

Terostat-9100

1C PUR Car Body Sealant

Elastic One Component Adhesive/Sealant
Paintable

Basis: Polyurethane

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Product Description

Terostat-9100 is a gun-grade, one component adhesive/sealant based on polyurethane, which cures by reaction with moisture to a soft elastic product. 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.

Terostat-9100 exhibits the following properties:

- good adhesion to painted surfaces, many metals and plastics without primer
- can be overpainted
- sag resistant
- high curing speed
- excellent elasticity.

Application Areas

Terostat-9100 is used for elastic sealing and bonding, particularly seam sealing and sealing of narrow joints in the following areas:

- vehicle and vehicle body manufacture
- railway carriage and container manufacture
- vehicle body build-ups
- ship and boat building
- metal and sheet metal manufacture
- bonding and sealing of flange connections
- bonding of customising parts like spoilers and trim rails

for interior and exterior application. (Exterior seams should be painted in general.) Temporary fixation of the joint with adhesive tapes or spacers is advised until the adhesive/sealant has completely cured. Terostat-9100 offers the important advantage that both bonding and sealing functions can be achieved with one product. Terostat-9100 is not generally suitable for constructive bonding.

Technical Data

Colour:	white, grey
Odour:	aromatic (no smell after curing)
Consistency:	paste, brushable – can also be applied by spatula
Density:	approx. 1.20 g/cm ³
Sag resistance:	very good
Curing mechanism:	moisture curing
Skin formation time:	approx. 20–45 mins
(DIN 50014 standard climate:	23°C, 50 % rh)
Cure rate:	approx. 4 mm/24 h
(DIN 50014 standard climate:	23°C, 50 % rh)
Shore-A-hardness (DIN 53505):	approx. 45
Tensile strength (DIN 53504):	approx. 1.7 MPa

Elongation to break (DIN 53504):	approx. 350 %
Tear resistance (DIN 53515):	approx. 11 N/mm
G-modulus:	approx. 0.65 MPa
Application temperature:	5°C to 35°C
In service temperature range:	-40°C to 90°C *
Short exposure (up to 3 hr.):	120°C

* up to 70°C hardly no changes of the mechanical properties

Adhesion

Good adhesion without primer to primed and painted vehicle body sheet metal, to glass/glass ceramic, wood (untreated, varnished and painted), plastics such as PUR-RIM, PBTP, various polymer blends, GF-polyester etc. Grinding of the surface is recommended for untreated sheet metal.

Depending on substrate surfaces, the use of a primer as an adhesion promoter to provide optimum adhesion of Terostat-9100 may be necessary.

In the case of stainless steel, aluminium and copper, adhesion can be significantly improved by using Primer-102.

Due to the large number of primer paints, paints, various plastic surfaces etc. we recommend application trials before use. Significant improvement in adhesion to plastic and metal surfaces can be achieved almost always by carefully cleaning with a suitable solvent.

We also recommend trials before use on all substrates not named above.

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 labeling, the relevant precautions should always be observed.

Pretreatment

The surfaces to be bonded or sealed must be dry, free of oil, dust, grease and other contaminants. For cleaning we recommend Cleaner-FL of the Teroson program, because other cleaners may contain alcohols, surfactants or amines which can lead to incompatibilities (see last page).

Application

Application of Terostat-9100 from 310-ml-cartridges is made with the relevant Teroson manual or air pressure pistols, from 200-ml-Presspack cartridges with the relevant Teroson manual Presspack pistol. Teroson recommends the use of

– Teleskop Pistol Power-Line	Art.-No. 141.84 S
– Teleskop-Pistol Multi-Press	Art.-No. 195.51 B
– Teroson Staku Hand Pressure Pistol	Art.-No. 167.65 Y
– Teroson Presspack Hand Pressure Pistol	Art.-No. 157.00 Q

For air pressure application 2–5 bar are necessary.

Low material temperatures of the sealant will lead to an increase of viscosity, resulting in a lower extrusion rate. This can be avoided by bringing the sealant up to room temperature prior to application.

If substrates are too cold temperature may fall below dew point causing condensation. This can be avoided by bringing the substrates up to room temperature in time.

After application, Terostat-9100 can be smoothed with a spatula dipped in water or Cleaner-FL.

Painting properties

After skin formation Terostat-9100 can be painted with 1K and 2K non-metallic paints based on Alkyd and Acrylate as well as with metallic paints. Paint compatibility has to be tested before use.

Corrosion protection primer paints may only be applied to cured Terostat-9100, as these usually permit only very low water vapour transmission. In cases where accelerated paint drying in a drying oven or with IR radiation is required a prereaction/waiting period of minimum 30 minutes must be respected. Only thereafter painted Terostat-9100 may be heated up to 70°C maximum.

Incompatibility

Nitro repair paints applied from aerosol cans and alcohol based paints, diluents and accelerators are not compatible with fresh Terostat-9100 (no curing).

Freshly applied Terostat-9100 is not compatible with MS materials like Terostat-9120 or Terostat-9320 because alcohols will block curing. PUR products must be completely cured prior to coating with MS materials.

Storage

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

Packaging

Presspack Cartridge	200 ml white	Art.-No.153.65 B (D/GB/F/NL)
Cartridge	310 ml white	Art.-No.112.72 C (D/GB/F/NL)
Cartridge	310 ml white	Scandi-Code 226
Cartridge	310 ml grey	Art.-No.129.19 S (D/GB/F/NL)

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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