

TEROSON VR 4600

Zinc-Spray April 2014

PRODUCT DESCRIPTION

TEROSON VR 4600 provides the following characteristics:

Technology	Sprayable Zinc Dust Corrosion Protection Primer in an Aerosol Can
Base	Zinc with Epoxy Agent

TEROSON VR 4600 is a sprayable, rapid 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 parts and features a high resistance to abrasive wear. It also conducts electricity, in dry conditions. As a result of its self-healing properties TEROSON VR 4600 is able to close small lesions and hence offer lasting protection for the steel surfaces.

Application Areas:

TEROSON VR 4600 is used in vehicle bodywork repairs to galvanize welding points and the joints of those parts which were originally galvanized, in particular those which will not be painted. TEROSON VR 4600 also serves as corrosion protection between welding flanges during MIG and spot welding (20 - 30 µm dryfilm thickness). TEROSON VR 4600 is used in structural steel engineering, in equipment, machinery, boat and appliances manufacture. It is particularly applied when high requirements for corrosion protection and mechanical strain are demanded.

TECHNICAL DATA

(Typical Test Results)

Colour:	grey
Odour	of solvents
Density:	approx. 1.0 g/cm ³
Drying time	approx. 30 min.
Corrosion resistance	
salt primer test DIN 50021	no corrosion
(35°C, salt solution 5%, 1000h)	
Dry-film thickness	50 µm
Adhesion acc. to DIN 53151	Cross cut characteristic value GT 0-1
Cleaning	Acetone or TEROSON D
In service temperature and temperature resistance	-50 to 500 °C (primer fully dried)

PRELIMINARY STATEMENT:

Prior to use 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

Surfaces to be treated with TEROSON VR 4600 have to be cleaned well and rust must be removed. In addition any old coats of paint or rust converters etc. should not be overspread, but should be removed prior to spraying. The areas must be dry and grease, dirt and dust free. Where possible the surfaces should be sanded; steel surfaces are prepared by sand blasting to SA 2.5 according to DIN 55928.

Application conditions

TEROSON VR 4600 should not be applied below 10°C and above 80°C relative humidity. The temperature of metal surfaces must not exceed 30°C, however, metal temperature should at least be 3°C above dew point.

Application:

The material should have room temperature at time of application. Shake can well, continuing for 1 minute after the ball-bearing becomes audible. Hold can vertically while spraying and apply in two to three crossing patterns at a distance of about 20 to 30 cm.

After use the can should be inverted and the spray activated until the jet is cleared and only propellant is emitted.

Drying

Both air-drying and oven drying are possible. Where air-drying is used the ambient temperature, the effective metal temperature and also the relative humidity can affect drying times. Forced oven drying assists curing.

The following data can be used as guidelines for

air-drying:

Dust-dry: approx. 30 min.

Touch-dry: approx. 60 min.

Cured: after 12 - 24 hrs.

for oven drying:

Ventilation time: approx. 10 min.

Baking time: approx. 30 min.

Baking temperature: 60 - 80°C

Painting

In instances where painting is necessary, a trial coat should be applied to the thoroughly dried TEROSON VR 4600 coating to test compatibility. Good results are obtained with one component finish paints.

Cleaning

Remove splashes immediately with acetone or TEROSON VR 10.

Attention: Solvents may remove paints.

Classification:

Please refer to the corresponding **Material Safety Data Sheets** for details on:

Hazards identification

Transport information

Regulatory information

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.1

Storage:

Frost sensitive	no
Recommended storage temperature	10 to 25 °C
Shelf life	18 months in original packaging

Protect from temperatures over 50 °C !!

Disclaimer**Note:**

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned

herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage

Henkel AG & Co. KGaA
40191 Düsseldorf, Germany
Phone: +49-211-797-0

Henkel Corporation
Rocky Hill, CT 06067, USA
Phone: +1-860-571-5100

Henkel (China) Co. Ltd.
201203 Shanghai, China
+86.21.2891.8000

For more information, please contact us on www.henkel.com