

LE-5031



Two-part low-viscosity transparent epoxy resin

- Low viscosity
- High transparency
- Excellent solvent, aging, and thermal resistance

LE-5031 is a low-viscosity, two-part, transparent epoxy resin, developed as an encapsulant for a wide array of technical and industrial applications. This epoxy resin exhibits exceptional transparency and boasts a high-gloss finish, making it ideal for applications where a polished surface is required. **LE-5031** also has robust solvent resistance, which makes it durable and reliable under acidic and alkaline environments. It proved to be highly resistant to aging and durable under extreme temperatures. This epoxy resin also provides superior scratch and abrasion resistance, preserving the integrity of surfaces. For specific coloration requirements, **LE-5031** can be customized using color or opaque pastes. Overall, LE-5031 epoxy resin is a reliable choice for encapsulation and sealing applications.

Premixed properties

Property	Part A	Part B
Appearance	Colorless transparent liquid	Light yellow transparent liquid
Specific gravity at 25 °C	1.18	0.98
Viscosity at 25 °C	1250±250 cP	115±35 cP
Flash point	>140 °C	>140 °C
Shelf life	183 days	183 days

Mixed properties

Property	Value	Unit
Mixing ratio by weight	3:1	-
Pot life (for a 100 g resin at 25 °C)	1	h

Cured properties

Property	Value	Unit
Water absorption	<0.15	%
Bending strength	132.39	MPa
Tensile strength	58.84–68.65	MPa
Elongation	3.6	%
Hardness	81	Shore D

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:

- Mix component A and B, stir uniformly, and degas under vacuum.
- Recommended molding curing conditions: Mold at 150 °C for 5 minutes and post-mold cure at 130–135 °C for 6–8 hours. Identify the specific curing settings based on your product requirements.

Precautions:

1. Follow the recommended mixing ratio precisely.
2. Make sure to stir the mixture thoroughly. Use the mixture as soon as possible.
3. When the relative humidity exceeds 85%, the solid surface can absorb moisture from the air, producing a white fog. Room temperature curing is not advised when the relative humidity is greater than 85%. Instead, consider heated curing as a recommended alternative.
4. After each use, seal the container tightly to prevent moisture from infiltrating and compromising the product's quality.

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 30 °C and 70% RH. Keep away from fire and heat sources. It is strictly forbidden to store in outdoor environments. At proper storage conditions, Part A and Part B both have a shelf life of 183 days. Shelf life can be extended by using cold storage.