

TEROSON MS 9320

April 2013

PRODUCT DESCRIPTION

TEROSON MS 9320 provides the following product characteristics:

Technology	MS [®] - Polymer
Product Type	Multi-functional sealant 4in1
Components	One-component
Cure	Humidity
Application	Assembly
Appearance	Black, Grey, Ocher
Consistency	Pasty

TEROSON MS 9320 Multi-functional sealant "4 in 1" is a sprayable sealant based on MS[®]-Polymer, which cures by reaction with humidity to an elastic, abrasion resistant 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 humidity, the reaction time can be reduced; low temperatures as well as low humidity retard the process. TEROSON MS 9320 Multi-functional sealant "4 in 1" displays the following properties:

- repaired seams have the same appearance as the original
- free of isocyanate, silicone and PVC
- good adhesion to metals, primers and top coats
- good paint compability, also to alcohol containing paints
- sag resistant
- sprayable and brushable
- fast through curing
- UV resistant
- high ageing resistance
- spotweldable if not cured

In addition, the material possesses modest sound damping properties.

Application Areas:

TEROSON MS 9320 Multi-functional sealant "4 in 1" is recommended for the sealing of automobile seams in the repair shop in the areas of:

- engine compartment
- boot
- passenger cabin.

The structure of nearly all original seams can be simulated by

the use of the Telescope-Pistol Mult-Press air assisted spray pistol.

TEROSON MS 9320 Multi-functional sealant "4 in 1" can also be used on larger areas to repair or substitute PVC based underbody or stone chip protection coatings.

TECHNICAL DATA**Density and SG:**

Colour:	grey, ocher, black
Odour:	characteristic
Density, g/cm ³ :	approx. 1.5
Consistency:	paste

Miscellaneous:

Sag resistance:	very good
Curing mechanism:	humidity curing
Skin formation time, min*:	approx. 10
Cure rate, mm/24 hrs*:	approx. 3
Shore-A-hardness (DIN 53505):	approx. 60
Application temperature, °C:	15 to 35
Paint compatibility:	can be painted wet-in-wet with car repair paints
Adhesion:	good adhesion to sheet metal (in degreased untreated, galvanized, EC or top-coat painted condition, including metallic paints), PVC underbody coating, polyester, PP/EPDM (trials are recommended)
Chemical resistance:	resitant to light, PVC plasticizers and (short term) to petrol
In service temperature range, °C:	-40 to 90
Short exposure (up to 3 h), °C:	130

* DIN 50014 standard climate: 23°C, 50% relative air humidity

TEROSON MS 9320

April 2013

DIRECTIONS OF USE

Preliminary statement:

Prior to application it is necessary to read the **Material 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.

Pre-Treatment:

The substrates must be clean, dry and grease free. For pretreatment TEROSON FL+ is suitable. TEROSON MS 9320 Multi-functional sealant "4 in 1" is increased by roughening the contact surface with abrasive paper or textiles.

Application:

TEROSON MS 9320 should be applied using a Telescopic Multi-Press gun. With this gun the material can be applied either as a bead or by spraying with a dual-circuit compressed air system. It is both sprayable and brushable, allowing seam structures and brush textures to be created. Seams applied with TEROSON MS 9320 can be oversprayed after only 15-30 minutes. If earlier paint-spraying is required, TEROSON MS 9120 can be used, which is highly compatible with TEROSON MS 9320 Multi-functional sealant "4 in 1". The gun can be adjusted to allow quick and easy reaction of nearly all OEM-supplied textures. By varying the spraying the distance is also possible to control the seam width and edges. Handling and setting details can be found in the instruction provided with the gun.

Cleaning:

For cleaning application equipment contaminated with uncured TEROSON MS 9320 we recommend the use of cleaner TEROSON FL+. Cured material can only be removed mechanically.

Painting:

TEROSON MS 9320 can be painted wet-on-wet with car repair paints. Curing is not hindered by an immediate painting but retarded. Painting should be done within 3 days after application of the sealant. Beginning with the fourth day, TEROSON 150 P Primer should be applied before painting to get an optimum adhesion. Accelerated drying after painting in a drying oven or under IR by a temperature of 60 °C is possible.

Primer:

Because of their good characteristics for corrosion resistance and adhesion primers based on phosphate and epoxy resins are the most compatible. Important: primers have to be dry when using TEROSON MS 9320 Multi-functional sealant "4 in 1" for sealing and coating.

High viscosity primers:

If, after accident repair, those parts to be painted have to be coated with high viscosity primers or similar, these materials should preferably be sprayed before applying TEROSON MS 9320 Multi-functional sealant "4 in 1". They should not be applied onto TEROSON MS 9320 Multi-functional sealant "4 in 1" because they are not as elastic as the sealant. If a high viscosity primer has to be sprayed following sealing or coating two things have to be assured: TEROSON MS 9320 Multi-functional sealant "4 in 1" should have been applied at least 6 hours before the high viscosity primer which must be suitable for the coating of plastics.

Incompatibility:

TEROSON MS 9320 is not compatible with uncured 1C-polyurethane material. PU products must have completely cured until TEROSON MS 9320 is applied. TEROSON MS 9320 should have fully cured until it is coated with TEROSON WT R 2000 BK AQU. Also the material should not be treated with aromatic solvent systems, for example, TEROSON SB S 3000 or TEROSON RB R 2000 HS since this may cause the sealant to partially dissolve or swell.

Tip based on our practical experience:

For filling deep joints we recommend Teroson MS 9120 which shows excellent compatibility with TEROSON MS 9320 Multi-functional sealant "4 in 1".

STORAGE

Shelf life:

Frost-Sensitive	No
Recommended Storage Temperature, °C	10 to 25
Shelf-life (in unopened original packaging)	12 months

TEROSON MS 9320

April 2013

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

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.

Henkel AG & Co. KGaA

D-40191 Düsseldorf, Germany
Phone: +49-211-797-0
www.henkel.com

Henkel Central Eastern Europe GmbH

A-1030 Wien, Austria
Phone: +43-1711-040
www.henkel.com

Henkel & Cie AG

CH-4133 Pratteln, Switzerland
Phone: +41-61-825-7000
www.henkel.com

