

TEROSON PU 8591T

June 2019

Direct Glazing adhesive excellent weathering stability

PRODUCT DESCRIPTION

Technology	1K- Polyurethane adhesive free from PVC and solvents	
Product Type	Direct Glazing for repair	
In driving condition	Weight	of Drive Away Time
recommendation for supported windscreens between 10°C - 25°C	< 40 kgs	2 hours
	41 – 75 kgs	4 hours
	76 – 100 kgs	6 hours
	> 100 kgs	24 hours

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
- Very low conductivity
- Good adhesion to the remaining material
- Excellent adhesion to glass, glass with the ceramic coating, encapsulation and to painted surfaces, in connection with primer/activator
- High UV resistance in connection with primer/activator

Application Areas:

TEROSON PU 8591T is used for the bonding of front, rear and side screens to the body of motor-, utility-, special- and rail vehicles.

Bonding of side windows made of single-pane glass or insulating glass in bus and rail coach manufacture.

TEROSON PU 8591T is also used as a gap filler with non staining properties.

TECHNICAL DATA

(Typical Test Results)

Colour:	black
Odour:	weak
Consistency:	smooth, sag-resistant, pasty
Density g/cm ³ :	approx. 1.27
Solids:	100 %
Curing mechanism:	humidity curing
Cure rate: (DIN 50014; 23°C, 50% rh)	approx. 3 to 4 mm / 24 h
Shore-A-hardness: (DIN 53505)	approx. 60
Tensile strength: (DIN 53504)	approx. 8.0 MPa
Stress: (DIN 53504)	approx. 2 MPa at 100 % elongation

Shear modulus: (according to DIN 54451)	approx. 2.0 MPa
Elongation at break: (DIN 53504)	approx. 400 %
Shear strength: after 24 h (DIN 54451)	2.0 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 ⁸ Ω cm
Volume change: (DIN 52451)	< 1 %
Glazing time*:	max. 20 min
Material application temperature, °C:	5 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.

Priming:

With the use of an applicator apply a thin layer of All-in-one primer TEROSON PU 8519P to the cleaned substrate surface.

Ensure the wet film should be 0.025 mm.

Let the primed surface evaporate for approx. 2 minutes before the direct glazing sealant is applied.

If a fresh bonding is made directly on the remaining material layer (left in the window cut-out of the body), this layer should not be primed within the first 2 hours after cutting back. But if the remaining layer is not used within the first 2 hours, it has to be activated with TEROSON PU 8519P. Provided that it is not contaminated with dust or grease, the remaining layer is the best adhesive surface, if TEROSON PU 8591T is used for the new bond.

If windows are bonded which have been pre-coated with a primer or PUR-based adhesive/sealant by the glass supplier, the primer TEROSON PU 8519P is also suitable to ensure the correct adherence of TEROSON PU 8591T to the pre-coating.

By means of an applicator, a thin layer of TEROSON PU 8519P is applied to the pre-coating. Following this, an evaporation time of approx. 15 minutes has to be observed. Subsequently, TEROSON PU 8591T is applied as usual, but taking into consideration the layer thickness of the pre-coating.

Processing:

The direct glazing sealant TEROSON PU 8591T is processed from the foil packs using commercial equipment such as hand, battery driven or air-pressure guns. To prevent air being trapped at the gap filling operation, make sure that the nozzle tipp remains at all times in the applied material. Apply a thicker layer of TEROSON PU 8591T than is ultimately needed. The filler must project onto the glass. Then remove the bulk of the excess with an empty cartridge or a flexible plastic towel. To create the smooth, ultimate finish with TEROSON PU 8591T, treat gap filled material with TEROSON VR 20 or TEROSON PU SMOOTHING AGENT and smooth with a flexible plastic towel.

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	5 to 25 °C
Shelf life	12 months foil pack

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

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