#### **TECH DATA SHEET**

# **PEM-665**



## DESCRIPTION

PEM-665 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

Thermal stability

Low shrinkage

Tough

# TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	RESULT
Appearance at Room Temperature	Light yellow tint liquid
Viscosity @ 50°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:

PEM-665 is recommended for use as a base resin in dental applications. PEM-665 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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