

## DATA SHEET

### Metal and Glass UV Adhesive: MY-149

**MY-149** was developed to answer a need for a medium viscosity adhesive for aluminum, glass and ceramics.

The adhesive is a low modulus flexible materials with excellent adhesion to both metals, glass, ceramics and most plastics. It is characterized by a high plasticity. Namely, excellent extensibility with a minimal elasticity. The low elasticity is a feature that is designed to reduce to a minimum any possible stress which may be created by the shrinkage that accompanies UV polymerization.

MY-149 is a soft polymer and is expected to have very good adhesion to glass and good behavior down to at least -20° and at least 100°.

#### Properties

|                                    | Liquid state |
|------------------------------------|--------------|
| RI liquid at 589 nm                | 1.469        |
| Density, g/cm <sup>3</sup>         | 1.04         |
| Viscosity, cps @ 25°C              | 900          |
|                                    | Cured state  |
| RI cured at 589 nm                 | 1.490        |
| RI cured at 950 nm                 | 1.483        |
| Adhesion to silica, 90° Peel, g/cm | >1200        |
| Elastic modulus, MPa               | 1.3          |
| Tensile Strength, MPa              | 0.63         |
| Elongation at Break, %             | 300          |

The products are 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 at least 12 months.

#### Application

To achieve good aesthetic non tacky surface, it is recommended to irradiate under nitrogen. Curing between two layers does not require inerting.

Curing can be achieved by any source of UV. Typically, a dose of 500-2000 mJ/cm<sup>2</sup> is necessary.

The cured products are very flexible polymers.

#### Cleaning

The non-cured adhesive can be removed with solvents such as acetone and iso-propanol. Do not use solvents for hand cleaning. Use only soap and water.

#### Safety

This adhesive must be handled by professional workers and after reviewing the SDS.

Updated: July 20, 2021