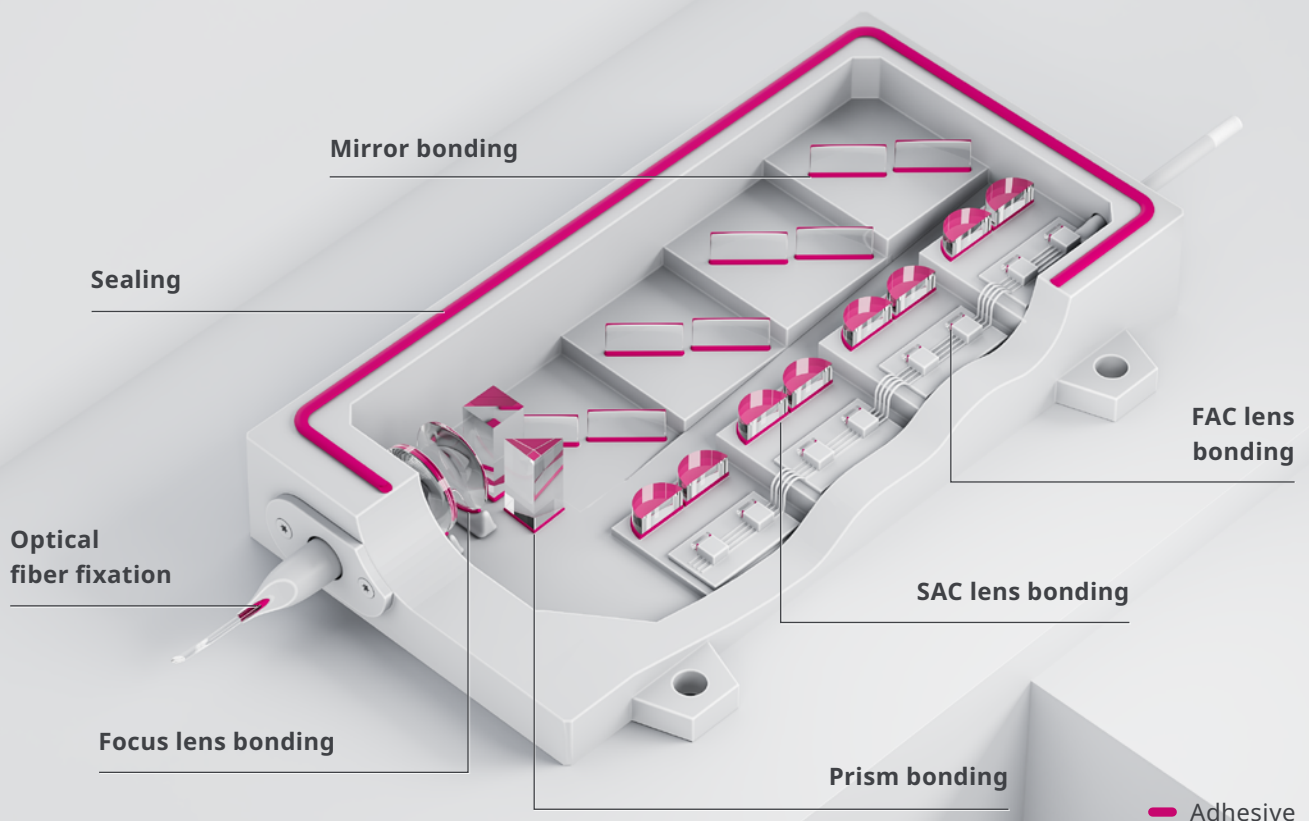


Advanced Adhesives

for laser component assembly.

Semiconductor lasers play a crucial role in various applications, such as industrial manufacturing, and can be combined to form powerful fiber lasers. DELO's **low outgassing** adhesives are specifically formulated to ensure **high precision** and **reliability** when bonding optical components, sealing laser housings, and fixing optical fibers in place.

Trust in our products to enhance the **efficiency**, **accuracy**, and **longevity** of your laser applications with advanced quality and innovation.



The following tables show which adhesive properties to look out for in which bonding task.

Optical component bonding

FAC lens bonding	SAC lens, mirror, prism, and focus lens bonding	Optical fiber fixation, bonding optical fiber into ferrule
Enables active alignment	Enables active alignment	Good resistance to laser light
Fast dispensing	Fast fixation	Very small gap bonding
Fast light fixation	Curing via light / heat or light only	Low outgassing
Curing @ +80 °C	Low outgassing	Low shrinkage
Very low outgassing	Matching Young's modulus	Low CTE
Very low shrinkage	Low shrinkage	
	Suitable CTE between metal and glass	

DELO's extensive portfolio of dual-curing adhesives, pure light-curing products and more can meet the specific requirements of most applications.

Sealing

Laser diode-to-housing bonding

Cured-in-place gaskets (CIPG)	Formed-in-place gaskets (FIPG)	Laser diode-to-housing enclosure
Sealing without bonding	Tight bonding of cover to housing	Bonding strength combined with thermal conductivity
Mechanical fixation of parts	Bonding and sealing in one step	Variable bondline thicknesses
Parts can be unfixed		Electrically insulating filler materials, high filler content
		Specified thermal conductivity
		Low thermal contact resistance
Light-curing solutions	2C and heat-curing solutions	Thermal conductive adhesives (TCA)

Specific product information

can be found in our material selection guide which is available upon request.



Any questions?
photonics@delo.de

DELO Industrial Adhesives

**China | Czechia | France | Germany HQ | Italy | Japan
Korea | Malaysia | Singapore | Thailand | USA**

The data and information provided are based on tests performed under laboratory conditions. Reliable information about the behavior of the product under practical conditions and its suitability for a specific purpose cannot be concluded from this. It is the customer's responsibility to test the suitability of a product for the intended purpose by considering all specific requirements and by applying standards the customer deems suitable (e.g. DIN 2304-1).

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