



SHERCOR™ CABLE SYSTEM

CORROSION PROTECTION FOR BRIDGE CABLES

Revised 07/2023 Issue 1

PRODUCT DESCRIPTION

The SherCor™ Cable System consists of 3 coating materials, a sealant and an injection material. Suitable for coating or sealing of bridge cables and steel constructions exposed to vibration as well as deformation.

The system has low solvent content according to Protective Coatings Directive of German Paint Industry Association (VdL-RL 04).

- Very good corrosion protection characteristics
- Flexible, even at low temperatures
- High weather and colour resistance

SherCor™ Cable Primer Plus

A 2-pack epoxy primer. It contains micaceous iron oxide, is versatile overcoatable, is of high chemical and mechanical resistance and adheres very well to steel and galvanized steel.

SherCor™ Cable TOP-1

A 2-pack polyurethane intermediate coat. It contains micaceous iron oxide and is of high elasticity, impact strength, wear resistance and very good corrosion protection. It is suitable for high build application and cures very fast.

SherCor™ Cable TOP-2

A 2-pack polyurethane topcoat. It is flexible, lightfast and weather resistant.

SherCor™ Cable Flex-1

A flexible, solvent-free 2-pack sealant based on polyurethane. Because of its high flexibility and expansion ability it is especially suitable for filling joints and gaps exposed to vibration (e.g. anchoring of bridge cables).

SherCor™ Cable Flex-2

A flexible, solvent-free 2-pack injection resin of low viscosity based on polyurethane. It is suitable for filling hollow spaces (e.g. parallel cables) and has a high penetration ability.

RECOMMENDED USE

Can be used as a flexible and high build corrosion protection for bridge ropes and cables of steel and galvanized steel.

PRODUCT TECHNICAL DATA

Volume Solids:	SherCor™ Cable Primer Plus: 68 ± 2% SherCor™ Cable TOP-1: 85 ± 2% SherCor™ Cable TOP-2: 64 ± 2% SherCor™ Cable Flex-1: 100 ± 2% SherCor™ Cable Flex-2: 100 ± 2% (ISO 3233-3)	SherCor™ Cable TOP-2: 308 g/l determined practically in accordance with Protective Coatings Directive of German Paint Industry Association (VdL-RL 04). 298 g/l calculated from formulation to satisfy EC Solvent Emissions Directive. 213 g/kg calculated from formulation to satisfy EC Solvent Emissions Directive (UK).
Weight Solids:	SherCor™ Cable Primer Plus: 81 ± 2% SherCor™ Cable TOP-1: 92 ± 2% SherCor™ Cable TOP-2: 78 ± 2% SherCor™ Cable Flex-1: 100 ± 2% SherCor™ Cable Flex-2: 100 ± 2%	Colours: SherCor™ Cable Primer Plus: DB 702 and DB 703 SherCor™ Cable TOP-1: DB 601 and grey-white SherCor™ Cable TOP-2: RAL- and DB-colour shades upon request SherCor™ Cable Flex-1: grey SherCor™ Cable Flex-2: beige
VOC:	SherCor™ Cable Primer Plus: 285 g/l determined practically in accordance with Protective Coatings Directive of German Paint Industry Association (VdL-RL 04). 326 g/l calculated from formulation to satisfy EC Solvent Emissions Directive. 217 g/kg calculated from formulation to satisfy EC Solvent Emissions Directive (UK). SherCor™ Cable TOP-1: 120 g/l determined practically in accordance with Protective Coatings Directive of German Paint Industry Association (VdL-RL 04). 90 g/l calculated from formulation to satisfy EC Solvent Emissions Directive. 60 g/kg calculated from formulation to satisfy EC Solvent Emissions Directive (UK).	Flash Point: SherCor™ Cable Primer Plus: Base: 23°C, Hardener: 48°C SherCor™ Cable TOP-1: Base: 40°C, Hardener: > 200°C SherCor™ Cable TOP-2: Base: 32°C, Hardener: 38°C SherCor™ Cable Flex-1: Base: > 101°C, Hardener: >101°C SherCor™ Cable Flex-2: Base: > 101°C, Hardener: >101°C



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PRODUCT TECHNICAL DATA (cont.)

