

TEROSON® PU 9225 SF

March 2021

Product description

 $\mathsf{TEROSON}^{\circledR}$ PU 9225 SF provides the following product characteristics:

Technology	Polyurethane
Chemical Type	Polyurethane
Appearance (resin)	Yellow paste
Appearance (hardener)	Black paste
Appearance (mixed)	Dark grey paste
Components	Two-components – requires mixing
Viscosity	Medium
Mix ratio, (by volume) Resin : Hardener	1:1
Cure	Room temperature cure after mixing
Application	Plastic parts bonding

TEROSON[®] PU 9225 SF is a polyurethane based two-component adhesive which cures at room temperature. For accelerated curing it is recommended to increase the temperature up to 60 to 70°C after bonding. The product is supplied in a convenient twin cartridge and is rapid curing. TEROSON[®] PU 9225 SF can be painted with standard commercial car repair refinishing paints. When applying TEROSON[®] PU 9225 SF to plastics the use of an approved Henkel primer is necessary, like TEROSON[®] 150. Typical applications include the repair of bumpers, trim and body parts made of plastic e.g. PP/EPDM, SMC, PC, PA, ABS, and PUR.

Typical properties of uncured material

Resin

Specific Gravity @ 23°C 1.6

Hardener

Specific Gravity @ 23°C 1.7

Typical curing performance

Curing @ 23°C

Pot life (23 g), minutes 2
Tack-free time (50% RH), minutes 6
Curing time, hours 1.5
Layer thickness, 3 mm

Typical performance of cured material

Physical properties

Shore A hardness 90
Grindability good

Adhesive properties

Cured for 2 days @ 50% RH

Layer thickness, 1 mm Cross head speed, 10 mm/min

Shear strength, N/mm² (psi) 13 (1,900)

Paintability good

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Directions for use

Pre-treatment

- 1. The parts to be bonded must be free from oil, grease, moisture, dirt and release agents.
- 2. Pre-cleaning with a high pressure injection cleaner is recommended.
- 3. After drying the parts should be cleaned and pretreated with TEROSON® VR 10.
- 4. Damaged plastic parts have to be sanded on the face side with a narrow belt sander (grit P 80 to 120) to grind a V-groove (1 to 2 cm).
- 5. Finally the sanded parts should be cleaned and pretreated with TEROSON® VR 10.
- 6. When applying TEROSON® PU 9225 SF to plastics the use of primer TEROSON® 150 in a thin layer is necessary. Evaporation time is approx. 10 minutes.



Application

- 1. Insert the cartridge into a suitable application gun.
- 2. Apply pressure to the cartridge(s) to ensure a simultaneous and homogeneous flow of both components.
- 3. Thereafter, attach the static mixer and cut the tip to provide for the desired bead size.
- 4. Discard the first 2 cm of extruded adhesive bead.
- 5. TEROSON® PU 9225 SF is applied directly to the substrates.
- Any excess material should be removed immediately after application.
- 7. If material is left in the cartridge leave the static mixer attached.
- 8. For further use of the product, simply remove the mixer and install a new one.
- 9. In case of plastic repair the use of woven fiberglass mat is recommended for reinforcing,
- 10. In the case of simple cracks TEROSON® PU 9225 SF can be applied in one step to both, the face side and the rear side.
- 11. For more difficult damages, the adhesive should be applied to both sides separately. Start with two continuous beads on the rear side and place them to both sides of the damaged area (bond with minimum 100 mm).
- 12. For large damages e.g. holes, it is recommended to reinforce the complete damaged area with woven fibre glass mat by incorporating the mat in the beads. Reinforce initial crack areas with woven glass fibre mat in the same way.
- 13. Then apply TEROSON® PU 9225 SF on top of the reinforced matting and smooth the surface. Ensure that the adhesive is pressed through the crack and the fibre glass mat to the front side to guarantee a reliable bonding.
- 14. During applying TEROSON® PU 9225 SF, keep the mixer tip within the material to avoid air inclusions. Apply an excess of TEROSON® PU 9225 SF in the same way to the front side.

Curing

- 1. Curing occurs at room temperature.
- For accelerated curing it is recommended to use a heat source.
 To get a faster grindability the parts bonded with TEROSON®
 PU 9225 SF can be warmed up to 60 to 70 °C for minimum 3 to 4 minutes.
- 3. After curing of the material these following steps are necessary: Sanding and cleaning and pretreating (P150/ P240, TEROSON® VR 10; priming (TEROSON® 150); further treatment e.g. filling, painting has to be carried out according to paint manufacturers directions for painting plastics.

Cleaning

- Freshly applied and uncured material should be removed with a dry cloth and then cleaned off with a suitable solvent.
- 2. Cured adhesive can only be removed with a machine.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal storage: 10°C to 25°C. Storage below 10°C or greater than 25°C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

Product specification

The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

Approval and Certificate

Please contact Henkel representative for related approval or certificate of this product.

Data ranges

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.

Temperature/Humidity Ranges: 23° C / 50% RH = $23\pm2^{\circ}$ C / $50\pm5\%$ RH

Conversions

 $(^{\circ}C \times 1.8) + 32 = ^{\circ}F$

kV/mm x 25.4 = V/mil mm / 25.4 = inches μ m / 25.4 = mil N x 0.225 = lb N/mm x 5.71 = lb/in N/mm² x 145 = psi MPa x 145 = psi N·m x 8.851 = lb·in N·m x 0.738 = lb·ft N·mm x 0.142 = oz·in mPa·s = cP

Disclaime

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Reference 1

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