

## TEROSON® EP 5010 TR

Known as Tin Solder Replacement  
November 2024

### PRODUCT DESCRIPTION

TEROSON® EP 5010 TR Tin Solder Replacement provides the following product characteristics:

<b>Technology</b>	Epoxy
Chemical type	Epoxy
Appearance (resin)	Dark grey
Appearance (hardener)	Yellowish
Appearance (mixed)	Grey
Components	Two components – requires mixing
Viscosity	Medium to high
Mix ratio, (by volume) Resin : Hardener	2 : 1
<b>Cure</b>	Room temperature cure after mixing, accelerated cure possible at elevated temperature
<b>Application</b>	Car body rebuilding
Application temperature	10 to 35°C (50 to 95°F)
In service temperature	-40 to 90°C (-40 to 194°F)
Specific benefits	<ul style="list-style-type: none"> <li>Used for body rework, rebuilding of metal car body surfaces</li> <li>Excellent adhesion to metals</li> <li>Excellent corrosion protection</li> <li>Excellent grinding and re-building properties</li> <li>Lead free, solvent free</li> <li>No shrinkage</li> </ul>

TEROSON® EP 5010 TR is a solvent free, two-component, high strength rebuilding compound based on epoxy resins with low density. TEROSON® EP 5010 TR has been specially developed for body rework and for rebuilding of car body metal surfaces to substitute traditional tin soldering. It is free of isocyanate, silicones and lead. The product has no shrinkage and is excellent for grinding. TEROSON® EP 5010 TR shows no sagging and has very good reshaping properties.

The material is used as a plumb free tin-solder replacement to fill and smooth damages. TEROSON® EP 5010 TR works on steel and aluminum.

### TYPICAL PROPERTIES OF UNDRIED MATERIAL

**Resin**  
Specific gravity @ 23°C 0.8

**Hardener**  
Specific gravity @ 23°C 0.6

### TYPICAL CURING PERFORMANCE

**Working Time**  
Working Time @ 23°C, minutes 90

**Final Cure Time**  
Final Cure, @ 23°C, hours 24  
Final Cure, Accelerated Cure @ 60°C, hours 1

### TYPICAL PERFORMANCE OF CURED MATERIAL

#### Physical Properties

Specific Gravity @ 23°C 0.7  
Water Absorption  
Weight gain, 24h at 98% RH, 40°C <0.5%

### 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:

#### Pretreatment:

- Surfaces must be free of oil, grease, dust, or any other contaminant. Pretreat bonding surfaces with TEROSON® VR 10 and a lint-free cloth.
- Remove old paint layers, body fillers from existing body parts to make sure they are back to bare metal and free of any contamination.
- Grind and rebuild the surface mechanically, as required.
- Surfaces must be cleaned again to remove grinding dust. Pretreat the surface with TEROSON® VR 10. Allow the prepared surface to evaporate for approx. 5 minutes.

**Application:**

1. Unscrew the coupling ring and remove the cap from TEROSON® EP 5010 TR cartridge. Before attaching the static mixer to the cartridge, squeeze out a small amount of material until both adhesive components run equally. This is necessary to achieve a good mix of the two components.
2. Attach the static mixer and tighten the threads. Insert the cartridge into the application dispenser. Only use dispensers that are equipped with a piston rod. (LOCTITE® HD14 Handheld Pneumatic Dual Cartridge Dispenser or LOCTITE® HD14 Handheld Manual Dual Cartridge Dispenser).
3. When mixed, TEROSON® EP 5010 TR is grey in color. Discard first 5 cm (~2 inches) of adhesive.
4. Apply TEROSON® EP 5010 TR leveling compound to the rebuilt area in a way that the area is sufficiently filled with excessive material (between 3 and max. 5mm). Keep the nozzle tip inside the material to avoid air inclusion.
5. Spread TEROSON® EP 5010 TR with a spreader to rebuild the original shape.
6. TEROSON® EP 5010 TR can be used on steel and aluminum panels and as part of the preparation: with new panels, the 'e-coat' must be removed from the bonded area and leveling compound to be applied and spread to cover the bare metal.
7. It may be necessary to change the static mixer if no material has been passed through it in over 30 minutes.

**Curing:**

1. Cure speeds may vary based on adhesive and substrate temperatures.
2. TEROSON® EP 5010 TR cures without additional exterior heat only by chemical reaction after mixing resin and hardener at room temperature.
3. The more TEROSON® EP 5010 TR applied, the higher the heat reaction. For accelerated curing it is recommended to use a heat source (convection oven, infra- red or similar). Do not use a hot air gun for heating.
4. 60°C object temperature for 60 minutes is recommended.
5. Sand the material with P150 paper to achieve a smooth surface contour and rebuild original shape.

**Cleaning:**

1. It is important to clean up excess adhesive from the work area and application equipment before it hardens.
2. Remove excess adhesive immediately with spatula or cloth and TEROSON® VR 10. Cured adhesive can only be removed mechanically.

**Painting:**

1. Once curing and rebuilding completed, TEROSON® EP 5010 TR can be painted with common automotive paints systems, followed by painting procedures.

**Storage**

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

**Optimal Storage: 15°C to 35°C (59°F to 95°F).**

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel 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±2°C / 50±5% RH

**Conversions**

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$   
 $\text{kV/mm} \times 25.4 = \text{V/mil}$   
 $\text{mm} / 25.4 = \text{inches}$   
 $\mu\text{m} / 25.4 = \text{mil}$   
 $\text{N} \times 0.225 = \text{lb}$   
 $\text{N/mm} \times 5.71 = \text{lb/in}$   
 $\text{N/mm}^2 \times 145 = \text{psi}$   
 $\text{MPa} \times 145 = \text{psi}$   
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$   
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$   
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$   
 $\text{mPa}\cdot\text{s} = \text{cP}$



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