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

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

KEY PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Product</th>
<th>Mix Ratio</th>
<th>Colour</th>
<th>Mixed Viscosity</th>
<th>Durometer</th>
<th>Tensile</th>
<th>Elongation</th>
<th>Refractive Index, 589 NM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SilSo Clear 21002</td>
<td>1:1</td>
<td>Transparent</td>
<td>25,000 cps</td>
<td>67, Shore A</td>
<td>700 psi</td>
<td>110%</td>
<td>1.41</td>
</tr>
</tbody>
</table>

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.