



AUTOMOTIVE DISPLAY SOLUTIONS

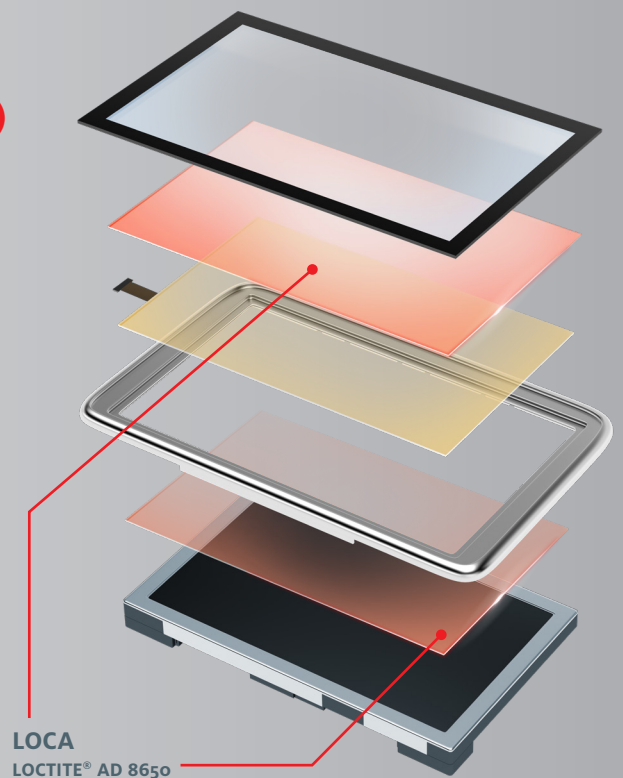
LOCTITE® AD 8650 Liquid Optically Clear Adhesive(LOCA)

LOCTITE® AD 8650 is a UV and Visible light Cure Silicone LOCA. It is a single component adhesive designed to achieve high bonding performance on optical displays, specifically those using multiple substrates or with unique free-form designs. It is a medium viscosity adhesive, which cures instantaneously when exposed to UV light.

Using a Henkel LOCA to bond the interfaces, display performance can improve up to a 400% better contrast ratio in sunlight and up to three times higher impact resistance than unfilled gaps. LOCA can realize thinner designs.

Typical Applications

- Center information displays
- Instrument clusters
- Front and rear (seat) entertainment displays
- Side and rear view mirrors
- Head up displays (HUD)



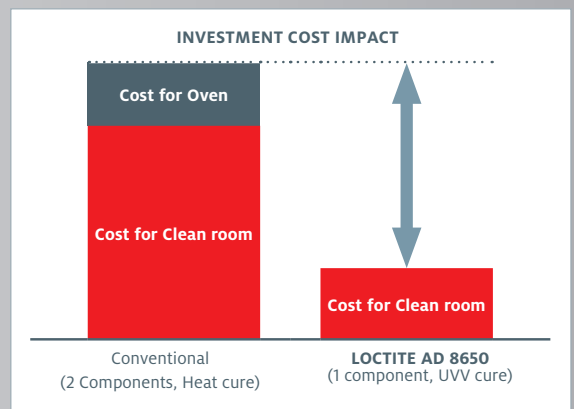
LOCTITE® AD 8650

Features & Benefits

- Enables design flexibility including free-form design even on large surface displays.
- Excellent multiple substrates bonding, such as plastic cover lens to glass sensor or to LCD/OLED.
- Outstanding durability under high temperature and high humidity environment.
- High elongation and low modulus allow material flexibility at various temperatures.
- High resistance to harsh, thermal shock environment.
- UV and visible light cure lead to processing flexibility
 - Applicable to substrates with a UV cutoff below 400 nm
 - Use of LED arrays to avoid thermal stress of plastics
- Significant cycle time reduction by fast curing technology in UV light that lead to cost efficiency.
- Post curing is not required.

Process optimization & increased process efficiency

Henkel UVV curable optical bonding products can be used with optimized, small footprint processes, such as vacuum lamination, accurate slit coating or digital printing. This allows for a significant reduction in clean room area as compared with typical two component heat cure products and processes.



TYPICAL PROPERTIES OF LOCTITE® AD8650	
Chemistry	One component Silicone
Curing method	UV / Visible light
Viscosity, mPa·s (Uncured)	5000
Hardness, Shore 000, ASTM D2240 (Cured)	20
Elongation @break, ASTM D412, % (Cured)	> 300
Volume shrinkage, Henkel STM 753, %	< 1
Light transmission @550 nm, % (Cured)	> 99

NOTE:

LOCTITE AD 8650 is for Automotive applications only

For further detail about the product specifications, please contact Henkel office below for assistance or refer to LOCTITE AD 8650 Technical Data Sheet

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