



## Technical Data Sheet

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### Terokal-9225SF



Two-Component Adhesive  
for the Repair of Plastic Parts  
fast curing

Base: Polyurethane

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#### Product Description

Terokal-9225SF is a polyurethane-based two-component adhesive which cures at room temperature. For accelerated curing a temperature increase is recommended (60 - 70°C). The product is supplied in a convenient twin cartridge and is rapid-curing. Terokal-9225SF can be coated with Terotex-Super 3000, Terotex-Super 3000 Aqua, Variodur classic, Variodur aqua and be painted with normal commercial car repair refinish paints.

When applying Terokal-9225SF the use of primer Terokal-150 is absolutely necessary. Use woven glass fibre mat for reinforcement, galvanised metal strip can be used (not recommended by insurance companies).

#### Application Areas

Terokal-9225SF is used in garages for the repair of bumpers, trim and body parts made of plastic, e. g. PP/ EPDM, SMC, PC, PA, ABS and PUR.

#### Technical Data

	Component A	Component B
Colour:	yellow	black
Density:	approx. 1.4 g/cm <sup>3</sup>	approx. 1.7 g/cm <sup>3</sup>
Solids (3 h at 100°C):	> 98 %	> 98 %
Mixing ratio: by volume:	100	: 100
<b>Mixture (Component A + B)</b>		
Colour:	dark grey	
Pot life:	approx. 2 Min.	
Tack-free time:	approx. 6 Min.	
Curing time at 23°C:	approx. 1.5 hrs.	
Shore A hardness:	approx. 90	
Grindability:	grinding possible: under the following curing conditions: after 3 to 4 min. curing at 60°C to 70°C and cooling down to room temperature afterwards or after 15 mins. at room temperature	
Shear strength at 23°C (measured after 2 d at 23°C):	approx. 13 MPa	
Layer thickness:	1 mm	
Cross head speed:	100 mm/min	
Paintability:	good with normal commercial 2C-car refinish paints and Terotex-Super 3000, Terotex-Super 3000 Aqua, Variodur classic, Variodur aqua, (after priming with Terokal-150!)	
Application temperature:	15°C to 30°C	
In service temperature range:	-40°C to 80°C	

## **Preliminary statement**

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 labeling, the relevant precautions should always be observed.

### **1. Pretreatment of the adhesion surfaces**

#### **1.1. Precleaning and cleaning**

The parts to be bonded must be free from oil, grease, moisture, dirt and release agents. Pre-cleaning with a high pressure injection cleaner is recommended. After drying (oven, infrared) the parts are cleaned with Cleaner-FL.

Badly deformed parts should be reshaped with a hot air dryer.

#### **1.2. Sanding and cleaning**

Damaged plastic parts are sanded on the face side with a narrow belt sander (grit P 150), 1 - 2 cm V-shaped. In cases of cracks a hole must be drilled at the end of the crack to avoid further cracking. The remaining areas and the rear side are sanded with an eccentric sander (grit P 150).

Finally the sanded parts are cleaned with Cleaner-FL.

#### **1.3. Priming**

Terokal-150 is applied from the spray can to both sides in a thin layer. Prior to application of Terokal-9225SF a flash-off time of approx. 10 minutes has to be observed

## **2. Application of the adhesive**

### **2.1. Inserting the cartridge**

Push the lock on the Teromix hand gun upwards and pull the plunger fully backwards. Open the lid of the gun, swing it downwards and insert the cartridge into the lid. Close the lid together with the cartridge. Remove the two caps from the cartridge and dispense product until both components are flowing out simultaneously. Thereafter, attach the static mixer and cut the tip to provide for the desired bead size.

### **2.2. Applying Terokal-9225SF**

When the gun lever is operated, the material is forced through the static mixer and the two components are automatically mixed. (Do not use the first 2 cm of extruded adhesive bead, these might not be perfectly mixed.) After application of primer Terokal-150, Terokal-9225SF is applied directly onto the substrate. Any excess material should be removed immediately after application.

If not all product was used, leave the static mixer attached to the cartridge. For further use of the product, simply remove the mixer and install a new one (see 2.1.).

### **2.3. Reinforcing**

Terokal-9225SF is first applied as two continuous beads to the rear side of the plastic parts adjacent to both sides of the crack (bonding width 100 mm minimum). To reinforce the beginning of the crack use woven glass fibre mat. Finally Terokal-9225SF is applied and the surface is smoothed. Assure that the adhesive is pressed through the crack to the face side to guarantee a safer bond and avoid air entrapments.

For large damages, e. g. holes, the use of woven glass fibre mat is recommended for reinforcing. In the case of simple cracks Terokal-9225SF can be applied in one step to both, the face side and the rear side. On the face side material should be applied in excess. During applying Terokal-9225SF keep the mixer tip within the material to avoid air entrapments. Finally the surface can be smoothed air-free by spatula.

For more complicated damages, however, the adhesive should be applied in two steps, rear side and face side cured separately.

### **2.4. Curing / Grindability**

Curing can take place at room temperature, for shorter curing times, however, a heat cure is recommended. To get grindability the parts bonded with Terokal-9225SF are warmed-up to 60 - 70°C for minimum 3 - 4 minutes (e. g. oven, infra-red heater).

## 2.5. Cooling

For a fast follow-up accelerated cooling to room temperature is recommended, e. g. with air flow.

## 3. Pretreatment for Finish

### 3.1. Sanding and Cleaning

Excessive adhesive is sanded back on the visible side with an eccentric sander (grit P 150). Finally the part will be re-sanded with fine paper (e.g. P180/P240), sanding dust residues are removed. Thereafter the sanded parts are cleaned with Cleaner-FL.

### 3.2. Priming

To the parts treated in that manner primer Terokal-150 is applied from the spray can in a thin layer. Flash-off time: approx. 10 minutes.

### 3.3. Smoothing and filling

Further treatment (e.g. filling) has to be done according to paint manufacturers directions for painting plastics.

## 4. Finish

### 4.1. Priming

Prior to painting of the parts primer Terokal-150 is applied from the spray can in a thin layer. Flash-off time: approx. 10 minutes.

### 4.2. Texture painting

The original texture of the plastic parts can be re-created by coating with Terotex-Super 3000, Terotex-Super 3000 Aqua, Variodur classic, Variodur aqua. Various textures can be obtained by varying spraying pressure and nozzle size of the spraying gun. See technical Data sheets of Terotex-Super 3000, Terotex-Super 3000 Aqua, Variodur classic and Variodur aqua.

### 4.3. Painting

Painting of the bonded plastic parts is executed according to the application directions of the paint manufacturers.

## 5. Cleaning

Fresh, non-cured material (e. g. for cleaning tools, cleaning contaminations on the substrates etc.) may first be removed dry and then cleaned off with a suitable solvent (e.g. acetone, ethyl acetate, Cleaner-D). Cured adhesive can only be removed mechanically.

## Storage

Frost-sensitive	no
Recommended storage temperature	10°C to 25°C
Shelf-life	12 months

## Packaging

Bag with twin cartridge	2 x 25 ml	Art.-No. 172.53 D(D/GB/F/NL) IDH 882088
Teromix-Hand Gun		Art.-No. 117.16 K IDH 150035
Static Mixer		Art.-No. 117.55 C IDH 142242

**Hazard Indications/  
Safety Recommendations/  
Transport Regulations**

see Safety Data Sheet

### **Important**

The data above, particularly the recommendations for application and use of our products is based on our knowledge and experience. Due to different materials and conditions of application which are beyond our knowledge and control we strongly recommend carrying out sufficient tests in order to ensure that our products are suitable for the intended process 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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