

# LOCTITE®

## LOCTITE® 3296 HENKEL SOLUTIONS FOR ADAS ACTIVE ALIGNMENT ADHESIVES

Next generation, high reliability, dual cure, active alignment adhesive for high resolution ADAS & LiDAR applications



### Benefits

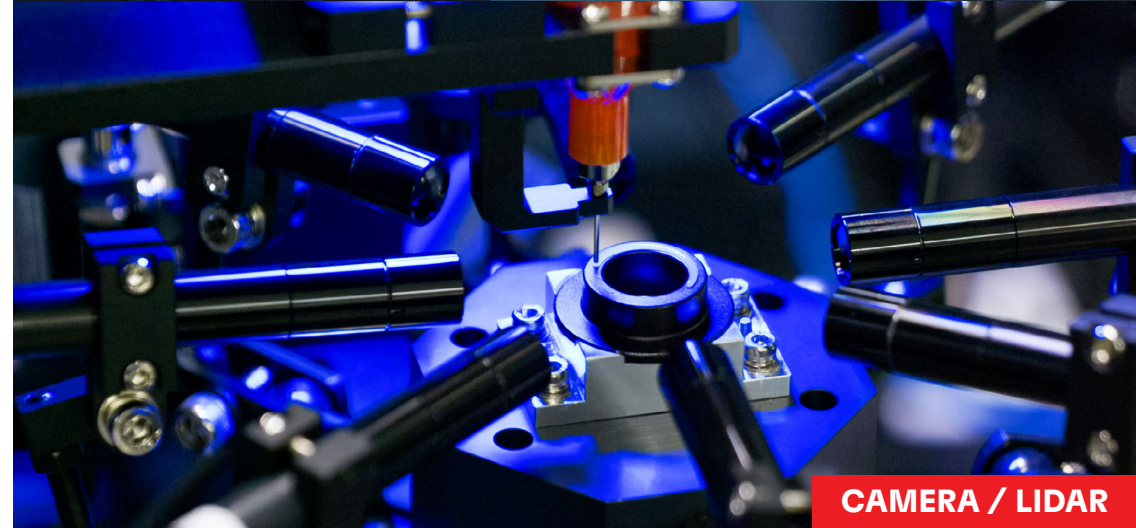
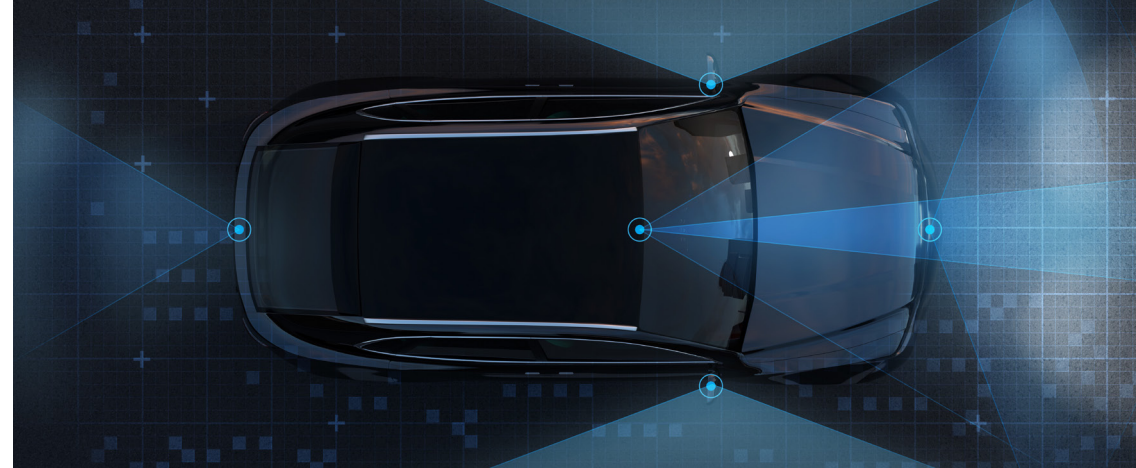
- Fast UV & heat cure
- High T<sub>g</sub> and low CTE for automotive grade applications
- Low and consistent shrinkage
- Long-term robust & reliable performance
- Excellent adhesion to standard substrates (Al, FR4)
- High UV cure depth



