

TEROSON PU 9097 PL HMLC

October 2016

Primerless adhesive with high shear modulus and low conductivity

PRODUCT DESCRIPTION

Technology	1K- Polyurethane adhesive free from PVC and solvents
Product Type	Direct Glazing for repair
In driving condition with airbag	1 hour after the window has been bonded (Crash-Norm: FMVSS 208 / 212 (50 km/h, 100% frontal))

The direct glazing adhesive is outstanding for the following properties:

- Very good sag resistance
- High cure rate
- High elastic and shear strength, even after aging
- Good adhesion to the remaining material
- Very low conductivity
- High shear modulus
- Excellent primerless adhesion to glass, glass with the ceramic coating, encapsulation and to painted surfaces
- Improved UV resistance

APPLICATION AREAS

TEROSON PU 9097 PL HMLC is used for the bonding of front, rear and side screens to the body of motor-, utility-, special- and rail vehicles.

TECHNICAL DATA

(Typical Test Results)

Colour	black
Odour	weak
Consistency	smooth, sag-resistant, pasty
Density g/cm ³	approx. 1.3
Solids	100 %
Curing mechanism	humidity curing
Cure rate (DIN 50014; 23°C, 50% rh)	approx. 3 to 4 mm / 24 h
Skin formation time (DIN 50014; 23°C, 50% rh)	approx. 25 min.
Shore-A-hardness (DIN 53505)	approx. 66
Tensile strenght (DIN 53504)	approx. 8.0 MPa
Stress (DIN 53504)	approx. 3 MPa at 100 % elongation

Shear modulus (according to DIN 54451)	approx. 2.5 MPa
Elongation at break (DIN 53504)	approx. 280 %
Shear strength after 24 h (DIN 54451)	1.8 MPa
Layer thickness 5mm based on DIN 54451	5 to 6 MPa (fully cured)
Specific forward resistance (ASTM D 257-99 / DIN IEC 60093)	approx. $1 \times 10^{10} \Omega \text{ cm}$
Volume change (DIN 52451)	< 1 %
Glazing time:*	max. 25 min
Material application temperature, °C	10 to 35
Environmental temperature at application, °C	10 to 45
In service temperature range, °C	-40 to 90
Short exposure (up to 1 h), °C	120

* period of time between beginning of material application until inserting of the pane

PRELIMINARY STATEMENT

Prior to application it is necessary to read the **Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed.

SURFACE PRETREATMENT

The substrates to be bonded must be dry and free from oil, dust, grease and other dirt.

Clean new glass thoroughly with TEROSON VR 100.

Check new glass if it is correct and free of any damage.

To obtain an optimal adhesion we recommend abrading the windscreen's bond line with a smooth abrasive pad in order to have a clean surface.

Clean and pretreat the bonding surfaces with TEROSON VR 20 after abrading and allow to dry for 2 minutes.

The layer remaining in the window cut-out need not to be cleaned. If, however, cleaning of this remaining layer is indispensable, an evaporation time of at least 5 minutes has to be observed before the sealant can be applied, since the adhesive surfaces must have fully dried.

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PROCESSING

The direct glazing sealant TEROSON PU 9097 PL HMLC is processed from the cartridge using commercial equipment such as hand, battery driven or air-pressure guns.

STORAGE

Frost sensitive	no
Recommended storage temperature	10 to 25 °C
Shelf life	9 months in original packaging

ADDITIONAL INFORMATION

Disclaimer:

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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