

DATA SHEET

BIO-134-1

Low RI non-cytotoxic, non-fluorescent optical polymer/coating/adhesive

BIO-134-1 is a non-toxic, non-fluorescent, low refractive index UV curable optical polymer/coating/adhesive. **BIO-134-1** is intended for bio-photonics and biological microscopy/imaging applications. The index of 1.34 matches the index of cells and tissues, and therefore, it minimizes image distortion, and enables a breakthrough in optical Point Spread Function.

Properties

n^D liquid	1.336
n^D cured @589nm	1.342
RI cured @950 nm	1.337
Density, g/cm³	1.65
Viscosity, cp	5500
Shore A	71
Elastic Modulus, MPa	5.6
Cured appearance	Clear, Soft polymer

* Please contact us for RI data at other wavelengths.

The product is supplied pre-filtered to below 1 micron particles.

Storage

1. Avoid unnecessary exposure to ambient light.
2. The product should be stored at ambient conditions of 10-30°C. Do not refrigerate.
3. Long periods of storage combined with excessive heat may cause irreversible gelation..
4. Do not store under nitrogen. Oxygen is an essential inhibitor against premature gelation.

The product is specified to be useful for 12 months.

Application

To achieve good aesthetic non tacky surface, it is recommended to irradiate between two layers to avoid the inhibition effect of oxygen. When cured as an open layer, use inert atmosphere (nitrogen, argon) . Curing under a layer of water is also a possibility. Curing can be achieved by any source of UV at 300-400nm. Typically, a dose of 1000-2000 mJ/cm² is necessary. Higher doses are advantageous.

The cured product is a soft elastic polymer.

Safety: Refer to the MSDS.

Updated: November 4, 2015