

TEROSON PU 9097 PL HMLC

June 2019

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 strength: (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. 1×10 ¹⁰ Ω 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

Surface Preparation:

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

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

To obtain an optimal adhesion on the new screen we recommend 2 different surface preparation methods (solvent based, TEROSON VR 10 or waterborne, TEROSON VR 100):

1. Wipe off surface with a lint free cloth and TEROSON VR 10.
2. Abrade bondline with a smooth abrasive pad or wetted TEROSON ET Cleaning sponge.
3. Wipe off again surface with a lint free cloth and TEROSON VR 10.

Or

1. Spray on TEROSON VR 100 on the to be cleaned surface.
2. Abrade wetted bondline with TEROSON ET Cleaning sponge.
3. Dry off the bondline by wiping in one direction using a lint free cloth.

Evaporation time for both methods: 2 minutes.
Cleaning of the cut adhesive layer, remaining on the window aperture, is in general not necessary.
If, however, cleaning of this remaining layer is indispensable, an evaporation time of at least 5 minutes is mandatory.

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.



Preliminary Statement:

Prior to use 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.

Classification:

Please refer to the corresponding **Material Safety Data Sheets** for details on:

Hazards identification**Transport information****Regulatory information****Storage:**

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

ADDITIONAL INFORMATION**Disclaimer:****Note:**

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