

**INDUSTRY
SOLUTIONS.**

**Material
Solutions.**

CHT

**SMART CHEMISTRY
WITH CHARACTER.**

**SilSo Clear 21002
OPTICAL GRADE
LIQUID SILICONE RUBBER**

- ▶ **OPTICALLY CLEAR**
- ▶ **HIGH LIGHT TRANSMITTANCE**
- ▶ **HIGH TEMPERATURE RESISTANCE**
- ▶ **LOW VISCOSITY**

OPTICAL-GRADE LIQUID SILICONE RUBBER

CHT's SilSo Clear 21002 is a platinum cure optically clear liquid silicone rubber (LSR) designed for injection moulding applications.

SilSo Clear 21002 can be easily moulded for the purpose of lenses or light pipes and features a long pot life. This encapsulant is lightweight in comparison to traditional materials used such as glass, polycarbonate and polymethyl methacrylate for various lighting applications. Its refractive index enables optimum illumination and maintains stable transmittance over a long period of time. SilSo Clear 21002 also functions as protective barrier against moisture and other environmental contaminants when casted over LEDs and maintains transparency even when cured in thick sections.

KEY FEATURES

- ▶ Optical clarity
- ▶ Non-yellowing
- ▶ High heat stability / UV resistance
- ▶ Wide operating temperature range (-55 °C – 204 °C)
- ▶ Mechanical stability (no breaking, no scratching)
- ▶ Low viscosity
- ▶ High durometer
- ▶ Design flexibility (for small and complex shapes)
- ▶ Recommended tool temperature: 150 °C



KEY PHYSICAL PROPERTIES

Product	Mix Ratio	Colour	Mixed Viscosity	Durometer	Tensile	Elongation	Refractive Index, 589 NM
SilSo Clear 21002	1:1	Transparent	25,000 cps	67, Shore A	700 psi	110%	1.41

The data are standard values and not suitable for establishing specifications. Please note that the given values were determined in the laboratory and must be verified in tests for your specific manufacturing under the conditions in practice.



APPLICATIONS:

- ▶ Light guides
- ▶ Optical / magnifying lenses
- ▶ LED modules
- ▶ Diffractive optical elements
- ▶ Diffusers
- ▶ Microlens arrays
- ▶ Solar collection products
- ▶ Photonic fibres
- ▶ Endoscopy components
- ▶ Catheters
- ▶ Eye glasses / contact lenses

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Interested in further information or product samples?
Please contact us: material@cht.com

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