

DATA SHEET

OF-140-N: Optical Fiber Coating

OF-140-N is a low refractive index optical fiber coating, developed for the cladding of optical fibers. The material is designed to be compatible with Optical fiber Drawing Towers.

The extension N denotes there is No adhesion promoter in the formulation. This allows a longer shelf life, but adhesion under wet conditions is lower.

Properties

	Liquid state
RI liquid at 589 nm	1.393
Density, g/cm ³	1.44
Viscosity, cps @ 25°C	3300
	Cured state
RI cured at 589 nm	1.407
RI cured at 950 nm	1.401
Adhesion to fused quartz, 90° Peel, g/cm	130
Elastic modulus, MPa	250
Tensile Strength, MPa	10
Elongation at Break, %	35

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-140-N 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 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: 16/10/2023