

## Provisional DATA SHEET

### DC-136: Dual Cure Optical Coating/Adhesive

DC-136 is a Dual Cure low refractive index Coating/Adhesive. It is cured by either UV radiation, heat, or both. DC-136 was designed to match the index of the mainstream specialty optical fibers that use MY Polymers OF-136 Primary Coating. The material can be used for recoating a stripped optical fibers, in situations where UV radiation is partially or fully blocked. The accurately matched index ensures restoration of the stripped fiber to its original state.

DC-136 is also distinguished by its unique combination of low index (1.36) and relatively high bond strength. Its relatively low modulus makes it a good candidate for applications that require good durability under multiple thermal cycles

#### Properties

	Liquid state
RI liquid at 589 nm	1.363
Density, g/cm <sup>3</sup>	1.52
Viscosity, cps @ 25°C	1500
	Cured state
RI cured at 589 nm	1.373
RI cured at 950 nm	1.367
Adhesion to glass, 90° Peel, g/cm	180
Elastic modulus, MPa	18.5
Tensile Strength, MPa	4.5
Elongation at Break, %	85

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 in a cool place or in a refrigerator at 6-20°C.
3. The coating is supplied in glass bottles. Keep container closed to avoid moisture penetration.
4. The shelf life is 6 months.

#### Application

Curing can be achieved by any source of UV at 300-400nm. Typically, a dose of 1000-2000 mJ/cm<sup>2</sup> 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). If necessary a thermal curing can be activated by heating for 1-2 hours at 120°C.

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 provisional. It 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: May 24, 2018