

## TEROSON MS 9221

January 2016

### PRODUCT DESCRIPTION

TEROSON MS 9221 provides the following product characteristics:

<b>Technology</b>	MS <sup>®</sup> - Polymer
<b>Product Type</b>	Adhesive
<b>Components</b>	One-component
<b>Cure</b>	Humidity
<b>Application</b>	Assembly
<b>Appearance</b>	Black, Grey, White
<b>Consistency</b>	Pasty, Thixotropic
<b>Odor</b>	Odorless

TEROSON MS 9221 is a one component adhesive with high sag resistance, based on MS-Polymer. The material cures by reaction with humidity to an 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 humidity, the reaction time can be reduced; low temperatures as well as low humidity retard the process. TEROSON MS 9221 is free of solvents, isocyanates, silicones and PVC, and has only a weak odour (after curing it is odourless). It demonstrates good adhesion to many substrates. The material demonstrates good resistance to UV-light and can therefore be used for exterior applications.

### Application Areas:

TEROSON MS 9221 is used in the areas:

- vehicle body manufacture
- bus manufacture
- vehicle body build-ups
- caravan
- ship and boat building

for elastic bonding without primer and high quality sealing on metallic surfaces (including galvanized metal sheets and aluminium) or painted surfaces. TEROSON MS 9221 is also fitted for bonding glass, ceramic surfaces and most plastics, except Teflon, PE, PP and blends with these polymers. For this reason trials are recommended prior to bonding of plastics. After matching of the materials to be bonded a high adhesion strength is obtained.

### TECHNICAL DATA

Colour:	black, white, grey
Odour:	odourless
Density, g/cm <sup>3</sup> :	approx. 1.4
Consistency:	thixotropic paste

### Miscellaneous:

Skin formation time, min*:	approx. 5
Tack-free time, min.:	20 to 30
Cure rate, mm/24 hrs:	approx. 3
Shore-A-hardness (ISO 868 / Durometer A):	approx. 60
Tensile strength (acc. to ISO 37), MPa:	approx. 5
Shear strength (DIN EN 1465), MPa:	approx. 2
Substrates:	aluminium
Layer thickness, mm:	2
Cross head speed, mm/min:	50
In service temperature range, °C:	-40 to +100
Application temperature, °C:	-40 to 100
Short exposure (up to 1 h), °C:	120
* DIN 50014 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 and grease free. For pretreatment TEROSON VR 20 and TEROSON VR 40 are suitable.

#### General remarks:

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. If substrates are too cold temperature may fall below dew point causing condensation. This can be avoided by bringing the substrates up to room temperature in time.

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## Application:

TEROSON MS 9221 can directly be applied from cartridges employing standard air or hand operated guns. In case of compressed air application a pressure of 2-5 bar is required, depending on nozzle aperture and application speed. When applying TEROSON MS 9221 in closed rooms, it is important to ventilate well during the curing process.

## Cleaning:

For cleaning application equipment contaminated with uncured TEROSON MS 9221 we recommend the use of cleaner TEROSON VR 40.

Cured material can only be removed mechanically.

## STORAGE

### Shelf life:

Frost-Sensitive	No
Recommended Storage Temperature, °C	10 to 25
Shelf-life	12 months

## Disclaimer

### Note:

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