

OPTOLINQ™ OLS-1000HV

Optically clear spray-on epoxy resin



- Rapid Cure
- Excellent Mechanical Properties
- Optically Clear Encapsulant

OPTOLINQ™ OLS-1000HV is an optically clear spray-on halogen-free epoxy resin specifically designed for metal impregnation and LED lamps packaging applications. This halogen-free resin offers exceptional performance, combining good outgassing properties and extended service life at room temperature with rapid curing at medium temperatures. **OPTOLINQ™ OLS-1000HV** produces cured products with outstanding mechanical strength, electrical performance, superior high temperature resistance. It is a reliable choice for high-quality through hole packages requiring uniform light transmittance. **OPTOLINQ™ OLS-1000HV** is available with visible light-blocking dyes with various cutoff wavelengths, including 700 nm, 750 nm, and 835 nm

Premixed properties

Property	Part A	Part B
Appearance	Light Purple	Colorless Transparent
Viscosity	5760 ±1140 cP	100 ±50 cP
Density	1.15 ±0.05	1.15 ±0.05
Shelf life	183 days	93 days

Mixed properties

Property	Value	Unit
Mixing ratio	100:100	-
Viscosity	840 ±170	cP
Gel Time @150°C	95 - 140	sec
Pot Life	4	hours

Cured properties

Property	Value	Unit
Volume resistivity	6.4×10^{15}	$\Omega \cdot \text{cm}$
Surface resistivity	2.8×10^{15}	Ω
Breakdown Voltage	20	kV/mm
Hardness	85 ±5	Shore D
Water absorption	< 0.3	%
Glass Transition Temperature ¹	137 ±5	°C
Coefficient of Thermal Expansion, α_1 ²	< 80	ppm/°C

¹ Test sample was a cylindrical cured product with a diameter of about 5 mm and a height of about 10 mm cured at 135 °C for 1.5 h.

² Test sample was a Φ 5 LED lamp beads cured at 140 °C for 1.5 h.

Europe

Industrieweg 15E,
1566JN Assendelft
The Netherlands
Phone: +31 (20) 893 2224
Email: info@caplinq.com

Canada

80 Sirocco Crescent
Ottawa ON, K2S 2C9
Canada
Phone: +1 (613) 482-2215
Email: info@caplinq.com



North America

36927 Schoolcraft Rd
Livonia, MI 48150
United states
Phone: +1 (313) 558-8243
Email: info@caplinq.com

South East Asia

S-08-07 Persiaran Triangle
B Lepas, Penang 11900
Malaysia
Phone: +60(12)4302223
Email: info@caplinq.com

Processing Instructions:

1. Part A can be preheated at 45~60°C for no more than 24 hours.
2. Mix component A and B and stir uniformly.
3. Degas the mixture under vacuum using a centrifugal planetary mixer for 5 minutes.
4. Curing conditions (Determine according to the specific needs of the product, following conditions are for reference only.)
 - Encapsulation thickness >2mm: Cure at **125 - 130°C/4 - 5 hrs**
 - Encapsulation thickness <2mm: Cure at **130 - 145°C/1 - 1.5 hrs**

Precautions:

1. For optimal results, use the mixture within 6-8 hours after combining components A and B. Delaying application may lead to an undesirable increase in viscosity.
2. Bake the molded package as soon as possible to prevent degradation by moisture.
3. Pre-heating component A at 45~60°C can reduce viscosity, but excessively high temperatures will shorten the its pot life.
4. Store the curing agent (component B) in sealed jars to prevent moisture absorption and sedimentation.
5. When adding light diffusers, adjust the curing agent accordingly (e.g., A:B:Diffuser = 100:105:10).
6. Preheat color additive agents at 60-90°C, ensuring complete dissolution.
7. Avoid skin and eye contact. In case of contact, rinse thoroughly with soap (for skin) or clean water (for eyes), and seek medical attention if needed.
8. Maintain a clean and ventilated workplace, using extraction trunks when necessary.
9. Wear appropriate protective equipment and minimize direct contact with the human body. Refer to the Safety Data Sheet (SDS) before use.

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.

Storage and Handling

Store in a ventilated, dry, and clean environment below 25°C. Keep away from fire and heat sources. It is strictly forbidden to store in outdoor environments. At proper storage conditions, Part A has a shelf life of 6 months and Part B a shelf life of 3 months. Shelf life can be extended by using cold storage.

Europe

Industrieweg 15E,
1566JN Assendelft
The Netherlands
Phone: +31 (20) 893 2224
Email: info@caplinq.com

Canada

80 Sirocco Crescent
Ottawa ON, K2S 2C9
Canada
Phone: +1 (613) 482-2215
Email: info@caplinq.com



North America

36927 Schoolcraft Rd
Livonia, MI 48150
United states
+1 (313) 558-8243
Email: info@caplinq.com

South East Asia

S-08-07 Persiaran Triangle
B Lepas, Penang 11900
Malaysia
Phone: +60(12)4302223
Email: info@caplinq.com