# OPTOLINQ TC-9000T

## Clear epoxy molding compound

- Transparent filler technology
- Anti blue decay
- Low CTE and low moisture absorption





**OPTOLINQ TC-9000T** is a high-performance optical solid epoxy specifically developed for white decorative and backlight LED encapsulation. This monocomponent epoxy achieves superior adhesion performance and great transmittance. Its stability at high temperature aids towards a good package performance and long life. More important. **OPTOLINQ TC-9000T** applies transparent filler technology to achieve low CTE and low moisture absorption.

**OPTOLINQ TC-9000T** is developed based on TC-8060 formula, which is able to offer low blue-ray decay for outdoor LED applications, overall great light performance and anti yellowing white epoxy.

### **Cured properties**

Property	Value	Unit
Specific gravity	1.75±0.25	-
Hot hardness at 160 °C	88	Shore D
Gel time at 160 °C	40±20	s
Spiral flow at 160 °C	175±75	cm
Glass transition temperature by DSC	150	°C
Coefficient of thermal expansion, α1	45	ppm/K
Coefficient of thermal expansion, α2	100	ppm/K
Flexural strength	80	MPa
Flexural modulus	9	GPa
Transmittance, straight R-Tran	>10	%
Transmittance, total T-Tran	>90	%

#### **Recommended mold parameters**

Parameter	Value	Unit
Preheating temperature	40-80	°C
Molding temperature	150±10	°C
Transfer pressure	0.98-3.92	MPa

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#### Recommended mold parameters

Parameter	Value	Unit
Transfer time	35±15	s
Cure time	180-300	s
Post mold cure time at 150 °C	4-6	h

#### **Processing Instructions**

- Be sure to keep the product dry as moisture can lead to curing failures or affect the electrical integrity of compounds.
- Before use, thaw OPTOLINQ TC-9000T for 16-24 hours at 20-25 °C with the package sealed until product reaches room temperature. Keep the packaging unopened to prevent moisture contamination.
- Products must be used up within 24 hours after thawing.

#### **Packaging Instructions**

Keep the molding compound sealed with aluminum laminated bags, in quantity of 0.5 kg each bag and 10 kg each box for powder product and 1 kg each bag and 10 kg each box for tablet product.

#### Storage and Handling

To ensure the integrity of **OPTOLINQ TC-9000T**, store and use the products by following the recommended conditions. Keep it away from heat sources like molding dies and lead-frame preheating panels, as prolonged heat exposure can lead to the degradation of the molding compound. Keep the product at 5°C or lower environment for storage and transport. Under proper conditions, the shelf life of the product is 6 months from the manufacturing date.

Please note that the provided information is based on available data and typical conditions. For specific applications and detailed test results, refer to the actual test data and conduct appropriate certifications.

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