Cleaner/Thinner: Thinner EG (for cleaning).
Thinner EG for thinning with max. 5% to adapt the viscosity.
Thinning will affect VOC compliance, sag tolerance and dry film thicknesses.
Note: Do not thin SherCor™ Cable Flex-1 and SherCor™ Cable Flex-2.

Pack Size: Two component materials supplied in separate containers to be mixed prior to use:
SherCor™ Cable Primer Plus: 15 kg (10 litre) unit when mixed
SherCor™ Cable TOP-1: 3 kg (2 litre) unit when mixed
SherCor™ Cable TOP-2: 3 kg (2.1 litre) unit when mixed
SherCor™ Cable Flex-1: 2.5 litre unit when mixed
SherCor™ Cable Flex-2: 12.5 kg (10.4 litre) unit when mixed
Volume will vary with colours and density.

Mixing Ratio: By weight
SherCor™ Cable Primer Plus: 90 parts base to 10 parts hardener
SherCor™ Cable TOP-1: 85 parts base to 15 parts hardener
SherCor™ Cable TOP-2: 83 parts base to 17 parts hardener
SherCor™ Cable Flex-1: 3.5 parts base to 1 parts hardener
SherCor™ Cable Flex-2: 100 parts base to 20 parts hardener

Density: **SherCor™ Cable Primer Plus:** 1.5 kg/l
SherCor™ Cable TOP-1: 1.5 kg/l
SherCor™ Cable TOP-2: 1.4 kg/l
SherCor™ Cable Flex-1: 1.2 kg/l
SherCor™ Cable Flex-2: 1.2 kg/l
(may vary with colours)

Shelf Life: **SherCor™ Cable Primer Plus:** 2 years
SherCor™ Cable TOP-1: 1 year
SherCor™ Cable TOP-2: 2 years
SherCor™ Cable Flex-1: 1 year
SherCor™ Cable Flex-2: 1 year
from date of manufacture, stored in originally sealed containers in a cool and dry environment.

Recommended Application Methods:

Brush

Typical Thickness:

Recommended Spreading Rate Per Coat

	Typical		
	SherCor Cable Primer Plus	SherCor Cable TOP-1	SherCor Cable TOP-2
Dry	50 µm	150 µm	60 µm
Wet	74 µm	176 µm	94 µm
Theoretical Consumption*	0.110 kg/m ² 0.074 l/m ²	0.265 kg/m ² 0.176 l/m ²	0.131 kg/m ² 0.094 l/m ²
Theoretical Coverage*	9.07 m ² /kg 13.60 m ² /l	3.78 m ² /kg 5.67 m ² /l	7.62 m ² /kg 10.67 m ² /l

* This figure makes no allowance for surface profile, uneven application, overspray or losses in containers and equipment.

Film thickness will vary depending on actual use and specification.

Pot Life:

SherCor™ Cable Primer Plus at + 20°C	8 hours
SherCor™ Cable TOP-1 at + 20°C	1.5 hours
SherCor™ Cable TOP-2 at + 20°C	2 hours
SherCor™ Cable Flex-1 at + 20°C	1 hour
SherCor™ Cable Flex-2 at + 20°C	2.5 hours

Pot life is dependent on temperature and volume.



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AVERAGE DRYING TIMES

SherCor™ Cable Primer Plus for 50 µm Dry Film Thickness:

	+ 10°C	+ 20°C	+ 30°C
Dry to handle (Drying Stage 6*)	8 hours	4 hours	2 hours
To Recoat	24 hours	24 hours	24 hours

SherCor™ Cable TOP-1 for 150 µm Dry Film Thickness:

	+ 10°C	+ 20°C	+ 30°C
Dry to handle (Drying Stage 6*)	20 hours	20 hours	15 hours
To Recoat	24 hours	24 hours	24 hours

SherCor™ Cable TOP-2 for 60 µm Dry Film Thickness:

	+ 10°C	+ 20°C	+ 30°C
Dry to handle (Drying Stage 6*)	15 hours	6 hours	4 hours

*ISO 9117

Maximum recoat time is 1 year. Prior to further applications all contamination must be removed. In the case of extended recoating times consult Sherwin Williams customer service.

