

TEROSON RB 3216

December 2013

PRODUCT DESCRIPTION

Technology	Rubber
Product Type	Antiflutter Adhesive

TEROSON RB 3216 is a heat curing, solvent free, one component adhesive, based on Rubbers. The high viscosity of the product leads to an excellent sag resistance and makes it wash-off resistant without pregelling or precuring against aqueous cleaning and pretreatment agents. TEROSON RB 3216 adheres well to oily steel sheets, aluminum and zinc coated surfaces. The material is flexible and little dependent of changes in temperature. TEROSON RB 3216 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 3216 can be painted after curing.

APPLICATION AREAS

TEROSON RB 3216 is used as antiflutter in the automotive body shop and shows good adhesion on oily surfaces. It is specially designed as stiff antiflutter material to bond parts like engine hoods or trunk lids. 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

(Typical Test Results)

Uncured	
Colour	black
Density	approx. 1.5 g/cm ³
Consistency	pasty
Solids	> 98 %
Viscosity (DIN 54458)	300 Pa.s
Equipment	P/P 25 mm
Frequency	10 Hz
Deformation	10 %
Temperature	45 °C
Sag resistance	
10 min at 23 °C	no sagging
30 min at 180 °C	no sagging
Cured (25 min. at 175 °C)	
Expansion rate	approx. 10 %
Shear strength (DIN EN 1465)	> 1.4 MPa
bonding area	25 x 20 mm
layer thickness	2 mm
substrate	HDG / EGS 0.75 mm
Shore A hardness (DIN 53505)	approx. 60
Temperature resistance	
short exposure (up to 1 h)	200°C

In service temperature range -40 to 80 °C
 Glass transition temperature (T_g) -17 °C
 DMTA 10 Hz, 2 K/min

PRELIMINARY STATEMENT

Prior to application 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.

APPLICATION

TEROSON RB 3216 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 3216 should be applied at elevated temperatures. After assembly of parts, the open time before curing is at least 4 weeks (indoor under storage conditions of maximum 30°C and 70% of humidity). The material is applied directly to oily sheet metal no more than 3 g/m². 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 3216 is cured while passing the EC oven, e.g. 25 minutes at 175 °C. The minimum curing cycle is 25 min at 170 °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.

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STORAGE

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

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