

# TEROSON RB 3211-2 F

February 2021

## PRODUCT DESCRIPTION

<b>Technology</b>	Rubber
<b>Product Type</b>	Antiflutter Adhesive
<b>Additional Information</b>	Expandable

TEROSON RB 3211-2 F is a heat curing, solvent free, one component sealant, based on rubbers. Special viscosity of the product leads to an excellent sag resistance and makes it wash-off resistant against aqueous cleaning and pretreatment agents. TEROSON RB 3211-2 F adheres well to oily steel sheets, aluminum and zinc coated surfaces. The cured material shows a foamy structure, is highly flexible and little dependent of changes in temperature. TEROSON RB 3211-2 F chemically cross-links at temperatures above 140 °C. Due to the good compatibility to E-coat paint it offers a safe corrosion protection even at boundary areas. TEROSON RB 3211-2 F can be painted after curing.

## APPLICATION AREAS:

TEROSON RB 3211-2 F is used in the automotive body shop for antiflutter applications. Low hardness prevents read-through effects. It is recommended for use, when wash-off resistance must be obtained without pre-gelling or pre-curing, and where a high degree of elasticity is required over a wide temperature range.

## TECHNICAL DATA

<b>Uncured</b>	
Colour	black
Density	approx. 1.45 g/cm <sup>3</sup>
Consistency	pasty
Solids	> 99 %
Viscosity (DIN 54458)	400 Pa.s
Equipment	P/P 25 mm
Frequency	10 Hz
Deformation	10 %
Temperature	45 °C
<b>Sag resistance (3 mm bead)</b>	
30 min at 23 °C	no sagging
30 min at 200 °C	no sagging
<b>Cured (25 min. at 175 °C)</b>	
Expansion rate	approx. 85 %
Shear strength (DIN EN 1465)	approx. 0.8 MPa
substrate	HDG / EGS 0.75 mm
layer thickness	2 mm
bonding area	25 x 20 mm
Shore A hardness (DIN 53505)	approx. 30
<b>Temperature resistance</b>	
short exposure (up to 1 h)	200 °C

In service temperature range: -40 to 90 °C

## DIRECTIONS FOR 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.

### APPLICATION:

TEROSON RB 3211-2 F is applied from pails or drums using high pressure pumps with a compression ratio minimum 50:1. For the best application the use of volume controlled dispensers is preferred. The heated application pistol can be used either manually or on a fixed jig. More commonly is attached to an automatic application system (robot, CNC). It is recommended to switch off heating during a shutdown of more than 1 hour. The pressure should be switched off after 15 minutes of non-production. Independent heating circuits should have the lowest temperature at the follower plate and the highest temperature at the application nozzle. To ensure an optimal wetting to the substrate TEROSON RB 3211-2 F should be applied at elevated temperatures. The material is applied directly to oily sheet metal no more than 3 g/m<sup>2</sup>. If required, we will provide you with the additional information on suitable application equipment.

### Recommended material temperature:

Follower plate and pump:	25 to 35 °C
Temperature at nozzle:	35 to 60 °C

### CURING:

TEROSON RB 3211-2 F is cured while passing the EC oven, e.g. 15 minutes at 175 °C. The minimum curing cycle is 15 min at 165 °C. These are effective metal temperatures.

### CLEANING:

Fresh, uncured material can be removed with the aid of ethylacetate or gasoline. Cured adhesive can only be removed mechanically.

**CLASSIFICATION:**

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

**Hazards identification**  
**Transport information**  
**Regulatory information**

**STORAGE:**

Frost sensitive	no
Recommended storage temperature	5 to 25 °C
Shelf life	6 months

**ADDITIONAL INFORMATION****Disclaimer**

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, 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.

Reference 3