Technical Data Sheet

TEROSON® WT 123 WF

May 2025

PRODUCT DESCRIPTION

TEROSON® WT 123 WF provides the following product characteristics:

Technology	Aqueous dispersion
Chemical type	Synthetic resin dispersion
Appearance (uncured)	Beige
Viscosity	Pasty
Cure	Moisture evaporation
Application	Sprayable NVH coating compound
Application temperature	10 to 40°C
In service temperature	-50 to 120°C
Short exposure (up to 1 hr)	160°C
Specific benefits	• Reduces NVH improve perception of quality • Easy to apply

TEROSON® WT 123 WF is a secondary noise and vibration control coating that can be sprayed or spatula applied. It is based on a aqueous synthetic resin dispersion with flame retardant additives. The product is rendered environmentally friendly by the use of low toxicity raw ingredients (Halogen, heavy metal and asbestos free).

TEROSON® WT 123 WF demonstrates reliable adhesion to stainless steel, galvanized steel sheets, painted sheet metal, wooden underbodies and anodized aluminum. Non-galvanized steel and raw aluminum surfaces will first require application of an effective corrosion protection system (Primer coated and painted).

Coatings of TEROSON® WT 123 WF can be subjected to standing water for a longer period of time than similar materials. The light swelling process is reversible. The coating will not peel off the surface.

Typical applications include the sound deadening or absorption of structural-bourne noise, secondary noise and vibration control on thin walled sheet metal constructions in the manufacture of vehicle, railway carriages, shipbuilding as well as plant and equipment construction. Railway vehicles can be completely sprayed with TEROSON® WT 123 WF, assuming that appropriate drainage holes be provided in the floor, in order for the coating to dry and allow drainage in service.

TEROSON® WT 123 WF dries fast and demonstrates excellent fire-resistance properties. The material is not suited for corrosion protection on untreated/uncoated metal surfaces.

TEROSON® WT 123 WF has been tested to the fire protection requirements in rail including HL 3 of EN 45545-2 and A level according to TB/T3237.

Fire protection according to DIN EN 45545-2
Spread of flame:
The product has been tested to the fire protection requirements R1 for the Hazard Level HL3.
Test Method: ISO 5658-2

Smoke toxicity & density:
The product has been tested to the fire protection requirements R1 for the Hazard Level HL3.
Test Method: ISO 5659-2

Heat release rate:
The product has been tested to the fire protection requirements R1 for the Hazard Level HL3.
Test Method: ISO 5660-1

TYPICAL PROPERTIES OF UNCURED MATERIAL

Density, g/cm^3	1.4
Solids, %	73
pH	9

TYPICAL PERFORMANCE OF CURED MATERIAL

Density, g/cm^3	1.3
Drying time, (2mm Wet Film)	
At standard climate GB/T1728, hours	18
At 60°C convention, hours	5
Volume shrinkage, on drying, %	20 - 25
Completely dry, hours	24 - 48
Sky dry time, hours	2 - 4

Acoustic data

Loss factor DIN EN ISO 6721-3	≥ 0.11
GB/T18258 and GB/T 16406	≥ 0.11
Temperature, °C	20
Frequency, Hz	2nd order
Material, steel sheet, mm	1
Thickness ratio coating / steel sheet	2 : 1

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

Surface preparation

1. The surfaces to be coated must be dry, free of oil, dust, grease and other contaminants.
2. An adhesion promoter is not necessary.
3. Non-galvanized steel sheet and non-anodized aluminium, however, require coating with a suitable water retardant corrosion protection.

Application

1. If necessary, TEROSON® WT 123 WF must be stirred before use when it has been stored between delivery and use for longer period (approx. 3 months).
2. TEROSON® WT 123 WF is designed for airless spraying process at 5 to 8 bar.
3. All spraying equipment should be built from stainless steel, including the pump, to eliminate the possibility of the aqueous base corroding the equipment.
4. The material can be spray applied, even overhead and on vertical surfaces, up to a wet film layer thickness of 4 mm per application layer. Optimum temperature is 15°C to 25°C.
5. The material can also be applied by hand with a spatula, however this application method is recommended only for smaller areas or touch up.
6. Good ventilation reduces the drying time.
7. The drying time depends on layer thickness, temperature, and the ambient air humidity.
8. If humidity is high (close to 100%), drying can be retarded severely or may cease altogether. In such cases only hot drying is possible.
9. The material can be dried at room temperature or subjected to accelerated drying at temperatures up to 70°C.
10. During the drying process no cracks occur even on large, flat coated surfaces. If the material is allowed to pile up in grooves or at corners, and if unfavorable drying conditions ensue (eg. the absence of convection), this may give rise to occasional hairline fractures.
11. The bond should be allowed to cure (e.g. seven days), before subjecting to heavy service loads.
12. The completely dried layer can be painted. Due to the large number of paint systems on the market available, preliminary tests are recommended.

Cleaning

1. Provided that TEROSON® WT 123 WF is not yet dry, application equipment can be cleaned after use with water, with the addition, where necessary, of detergent.
2. Dried material can be removed using mechanically.
3. If spray guns are not cleaned immediately, they should be stored under exclusion of air, e.g. directly in water.

Storage

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

Optimal storage: 5°C to 30°C. Storage below 5°C or greater than 30°C can adversely affect product properties.

Material is frost sensitive.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel 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 Henkel representative.

Product specification

The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

Approval and certificate

Please contact Henkel representative for related approval or certificate of this product

Data ranges

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.
Temperature/Humidity Ranges: 23°C / 50% RH = 23±2°C / 50±5% RH

Conversions

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Disclaimer

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