



## DESCRIPTION

**R9990** is a methacrylate terminated polyester oligomer that has low color and low cure shrinkage. The backbone of this product consists of a statistical distribution of low molecular weight polyester segments. A representative structure is shown above. The cycloaliphatic dibasic ester residues as well as the methacrylate end-groups resist hydrolysis. This oligomer has approximately 33% less cure shrinkage than BisGMA at 100% conversion. Unlike BisGMA, it is not based upon a bisphenol A backbone and therefore does not have the potential to act as an endocrine disruptor.

## HIGHLIGHTS

- Low color
- Low shrinkage
- Thermal stability
- Tough

## TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

| PROPERTY                           | RESULT                           |
|------------------------------------|----------------------------------|
| Appearance at Room Temperature     | Colorless to light yellow liquid |
| Viscosity @ 40°C                   | 6,500 cP                         |
| Approximate Molecular Weight       | 665 Daltons                      |
| Refractive Index @ 20°C            | 1.51                             |
| Volume Shrinkage @ 100% Conversion | 4.8%                             |
| Weight Loss @ 300°C (catalyzed)    | 1.6%                             |
| Decomposition Temp. (catalyzed)    | 422°C                            |
| Recommended Storage Temp           | +5°C or colder                   |

*Data is for reference only and may vary depending on testing method used. The structure shown above is an idealized representation of a statistical distribution.*

## RECOMMENDED FORMULATION USE:

**R9990** is recommended for use as a base resin in dental applications. **R9990** also has good solubility in both aliphatic and aromatic co-monomers.

## CONTACT:

### REQUEST A SAMPLE OR PLACE AN ORDER

Customer Support

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REF: DMI Part Number: R9990