Terokal-9225

Two-Component Adhesive
for the Repair of Plastic Parts

Product Information
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Basis: Polyurethane

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Product Description

Terokal-9225 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-9225 can be coated with Terotex-Super 3000 and be painted with normal commercial car repair paints.

When applying Terokal-9225 the use of primer Terokal-150 is absolutely necessary. Galvanised sheet metal is recommended for reinforcement.

Application Areas

Terokal-9225 is used in garages for the repair of bumpers, customising 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. 1.43 g/cm^3	approx. 1.7 g/cm^3
Solids (3 h at 100°C):	> 98 %	> 98 %
Mixing ratio by volume:	100 :	100

	Mixture (components A + B)
Colour:	dark grey
Pot life (100 g, 23°C):	approx. 10 mins
Tack-free time:	approx. 30 mins
Curing time at 23°C:	approx. 5 hrs (85 % of final strength)
Shore A hardness:	ca. 90
Grindability:	grinding possible: under the following curing conditions: after 15 mins curing at 60°C to 70°C and cooling down to room temperature afterwards or after 6 hrs at room temperature
Shear strength at 23°C (measured after 2 d at 23°C):	ca.13 MPa
Layer thickness:	1 mm
Cross head speed:	100 mm/min
Paintability:	good with normal commercial 2C-car repair paints and Terotex-Super 3000 (after priming with Terokal-150!)
Application temperature:	15°C to 25°C
In service temperature range:	-40°C to 80°C

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. Pretreatment of the adhesion surfaces

1.1. Precleaning and cleaning

The parts to be joined 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 relocated and straightened with a hot air dryer.

1.2. Sanding and cleaning

Damaged plastic parts are sanded on the face side with a narrow belt sander (grain 120), 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 (grain 120).

Finally the sanded parts are cleaned with Cleaner-FL.

1.3. Priming

Terokal-150 is applied from the spray can in a thin layer. Prior to application of Terokal-9225 a flash-off time of 10–15 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. removw 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-9225

When the gun lever is operated, the material is forced through the mixer nozzle and the two components are automatically mixed. (Do not use the first 2 cm of extruded adhesive bead, for these might not be perfectly mixed.) After application of primer Terokal-150, Terokal-9225 is applied direct 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.

2.3. Reinforcing

Terokal-9225 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). For fixing the crack a galvanised strip of sheet metal is attached with a clamp, adding further strips in regular distances. Finally Terokal-9225 is applied onto the sheet metal strips, the surface is smoothed by putting down a PE foil. Assure that the adhesive is preferably pressed through the crack to the face side to guarantee a safer bond and avoid air entrapments.

For extensive damages, e. g. holes, the use of glass fibre mat is recommended without eliminating the additional reinforcing with galvanised sheet metal strips.

In the case of simple cracks Terokal-9225 can be applied in one step to both, the face side and the rear side. On the face side material should be spread proud. Finally the surface can be smoothed air-free by applying a PE foil.

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

2.4. Curing

Curing can take place at room temperature, for shorter curing times, however, a heat cure is recommended. For this purpose the parts bonded with Terokal-9225 are warmed-up to 60–70°C for minimum 15 minutes (e. g. oven, infra-red radiator).

2.5. Cooling

For a fast subsequent treatment of the parts accelerated cooling to room temperature is recommended, e. g. with water.

3. Pretreatment for Finish

3.1. Sanding and Cleaning

Excessive adhesive is mostly removed from the visible side with an eccentric sander (grain 120). Finally the part will be re-sanded with sanding paper 600, sanding dust residues are blown off with compressed air. 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: 10–15 minutes.

3.3. Smoothing and filling

Further treatment has to be executed according to the application directions for plastic painting, as directed by the paint manufacturers.

4. Finish

4.1. Primiming

Prior to painting of the parts primer Terokal-150 is applied from the spray can in a thin layer. Flash-off time: 10–15 minutes.

4.2. Texture painting

The original texture of the plastic parts can be re-established by coating with Terotex-Super 3000.Various textures can be obtained by varying spraying pressure and nozzle orifice of the spraying gun. Variable surface gloss of the textured plastic can be matched by adding 40–50 % of 2C car repair paint hardener or a mixture of 2C car repair paint with hardener (2:1), in both cases by adding of a small amount of base enamel.

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 temp.	10°C to 25°C
Shelf-life	12 months

Packaging

Bag with twin cartridge	2 x 25 ml	Art.-No. 109.91 X (D/GB/F/NL)
Plastic Repair Box	Set	Art.-No. 134.11 C (D/GB/F/NL)
Teromix-Hand Gun		Art.-No. 117.16 K
Static Mixer		Art.-No. 117.55 C

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 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.

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