High-modulus, low-conductive direct glazing adhesive/sealant for repair

Basis: Polyurethane Issue: 2003-02-21

# **Product Description**

The product is a pasty 2–component sealant /adhesive for direct glazing. It is based on polyure-thane. After processing it cures to a rubber–elastic material. The cured material has a high shear modulus and very low conductivity.

The product cures extremely fast. Curing does not depend on the atmospheric moisture and is relatively independent of the surrounding temperature.

The direct glazing adhesive/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 remaining PUR material
- Extremely fast curing
- High UV resistance in connection with primer Terostat-8517 H
- High tensile shear strength, even after ageing
- Very low electrical conductivity
- Easy to use

#### **Application Areas**

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

#### **Technical Data**

#### 1. 2-K-Terostat-8600 2-K HMLC

Colour: black Consistency: paste

Density: approx. 1.2 g/cm<sup>3</sup>

Solids: 100 %

Glazing time approx. 10 min. \*
Shore-A-hardness (DIN 53505): approx. 60
Tensile strength (DIN 53504): approx. 10 MPa

Stress (DIN 53504): approx. 5,7 MPa at 100 % elongation

Shear modulus: approx. 3 MPa

(according to DIN 54451)

Elongation to break (DIN 53504): approx. 370 %

Shear strength: approx. 3,9 MPa (layer thickness 5 mm)

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(based on DIN EN 1465)

Volume change (DIN 52451): < 1 %
Warm up time in warming Box 30 mins

In service temperature range: -40°C bis 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/cm³
Solids: approx. 36 %
Optimum layer thickness: 50 µm wet
Drying time: approx. 30 mins

Primer open time: up to 24 hrs after application

#### 3. Cartridge Preheating unit

Weight: approx. 300 g

Heating capacity at 230 V: 70W

Resistance: approx. 530  $\Omega$  Final temperature in cartridges: maximum 65°C Approval: GS and VDE sign

#### **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 PUR layer remaining in the window cut—out need not be cleaned. If, however, cleaning of this remaining layer is indispensable, an evaporation time of **at least 30 minutes** has to be observed before the adhesive/ 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 at least 30 minutes before the direct glazing adhesive/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-8600 2-K 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-8600 2-K 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-8600 2-K 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

Prior to its use, the cartridge containing the A–component of Terostat-8600 2-K HMLC must be warmed in the cartridge warming box for at least 30 minutes. Simultaneously, the cartridge containing the B–component is laid onto the warming box. **Bear in mind**: Should very large windows be bonded, the supplementary cartridge (150 ml) is also conditioned in the warming box. This supplementary cartridge must be exchanged for the emptied 310–ml cartridge within one minute. The content of the B–component is sufficient for both a 310–ml and a 150–ml cartridge. Immediately before the ap-

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plication, the B-component is fully screwed onto the opened cartridge in the cartridge set. Then processing is carried out using the COX Sherborne HP compressed-air pistol at a pressure of 6–7 bar.

The vehicle can be used: 15 minutes after the window has been bonded (in line with the US stan-

dard FMVSS 208).

The vehicle can be used: 60 minutes after the window has been bonded.

Evidence has been provided by the crash test performed in accordance with the Euro NCAP standard (64 km/h, 40% overlap).

### **Storage**

Frost-sensitive no

Recommended storage temp. 10°C to 25°C

Shelf-life 12 months in original packaging

**Packaging** 

Repair set Art-Nr. 164.74 G

IDH-Nr. 424045

Cartridge 150 ml Art–Nr. 166.32 D

IDH-Nr. 413909

Cartridge preheating box Art-Nr. 131.17 H

IDH-Nr. 211556

**Hazard Indications/** 

Safety Recommendations/ see Safety Data Sheet

**Transport Regulations** 

# 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 knowledge 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.

Germany: UK:

Henkel Loctite Adhesives Ltd.

Watchmead

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Henkel KGaA Welwyn Garden City
D-40191 Düsseldorf Herfordshire AL 7 1 JB
Telefon (06221) 704-0 Telefax (06221) 704-698 Telefax (01707) 35 89 00

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