

## TEROSON® VR 4610

Known as Zinc Spray  
August 2023

### PRODUCT DESCRIPTION

TEROSON® VR 4610 provides the following product characteristics:

<b>Technology</b>	Zinc corrosion protection primer
<b>Chemical type</b>	Zinc with epoxy agent
<b>Appearance</b>	Grey
<b>Cure</b>	Room temperature
<b>Application</b>	Corrosion protection
<b>Application Temperature</b>	10 to 25°C (50 to 77°F)
<b>In service temperature</b>	-50 to 130°C (-58 to 266°F)

TEROSON® VR 4610 is a sprayable, fast curing zinc dust corrosion protection primer in an aerosol based on zinc, with an epoxy bonding agent. The material provides optimal protection against corrosion for iron and steel as a result of its electro-chemical interaction. The dry film bonds well to cleaned metal. As a result of its self-healing properties TEROSON® VR 4610 is able to close small lesions and hence offer lasting protection for the steel surfaces. Typical applications include touching up ferrous metal parts after welding and to provide long-term protection of metal assemblies.

### TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific gravity @ 23°C 1.03

### TYPICAL CURING PERFORMANCE

Drying time, minutes 30

### TYPICAL PERFORMANCE OF CURED MATERIAL

Corrosion resistance No corrosion  
salt primer test DIN 50021  
(35°C, salt solution 5%,1000h)

Dry-film thickness, µm 50

Adhesion acc. to DIN 53151 Cross cut  
characteristic  
value GT 0-1

### 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 Material Safety Data Sheet.**

**Use only in a well-ventilated area.**

### Directions for use

#### Pretreatment

1. Surfaces to be treated with TEROSON® VR 4610 have to be cleaned well and rust must be removed.
2. Any old coats of paint or rust converters etc. should not be overspread but should be removed prior to spraying.
3. The areas must be dry and grease, dirt and dust free.
4. Where possible the surfaces should be sanded; steel surfaces are prepared by sand blasting to SA 2.5 according to DIN 55928.

#### Application

1. TEROSON® VR 4610 should not be applied below 10°C (50°F) and above 25°C (77°F) . The temperature of metal surfaces must not exceed 30°C (86°F), however, metal temperature should at least be 3°C above dew point.
2. The material should be at room temperature at time of application.
3. Shake can vigorously, when the steel ball inside the can rattles, continue to shake for approx. 1 minute.
4. Hold can vertically while spraying and apply in two to three crossing patterns at a distance of about 20 to 30 cm (8 to 12 inches).
5. After use the can should be inverted, and the valve activated until the jet is cleared and only propellant is emitted.

#### Drying

1. Both air-drying and oven drying are possible.
2. In the case of air drying, the ambient and object temperature as well as the relative humidity can influence the drying times.

#### Cleaning

1. Remove excess spray immediately with TEROSON® VR 10.
2. Solvents may remove paints.

#### Painting

1. TEROSON® VR 10 is overpaintable.
2. 40 µm layer is over paintable after 6 hours and before 24 hours at minimum.
3. In instances where painting is required, a trial coat should be applied and observed with TEROSON® VR 10.

#### Handling precautions

Product must be handled in a manner applicable to highly flammable materials and in compliance with relevant local regulations. Special care must be taken to avoid contact of the product or its vapour with naked flame or any electrical equipment that is not flame proofed.

It is recommended to check all surfaces for compatibility before use.

**Storage**

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

**Optimal Storage: 5°C to 25°C. Protect from temperatures over 50°C.**

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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Reference 1