPa	1400
Tensile Strength, MPa	40
Elongation at Break, %	3.5

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 12 months.

#### Application

OF-HC-14 is intended to be used in optical fiber drawing towers. The UV curing is done under nitrogen. Typically, a dose of 1000-2000 mJ/cm<sup>2</sup> 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 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.

Last update: August 6, 2018