Note: When overcoating SherCor™ Cable TOP-2 the existing surface must be mechanically prepared.

Final cure: 1-2 weeks, depending on film thickness and temperature.

These figures are given as a guide only. Factors such as air movement, film thickness and humidity must also be considered.

SherCor™ Cable Flex-1 and SherCor™ Cable Flex-2 are applied directly onto the SherCor™ Cable Primer Plus.

APPROVALS & ENDORSEMENTS

Approved according to the German standard "ZTV-ING, Part 4, Chapter 5, Corrosion Protection of Ropes and Cables" and "TL/TP KOR-VVS".

SURFACE PREPARATION

Ensure surfaces to be coated are clean, dry and free from all surface contamination such as oil, grease, dirt and corrosion products to achieve satisfactory adhesion.

Steel substrates shall be blast-cleaned to Sa 2½ according to ISO 8501-1 (ISO 12944-4).

Hot-dip galvanized surfaces shall be prepared by sweep blasting according to ISO 12944-4 with a non-ferrous blasting abrasive.

MIXING

Coating materials:

Stir Component A very thoroughly using a mechanical paint mixer (start slowly, then increase up to approx. 300 rpm). Add component B carefully and mix both components very thoroughly (including sides and bottom of the container). Mix for at least 3 minutes until a homogeneous mixture is achieved. We recommend to fill the mixed material into a clean container and mix again shortly to avoid incorrect mixing.

SherCor™ Cable Flex-1 and SherCor™ Cable Flex-2:

Stir component A slowly by means of a mechanical paint mixer (max. 300 rpm), subsequently add hardener in the correct mixing ratio and mix intensively again using a mechanical paint mixer (300 - 500 rpm) until a homogeneous mixture is achieved (min. 3 minutes). Take care that no air is entrapped.

During mixing and handling of the materials always wear protective goggles, suitable gloves and other protective clothing.

APPLICATION CONDITIONS

Substrate temperature shall be above + 5°C and at least 3°C above the dew point.

Material temperature shall be above + 5°C.

Relative air humidity shall be below 85%.

APPLICATION EQUIPMENT

Coating materials: Brush

- According to ZTV-KOR 'Corrosion Protection of Ropes and Cables' brushing is the preferred application method.
- Where light and intense colour shades are applied, a second topcoat might become necessary.

SherCor™ Cable Flex-1 and SherCor™ Cable Flex-2:

- The application technique depends on the design features of the project.
- Steel and galvanized steel have to be primed with SherCor™ Cable Primer Plus.



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RECOMMENDED SYSTEMS

According to German ZTV-ING, Part 4, Chapter 5 "Corrosion Protection of Bridge Ropes"

Steel:

- 2 x 50 µm SherCor™ Cable Primer Plus
- 2 - 3 x 150 µm SherCor™ Cable TOP-1
- 1 x 60 µm SherCor™ Cable TOP-2

Galvanized steel:

- 1 x 50 µm SherCor™ Cable Primer Plus
- 2 - 3 x 150 µm SherCor™ Cable TOP-1
- 1 x 60 µm SherCor™ Cable TOP-2

ADDITIONAL NOTES

Drying times, curing times and pot life should be considered as a guide only.

Chemical resistance:

Resistant to weathering, water, de-icing salts, oils and grease.

Shore hardness A (according to ISO 868):

- SherCor™ Cable Flex-1: 35 - 45
- SherCor™ Cable Flex-2: 60 - 80

Numerical values quoted for physical data may vary slightly from batch to batch.

HEALTH & SAFETY

Consult Product Health and Safety Data Sheet for information on safe storage, handling and application of this product.

WARRANTY

Whilst all statements made about our products (whether in this data sheet or otherwise) are correct and accurate to the best of our knowledge, we have no control over the quality or the condition of the substrate, the application conditions or the many other factors affecting your use and application of our product.

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