Terostat-8597 HMLC

1–component, moisture–curing, direct glazing adhesive/sealant for repair
free from PVC and solvents

Technische Information
Technical Information
Henkel
Teroson

Basis: Polyurethane

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Product Description

Terostat-8597 HMLC is a 1–component, extremely sag–resistant direct glazing adhesive/sealant based on polyurethane, which crosslinks (cures) to a rubber–elastic material under the influence of atmospheric moisture. The skin formation time and the curing time depend on the moisture of the air and the temperature; in addition, the curing time depends on the depth of the joint. An increase in temperature and atmospheric humidity can accelerate skin formation and curing, whereas a lower content of atmospheric humidity and lower temperatures delay the reaction.

The direct glazing sealant is outstanding for the following properties:

– Very good sag resistance
– High elasticity and shear modulus
– Excellent adhesion to glass, glass with a ceramic coating and to painted surfaces, in connection with primer Terostat-8517 H
– Good adhesion to the remaining material
– High curing rate
– High UV resistance in connection with primer Terostat–8517 H
– High tensile shear strength, even after ageing
– Very low electrical conductivity

Application Areas

Bonding of front, rear and side windows into the body of motor vehicles (cars, trucks, busses, driver cabins of tractors/fork lift trucks and special–purpose vehicles). Bonding of side windows made of single–pane glass or insulating glass in bus and rail coach manufacture.

Furthermore, Terostat–8597 HMLC is suitable for all applications which require very high electrical insulation of the adhesive used for the bonding of windows (for example an adhesive compatible with aerials).

Technical Data

1. Terostat-8597 HMLC

Colour:	black
Odour:	weak
Consistency:	smooth, sag-resistant paste
Density:	approx. 1.25 g/cm^3
Solids:	100 %
Curing mechanism:	moisture curing
Cure rate:	approx. 3–4 mm/24 h
(DIN 50014 standard climate:	23°C, 50 % rLf)
Shore-A-hardness (DIN 53505):	approx. 70
Tensile strength (DIN 53504):	approx. 9 MPa
Stress (DIN 53504):	approx. 4 MPa at 100 % elongation
Shear modulus:	approx. 3 MPa
(according to DIN 54451)	
Elongation to break (DIN 53504):	approx. 350 %

Shear strength:	approx. 2 MPa (after 24 h DIN 50014)
(layer thickness 5 mm based on DIN EN 1465)	5–6 MPa (fully cured)
Specific forward resistance (DIN 53482):	approx. 10^{10} Ωcm
Volume change (DIN 52451):	< 1 %
Glazing time:	maximum 25 mins *
Application temperature:	5°C to 35°C
In service temperature range:	-40°C to 90°C
Short exposure (up to 1 h):	120°C

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

2. Terostat-Primer-8517 H

Colour:	black
Density:	approx. 0,98 g/cm^3
Solids:	approx. 36 %
Optimum layer thickness:	50 µm wet
Drying time:	approx. 15 mins
Primer open time:	up to 24 hrs after application

Preliminary remark

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 labelling, the relevant precautions should always be observed.

1. Cleaning

The substrates to be bonded must be dry and free from oil, dust, grease and other dirt. Glass or ceramic coating are cleaned with Cleaner FL, the same applies to painted surfaces. The layer remaining in the window cut–out need not to be cleaned (see below). If, however, cleaning 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 surfaces must have fully dried.

2. Priming

By means of an applicator, a thin layer of primer Terostat-8517 H is evenly applied to the cleaned substrates (glass, ceramic–coated or painted surfaces). The thickness of the wet film should be approx. 0.05 mm. Let the primed surface evaporate for approx. 15 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 must not be primed. Provided that it is not contaminated with dust or grease, the remaining layer is the best adhesive surface, if Terostat-8597 HMLC is used for the new bond.

3. Activation of precoated windows

If windows are bonded which have been precoated with a PUR–based adhesive/sealant by the glass supplier, the activator Terostat-8525 must be used in order to ensure the correct adherence of Terostat-8597 HMLC to the precoating.

By means of a wool applicator, a thin layer of Terostat-8525 is applied to the precoating. Following this, an evaporation time of approx. 15 minutes has to be observed. Subsequently, Terostat-8597 HMLC is applied as usual, but taking into consideration the layer thickness (approx. 2 mm) of the precoating.

Windows precoated with PUR adhesives/sealants are for instance used in many types of cars from VW/Audi.

4. Processing

The direct glazing sealant Terostat-8597 HMLC is processed from the cartridge using commercial equipment such as pistols operated manually or by means of compressed–air. From the Teroson application equipment, for instance the following pistols can be used:

– Telescope Pistol Power Line Art.-Nr. 141.84 S
– Staku Manually–operated Pistol Art.-Nr. 167.65 Y

When using the Telescope–Pistol Power–Line, an operating pressure of min. 8 bar is required.

In driving condition:
If bonding is carried out in line with the US standard FMVSS 208, the vehicle can be used:

with Airbag: 2 hours after the window has been bonded
without Airbag: 1 hour after the window has been bonded.

Storage

Frost-sensitive	no
Recommended storage temp.	10°C to 25°C
Shelf-life	12 months in original packaging

Packaging

Cartridge	310 ml	Art.-Nr. 168.79X IDH–Nr. 450503
Cartridge	150 ml	Art.-Nr. 168.76T IDH–Nr. 450478
Repair Set		Art–Nr. 168.75 S IDH–Nr. 450434
Applicator Set	25 pieces	Art.-Nr. 140.64 M IDH–Nr. 142245

Hazard Indications/
Safety Recommendations/
Transport Regulations see Safety Data Sheet

Important
The above data, particularly the recommendations for application and use of our products are based on our knowledge and experience. Due to different materials and conditions of application which are beyond our k-nowledge and control we recommend strongly to carry out sufficient tests in order to ensure that our products are suitable for the intended processes and applications. Except for wilful acts any liability based on such recommendations or any oral advice is hereby expressly excluded.

This Technical Data Sheet supersedes all previous editions.

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