

# OPTOLINQ OLS-5812M



## Two-part thermal-resistant silicone encapsulant

- High optical transparency
- Excellent UV and thermal resistance
- Excellent adhesion to different materials

**OPTOLINQ OLS-5812M** is a high-performance, two-part silicone encapsulant designed for the protection and encapsulation of various electronic components, particularly low to medium power LEDs. **OLS-5812M** encapsulant offers exceptional properties such as excellent optical clarity, a wide operating temperature range, easy application, and strong adhesion. It is ideal for applications in the automotive, lighting, and consumer electronics industries.

**OLS-5812M** provides robust protection against environmental factors, high light transmission, and reliable performance in extreme temperatures. Overall, OLS-5812M ensures the long-term reliability and optimal performance of electronic devices.

### Premixed properties

Property	Part A	Part B
Appearance	Transparent to translucent	Transparent to translucent
Viscosity	3600 cP	2400 cP
Shelf life	6 months	6 months

### Mixed properties

Property	Value	Unit
Mixing ratio	1:4	–
Viscosity	2500	cP
Refractive index	1.53	–
Pot Life at 25 °C	4	hours

### Cured properties

Property	Value	Unit
Hardness	42	Shore D
Temperature Resistance	–55 to 200	°C
Transmittance at 450 nm* Sample thickness = 1 mm	>95	%

Typical properties were measured at 25 °C.

The data and information provided in this datasheet are intended for informational purposes only and may not be considered as representative of standard values. Users are advised to verify specific requirements and conduct independent testing, as needed, to ensure compatibility and performance in their unique applications.

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### Processing Instructions:

- Mix Parts A and B in a 1:4 weight ratio. Ensure that the mixture is uniform and free from streaks or unevenness.
- Defoam the mixture under vacuum.
- Typical curing conditions: First cure at 125 °C for 5 min, followed by post cure at 150 °C for 180 min.

### Precautions:

1. Addition-cure materials may be susceptible to inhibition by certain substances, including organotin and other organometallic compounds, silicone rubber with organotin catalyst, sulfur-containing materials such as polysulfones, amines, urethanes, amine-containing materials, unsaturated hydrocarbon plasticizers, and some solder flux residues. Always exercise caution and conduct thorough compatibility testing when encountering materials or chemicals of concern in your specific application to prevent potential curing issues.
2. 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.
3. Maintain a clean and ventilated workplace, using extraction trunks when necessary.
4. 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.

### Cleaning

Uncured silicone can be easily removed using common hydrocarbon solvents, such as toluene and hexane. Polar solvents, including water and alcohols, are not recommended for this application.

### Storage and Handling

Store in a ventilated, dry, and clean environment below 25 °C. Do not allow moisture to come into contact with these materials. Containers should always remain tightly sealed. For partially filled containers, it is recommended to purge them with dry air or inert gases like nitrogen to maintain product integrity. At proper storage conditions, Part A and B have a shelf life of 6 months.

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