Technical Data Sheet

TEROSON® MS 949 FR 2C

May 2026

PRODUCT DESCRIPTION

TEROSON® MS 949 FR 2C provides the following product characteristics:

Technology	Silane-modified polymer
Product type	Adhesive/Sealant
Components	Two-component
Cure	Cure at ambient temperature
Application	Rail industry
Appearance (unmixed)	Component A: Black, grey Component B: White
Appearance (mixed)	Black, grey
Consistency	Pasty, Thixotropic
Odor	Characteristic
Mix ratio, by volume (Component A : B)	10 : 1

TEROSON® MS 949 FR 2C is a high viscous, two-component adhesive based on silane modified polymers which cures to an elastic product. The material is free of solvents, isocyanates and silicones. After component A has been thoroughly mixed with component B the curing starts - independent of humidity - to form an elastic material. In order to make use of the advantage of elastic bonding, care should be taken of a sufficient dimensioning of the bonding joint. A minimum thickness is necessary so that the elastic adhesive is able to compensate the movements between the materials to be bonded under the influence of different temperatures during final use of the bonded part.

Application areas

TEROSON® MS 949 FR 2C is designed for the rail manufacturing and repair industry and may cover following applications: Bonding of front and side windows, bonding of the floor panels, side paneling. Sealing of interior or exterior seams.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Component A, density, g/cm^3	~1.45
Component B, density, g/cm^3	~1.3
Sag resistance	No sagging (DIN profile 15 mm)
Application temperature, °C:	5 to 40

TYPICAL CURING PERFORMANCE

Pot life in the static mixer, min.*	~5
Open time, min.*	~30
Handling time *, acc. to EN 1465, to reach 0.1 MPa, min.	60 to 90
* ISO 291 standard climate	23°C, 50% relative air humidity

TYPICAL PERFORMANCE OF CURED MATERIAL

Physical properties

Sample cured for 1 week @ 23°C, 50% RH

Shore A hardness (ISO 868, Durometer A)	~55
Tensile strength (ISO 37), MPa	~2.3
Elongation at break (ISO 37, Speed 200 mm/min), %	~315
Tensile shear strength (EN 1465, Speed 50 mm/min, on 1 mm aluminum, 1 mm layer thickness), MPa	~1.4
In service temperature range, °C	-40 to 100
Short exposure (up to 1 h), °C	120

TYPICAL ENVIRONMENTAL RESISTANCE

Cured for 3 weeks @ 23°C, 50% RH

Fire resistance

TEROSON® MS 949 FR 2C is tested to the requirements of EN 45545-2. R22 HL2 / R23 HL2.

TEROSON® MS 949 FR 2C is tested to the requirements of NFPA 130. ASTM E-162 / ASTM E-662.

DIRECTIONS FOR USE

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. Please also refer to the local safety instructions and contact Henkel for analytical support.

Pre-treatment

The substrates must be clean, dry, oil- and grease free. Cleaners TEROSON® PU 8550 or TEROSON® VR 10 are recommended for this. Depending on the surface it can be necessary to roughen the surface or to use a primer/adhesion promoter e.g. TEROSON® PU 8517 H or TEROSON® SB 450 to provide best adhesion. When manufacturing plastics, external release agents are often used; these agents must be accurately removed first. Due to the different compositions of paints, especially powder paints and the large number of different substrates, application trials before use are necessary.

Application

TEROSON® MS 949 FR 2C consists of two components A and B. By means of suitable application equipment, both A and B component are dosed in a ratio by volume of 10:1 and are homogenously mixed by use of static mixer shortly before application. 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.

Application equipment
To apply the product correctly, a pneumatic hand gun e.g. LOCTITE® EQ HD 14 or an electric dispenser must be used. Manual hand guns are not suitable for this product.

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

Storage: 10 to 25°C

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

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