

TEROSON MS 9000 PL HMLC

April 2013

PRODUCT DESCRIPTION

TEROSON MS 9000 PL HMLC provides the following product characteristics:

Technology	Silane-modified polyether polymer (SMP)
Product Type	Adhesive/Sealant
Components	One-component
Cure	Humidity
Application	Assembly
Appearance	Black
Consistency	Pasty

TEROSON MS 9000 PL HMLC can be used without primer and is a 1-component, very good sag resistant direct glazing adhesive/sealant based on silane modified polyether polymer. The material is free of isocyanates. It crosslinks to a rubber-elastic material under the influence of atmospheric humidity. The skin formation and curing times are dependent on humidity and temperature, and the curing time also depends on joint depth. By increasing the temperature and moisture these times can be reduced; low temperature as well as low moisture retard the process.

The direct glazing sealant TEROSON MS 9000 PL HMLC is outstanding for the following properties:

- Very good sag resistance
- High elastic and shear modulus (high modulus)
- Excellent adhesion to glass and glass with a ceramic coating without primer
- Good adhesion to commonly used direct glazing materials
- High curing rate
- High UV resistance
- High tensile strength
- low conductive
- Cold application
- Easy handling.

Application Areas:

TEROSON MS 9000 PL HMLC has been designed for primerless high modulus low conductive bonding of front-, rear- and side screens into the body of motor vehicles.

TECHNICAL DATA

Colour:	black
Consistency:	smooth, sag resistant paste
Density, g/cm ³ :	approx. 1.20
Glazing time, min*:	approx. 15 **
Cure rate, mm/24 hrs*:	approx. 3
Shore-A-hardness (DIN 53505):	approx. 70
Tensile strength (acc. to DIN 53504), MPa:	approx. 6
Stress at 100 % elongation (acc. to DIN 53504), MPa:	approx. 4
Shear modulus (DIN 54451), MPa:	approx. 2.5
Elongation at break (acc. to DIN 53504), %:	approx. 220
Volume change (acc. to DIN 52451), %:	<1
Application temperature, °C:	5 to 35
In service temperature range, °C:	-40 to 100
Short exposure (up to 1 h), °C:	120

* DIN 50014 standard climate: 23°C, 50% relative air humidity

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

DIRECTIONS OF USE

Preliminary statement:

Prior to application it is necessary to read the **Material 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.

Pretreatment:

The substrates to be bonded must be dry and free of oil, dust, grease and other dirt. Glass or ceramic coatings are cleaned with Teroson FL+. The layer remaining in the window cut-out has not to be cleaned and is the best surface for effective adhesion (see below). If pretreatment of this remaining layer is indispensable, an evaporation time of at least 30 minutes has to be observed before the sealant can be applied, since the adhesive surface must have fully dried.

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Activation of Pre-coated Windows:

If windows are bonded which have been pre-coated with a PUR-based adhesive/sealant by the glass supplier, pre-coating has to be roughened and then cleaned with Teroson FL+. After an evaporation time of at least 30 minutes, TEROSON MS 9000 PL HMLC is applied as usual, but taking into consideration the layer thickness (approx. 2mm) of the pre-coating.

Processing:

The direct glazing material TEROSON MS 9000 PL HMLC is processed from the cartridge using commercial equipment such as pistols operated manually or by means of compressed-air. When using the Telescope-Pistol Power Line, an operating pressure of approx. 7 bar is required.

STORAGE

Shelf life:

Frost-Sensitive	No
Recommended Storage Temperature, °C	10 to 25
Shelf-life	12 months

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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