



**Manufacturer:**

Dymax

**Product Name:**

Dymax OP-81-LS Hybrid UV & Heat Cure Adhesive (3ml)

**Manufacturer Part Number:**

OP-81-LS-3ML

## UV/Visible Light-Curable Cationic Epoxy Best Practices

Dymax has recently commercialized new products that are light- and/or heat-curable cationic epoxies. The advantages of these types of products include very low shrinkage and low CTE, making them ideal for applications like active alignment or optical positioning.

It is important to note that there are some additional best practices when using epoxy-based materials that differ from Dymax's light-curable acrylated-urethane chemistries which you may be familiar with.

- 1-5°C storage is required
- Material should be allowed to reach room temperature prior to use
  - This may take approximately 20-60 minutes depending on the package size being used
- The pot life is 7 days at 25°C
  - In a production setting, once material is removed from 1-5°C storage, it should be used in its entirety within 7 days or be disposed of

Other things to note on dispensing and curing:

- These epoxies contain filler with a 3-4um is average but ~40-50 um max size
  - 25-gauge is the smallest recommended tip size in order to eliminate potential clogging issues
- Material can be cured with light, light + heat, or just heat
  - Please see PDS for recommended light curing conditions of individual products
- The recommended heat cure schedule is 85°C for approximately 30 min
  - Additional time may be needed for the entire part to reach 85°C
- Higher temperature for shorter time or lower temperature for longer time should be evaluated in your true application
  - On the low end (~70°C) it may take considerably longer to cure
- Properties between heat cure only or light cure only material are not expected to vary significantly
- Material will continue to cure even when light is removed due to the cationic reaction
  - Depending on your application requirements, parts should be tested at different post-cure intervals to validate in your process

**Contact the professionals at Fiber Optic Center for a quote or to get more details.**

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