

# Teroson MS 935

February 2014

## PRODUCT DESCRIPTION

Teroson MS 935 provides the following product characteristics:

<b>Technology</b>	Silane-modified polymer
<b>Product Type</b>	Adhesive/Sealant
<b>Components</b>	One-component
<b>Cure</b>	Humidity
<b>Application</b>	Assembly
<b>Appearance</b>	White, Grey, Black
<b>Consistency</b>	Pasty, Thixotropic
<b>Odor</b>	Characteristic

Teroson MS 935 is a gun-grade, one component sealant based on silane modified polymer, which cures by reaction with moisture to a soft elastic 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 moisture these times can be reduced; low temperature as well as low moisture retard the process. Teroson MS 935 is free of solvents, isocyanates, silicones and PVC, and is odorless. It demonstrates good adhesion to many substrates and is compatible with suitable paint systems. The sealant also demonstrates good UV resistance and can therefore be used for interior and exterior applications. Teroson MS 935 demonstrates the strength necessary for elastic bonding. Teroson MS 935 is high viscous and sag resistant, creating a high position tack of the parts to be bonded immediately after matching, thus making a fixing of the parts to be bonded in many cases unnecessary. Teroson MS 935 allows accelerated curing as two-component material. See separate data sheets Teroson MS Power & Speed Technology or Teroson MS 2c-Technology.

## Application Areas:

Teroson MS 935 is used for the following applications:

Elastic, anti-flutter bonding of metals and plastics (panel stiffeners, roof skins etc)

Teroson MS 935 is used in the photovoltaics industry.

Elastic, bonding of wood core plywood to the metal boat deck in ship building industry

Elastic, interior and/or exterior seam and joint sealing in the following areas. vehicle body, railway carriage, container and general metal construction; the equipment, electrical, plastics, air- conditioning and ventilation industries

## TECHNICAL DATA

Density, white, grey, black, g/cm <sup>3</sup> :	approx. 1.5
Sag resistance:	no sagging (DIN profile 15 mm)
Skin formation time, min*:	5 to 20
Cure rate, mm/24 hrs:	approx. 3
Shore-A-hardness (ISO 868, Durometer A):	approx. 50
Tensile strength (acc. to ISO 37), MPa:	2.8
Elongation at break (acc. to ISO 37, speed 200 mm/min), %:	approx. 230
Stress at 100 % elongation (acc. to ISO 37), MPa:	approx. 1.5
Volume change (acc. to DIN 52451), %:	<2
Paint compatibility:	can be painted (see painting properties)
UV resistance:	no signif. changes
UV source:	Osram Vitalux 300W, dry UV
Distance to the specimen, cm:	25
Test period, weeks:	6
Application temperature, °C:	5 to 40
In service temperature range, °C:	-40 to +100
Short exposure (up to 1 h), °C:	120
* ISO 291 standard climate:	23°C, 50% relative air humidity

## 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, oil- and grease free. Depending on the surface it can be necessary to roughen the surface or to use a primer/adhesion promoter to provide best adhesion. When manufacturing plastics, external release agents are often used; these agents must be accurately removed prior to starting bonding or sealing. Due to the different compositions of paints, especially powder paints and the large number of different substrates, application trials before use are necessary. For cleaning, Cleaner + Diluent A, FL or Teroson SB 450 from the Henkel portfolio are suitable. When bonding and sealing PMMA, e.g. Plexiglas®, and polycarbonate, e.g. Makrolon® or Lexan®, under tension, stress corrosion cracking may occur. Application trials before use are necessary. There is no adhesion to polyethylene, polypropylene and PTFE. Substrates not mentioned above should be subject to trials. . .

### Application:

Application from 290 ml cartridges is made with the Teroson Hand or Air Pressure Pistols, and from plastic wallets (310 and 570 ml) with the corresponding FK-Hand or FK-Air Pressure Pistols. In the case of compressed air application a pressure of 2 to 5 bar is required. Low material temperatures of the sealant will lead to an increase of viscosity, resulting in a lower extrusion rate. This can be avoided by bringing the sealant up to room temperature prior to application. Teroson MS 935 can be applied from hobbocks or drums with high pressure pumps with follower plates. See separate application directions of Teroson MS products in hobbocks and drums.

### Cleaning:

For cleaning application equipment contaminated with uncured Teroson MS 935 we recommend the use of Cleaner+Diluent A, D or FL.

### Painting:

Teroson MS 935 can be painted wet-on-wet with 1c and 2c repair paints, including those containing alcohols as solvent. Curing is not hindered by an immediate painting but retarded. 2c-PUR/acrylic paints show best results when the painting is done prior to full curing. For best adhesion the material should be painted within 3 h after application of the sealant. After full curing the sealant/adhesive must be pretreated similar to plastic painting. A retardation of drying may be observed with alkyd resin systems (trials are recommended). On certain types of 2c double layer metallic paints adhesion failures may be observed under unfavourable conditions (trials with plastic primers of the paint manufacturers are recommended). When using certain silicone removers adhesion failures are possible.

### STORAGE

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

### ADDITIONAL INFORMATION

#### 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.

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