

Optical Materials for Replication Technologies

Wafer-Level Micro-Optics



Liquid optical material

Your benefits

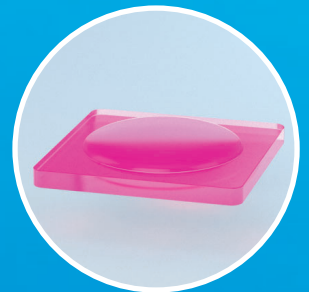
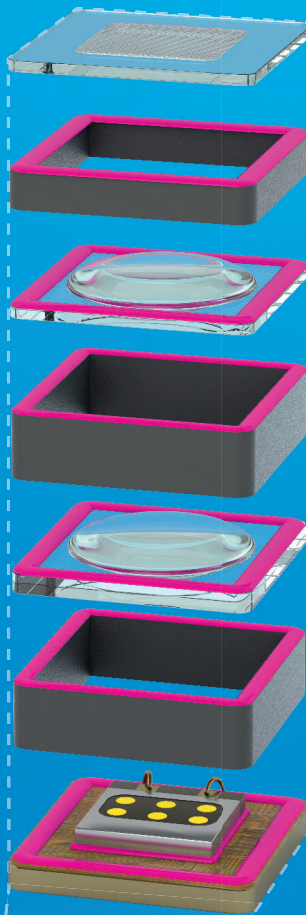
- High structural resolution
- Low shrinkage
- High-temperature-resistant
- Long stamp life



Liquid molding material

Your benefits

- High structural resolution
- Tailored transmission
- Adjustable degree of blackness
- Light curing possible
- Good dicing behavior



Liquid optical material

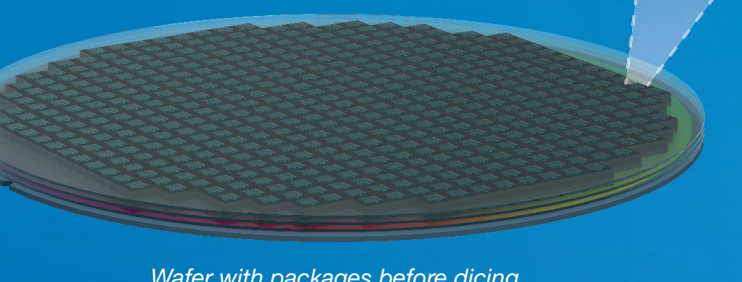
Your benefits

- Monolithic & polymer on glass
- High yellowing resistance (reflow: +260 °C, 1,000 h @ +125 °C)
- High glass transition temperature
- Long stamp life
- Low shrinkage
- Broad range of refractive indices

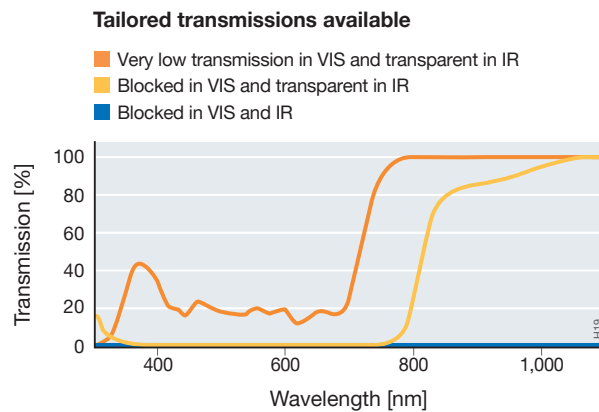
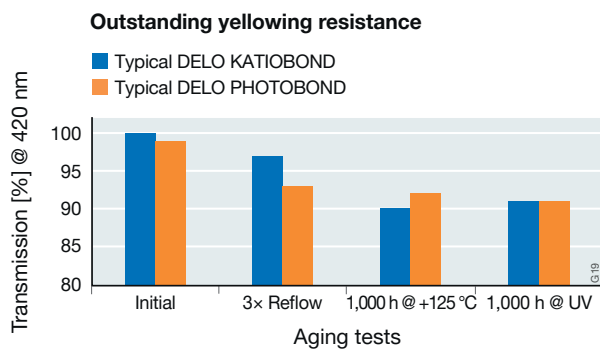
Process advantages through wafer-level packaging

DELO offers material solutions for manufacturing of optical components on a wafer level. With our liquid molding materials almost the whole package can be manufactured using replication technologies. Different optical and mechanical properties are combined with outstanding replication performance.

In addition to the optical materials, DELO also offers process-related materials as e.g. stamp and bonding materials.



Wafer with packages before dicing



Process advantage	Your benefits
Use of standard semiconductor equipment	→ High capacity utilization
Paralellization by processing on wafer level	→ Fast production
Singulation of packages only after stacking	→ High UPH
Miniaturization by advanced material properties	→ High UPH due to more parts per wafer → Competitive advantage through innovation



Discuss your project and requirements:

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ADHESIVES

DISPENSING

CURING

CONSULTING

DELO

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