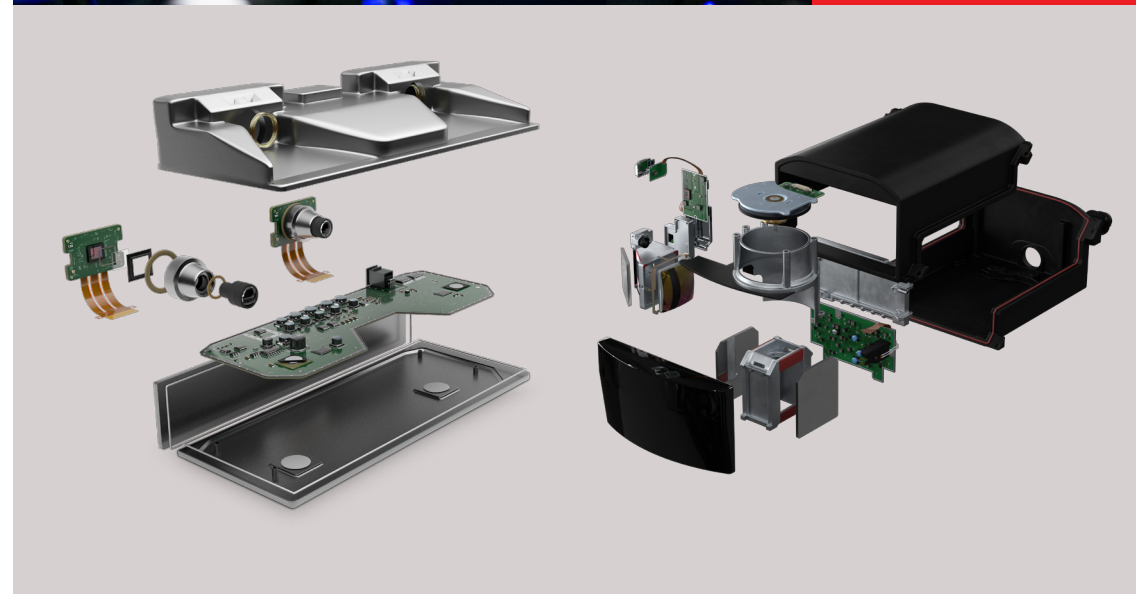
### Sustainability Value

- SVHC free, antimony free, REACH compliant
- Very low outgassing

Leverage Henkel's broad technology portfolio and application know-how to strengthen your automotive ADAS Technology.



CAMERA / LiDAR





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### Curing Performance

Typical Cure	Light Source and Condition	UV Wavelength (nm)	Light Intensity (mW/cm <sup>2</sup> )	UV Exposure Time	Secondary Heat Cure (30 minutes)
UV + Visible light	LED	365	1,000	3 seconds*	120 °C*

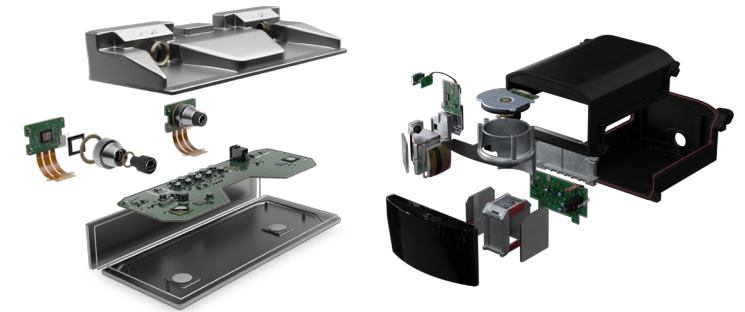
\* Shorter UV or lower heat settings possible

### Product Properties

Properties	Method	Typical Values	Properties	Method	Typical Values
Tg (°C)	DMA	189°C	Outgassing	TML < 1.00% CVCM < 0.10%	passes
CTE α 1 (ppm/K) Average 25 to 125°C	TMA	22	Water Absorption (%)	1,000 hours, 85 °C/85 %rh	0.7
Modulus at 25 °C (GPa)	DMA	10.9	Cure Depth	mm	> 3
Hardness	Shore D	94	Adhesion (MPa)	DSS on plasma treated Al	>10
Cure Shrinkage (Vol. %)	Pycnometer	1.0	Adhesion (MPa)	1,000 hours, 85 °C/85 %rh DSS on plasma treated Al	>10
			Storage	-	-25 °C to -18 °C for 6 months

### Typical Applications

- Designed for lens to barrel and barrel to PCB bonding applications for camera & LiDAR



### Configurations Available

- 30 cc syringe
- 55 cc syringe
- 6 oz cartridge

Reach out to our experts to partner up for active alignment adhesive applications in automotive and industrial electronics.

CONTACT US TO LEARN MORE

Europe  
Germany  
Henkel AG & Co. KGaA (Headquarters)  
Henkelstraße 67, 40589 Düsseldorf

Asia-Pacific  
China  
Henkel (China) Co., Ltd.  
No. 928 Zhangheng Road, Pudong New District  
201203 Shanghai

Americas  
U.S.A.  
Henkel Corporation  
Madison Heights, 32100 Stephenson Highway  
Madison Heights, MI 48071



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