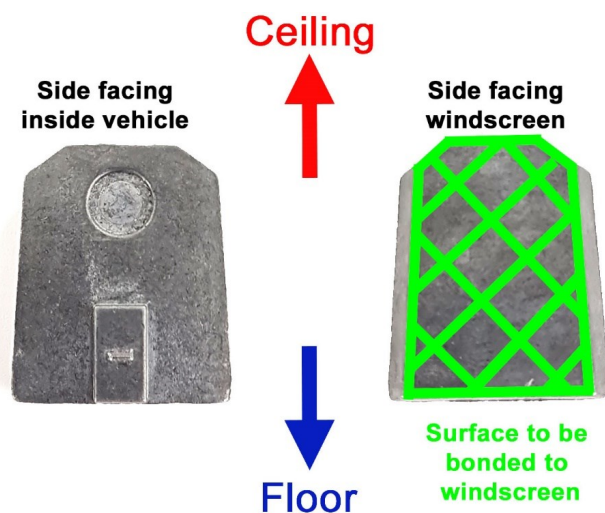


VERY IMPORTANT NOTES / TIPS ABOUT USING LOCTITE 319 GLUE

If you check reviews on any windscreen mirror adhesives you will notice that it can go astray, we stock the version that most fitters recommend. We have collected the following advice from forums and reviews to help get it right first time.

- **The glue should be kept at minimum 8C**, so avoid leaving in the vehicle before the install if the temperature is expected to be below this.
- **The glue should be kept at maximum of 28C**, so again avoid leaving in the van before the install if the temperature is expected to be above this (if the sun is shining then the vehicle is likely to get very hot inside even if the outside air temperature is cool).
- The windscreen area you plan to mount, as well as the **windscreen button should be clean and free of any residual oils** (it's surprising how much oil comes from fingers etc, glass cleaning wipe or glass cleaner with microfibre cloth for the windscreen, or Isopropanol alcohol, or similar wipes for the button).
- If it is cold when fitting, it might be worth **warming up the windscreen** with the vehicles windscreen heating system beforehand to ensure the temperature of the glass is not too cold to avoid affecting the bond.
- The **metal button will want to be nice and warm** too, maybe kept in a trouser pocket until the time of application.
- Follow the manufacturers guidance about **pushing the mesh with the applicator against the button**.
- **Practice your "holding pose"**, ensure you will be comfortable applying pressure for a long period of time in the position you choose.
- **Ensure you know which way round to mount the metal button**, here is a reminder:



- The mesh is the activator, it performs in the absence of oxygen, **so the most important thing to ensure you have a good bond is to keep that metal button pressed firmly in place on the windscreen for at least 5 mins**, some reviews from people regularly using the glue is to actually press for 10 mins, hence the advice above about practising the hold position.
- **Wait at least 15 mins before adding the monitor**, again out of an abundance of precaution, it may be prudent to extend this to 30 mins.



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Technical Data Sheet Product 319 Rear View Mirror Bonder

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PRODUCT DESCRIPTION

LOCTITE® Product 319 Rear View Mirror Bonder is a single component, anaerobic structural adhesive for bonding dissimilar materials such as metals and glass. The product cures when confined between close fitting parts with the aid of activator impregnated mesh.

TYPICAL APPLICATIONS

Typical applications include bonding metal stemmed rear view mirrors to windscreens, window mounted phone and radio aerals.

PROPERTIES OF UNCURED MATERIAL

Typical

	Value	Range
Chemical Type	Modified acrylic ester	
Appearance	Clear Amber	
Specific Gravity @ 25°C	1.1	
Viscosity @ 25°C, mPa.s (cP)		
Brookfield RVT Spindle #3 @ 20 rpm	2,750	1,500 to 4,000
Flash Point (TCC), °C	>93	

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Coefficient of thermal expansion, ASTM D696, mm/m	0.1
Coefficient of thermal conductivity, ASTM C177, W/(m.K)	0.1
Specific Heat, kJ/(kj.K)	0.3

PERFORMANCE OF CURED MATERIAL

(After 24 hr at 22°C.)

	Value	Typical Range
Shear Strength, ASTM D1002, N/mm ² (psi)	17.2 (1,500)	minimum minimum

TYPICAL ENVIRONMENTAL RESISTANCE

Test Procedure :	Shear strength ASTM-D1002
Substrate:	Grit blasted mild steel laps
Cure procedure:	1 week at 22°C/Act.NF

Chemical / Solvent Resistance

Aged under conditions indicated and tested at 22°C.

	Solvent Temp.	% Initial Strength retained at 720 hr
Gasoline	87°C	80
Motor Oil	87°C	30
Auto transmission fluid	87°C	30
Phosphate ester	87°C	35
Water/Glycol (50%/50%)	150°C	20
Humidity 100% RH	50°C	35

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidising materials. For safe handling information on this product, consult the Material Safety Data Sheets, (MSDS).

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some cases these aqueous washes can affect the cure and performance of the adhesive.

This product is not normally recommended for use on plastics (particularly thermoplastic materials where stress cracking of the plastic could result). Users are recommended to confirm compatibility of the product with such substrates.

Directions for use

Ensure hands and tools are free from grease and dirt before starting repair. Adhesive performs best at room temperature. The kit contains a tube of adhesive and an activated mesh.

Trim mesh to size of mirror or aerial button. Remove mounting button (if fitted) from mirror bracket.

Using a marker pen, mark the exact position of the rear view mirror/aerial on the opposite side of the window.

Remove all old adhesive on the window and mirror/aerial button with a safety blade or utility knife and ensure that the surfaces are clean and dry.

Cut the top off the adhesive. Apply adhesive to the button, using the nozzle to spread out adhesive to evenly cover the area. in cold conditions adhesive may be difficult to dispense, warm it to room temperature.

Place adhesive mesh over the adhesive on the button, use tip of bottle to press mesh onto the adhesive allowing mesh to become saturated. Taking care to ensure the button is right way up, apply it immediately to the winscreen in the position marked previously.

Hold firmly in place for at least 30 seconds (1 minute if button and mirror are one part). Allow adhesive to set for 15 minutes before attaching the mirror to the button, or adjusting the mirror.

Storage

Store product in the unopened container in a dry location.

Optimal Storage: 8°C to 21°C. Storage below 8°C or greater than 28°C can adversely affect product properties .

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Note

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PLEASE CONTACT YOUR LOCAL LOCTITE TECHNICAL DEPARTMENT FOR ASSISTANCE AND RECOMMENDATIONS ON SPECIFICATIONS FOR THIS PRODUCT.
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