



TEROSON®

Technical Data Sheet

TEROSON® MS 5555™

July 2019

PRODUCT DESCRIPTION

TEROSON® MS 5555™ provides the following product characteristics:

Technology	MS® - Polymer
Chemical Type	Modified silane polymer
Appearance	Black, White, Gray
Components	One part - requires no mixing
Viscosity	Paste
Cure	Atmospheric moisture
Application	Sealing

TEROSON® MS 5555™ is a high elongation adhesive used for sealing on various substrates. It is a one component adhesive/sealant based on a modified silane polymer, which cures by reaction with moisture to an elastomeric thermoset product. The skin formation and curing times are dependent on humidity, temperature, and joint depth. By increasing the exposure to moisture these times can be reduced. TEROSON® MS 5555™ is non-corrosive and free of solvents, isocyanates, and silicones. It demonstrates good adhesion without primer to a wide variety of substrates and is compatible with suitable paint systems. The adhesive/sealant also demonstrates good UV resistance and can therefore be used for interior and exterior applications.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Density, ISO 2811-1 @ 22 °C, g/ml	
Specific Gravity @ 25 °C	1.44
Extrusion Rate @ 23°C, D=3.5mm, 3 bar, 15 s, g	100 to 120

TYPICAL CURING PERFORMANCE

Under normal conditions, the atmospheric moisture initiates the curing process. The product develops functional strength in 24 hours and fully cures in 7 days.

Skin Over Time

Skin over time is the time the surface of the adhesive forms a skin upon exposure to atmospheric moisture at 25 ± 2 °C, 50 ± 5% RH.

Skin Over Time, minutes	20 to 30
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TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Shore Hardness, ISO 868, Durometer A	35
Elongation, at break, ISO 527-3, %	550
Tensile Strength, ISO 527-3, psi	190

TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

Cured for 21 days @ 22 °C

Lap Shear Strength, ISO 4587:		
Aluminum	N/mm ²	0.7
	(psi)	(100)
Aluminum (Alclad) (grit blasted)	N/mm ²	1.3
	(psi)	(185)
Mild steel	N/mm ²	1.3
	(psi)	(185)
Stainless steel	N/mm ²	1.3
	(psi)	(185)
Galvanized Steel	N/mm ²	1.0
	(psi)	(150)
Gel Coat FRP	N/mm ²	1.3
	(psi)	(185)
Glass	N/mm ²	1.5
	(psi)	(220)
ABS	N/mm ²	0.6
	(psi)	(85)
Polycarbonate	N/mm ²	1.2
	(psi)	(170)
PVC	N/mm ²	0.6
	(psi)	(85)

Cured for 7 days @ 21 °C / 50% RH

Knife Bead Adhesion, % Cohesive Failure:

Soda lime glass	100
Fiberglass	100
Steel	100
Stainless steel	100
Galvanized Steel	100
Polycarbonate	100
Wood (pine)	100
Anodized Aluminum	100

Note: Teroson® SB 450™ or Teroson® 8519P™ are suitable primers for Loctite® MS 5555™



GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Directions for use:

1. For best performance bond surfaces should be clean and free from grease.
2. Apply adhesive using recommended equipment and nozzle as required.
3. Full performance properties will develop over 7 days.
4. Excess material can be easily wiped away with non-polar solvents.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties. Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

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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