

## TI 150K

Technical Information Surface Protection Linings  
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# VULCOFERRAN 2206

Soft rubber lining to protect steel components with general construction regulation approval no. Z-59.22-25

### Base

Bromobutyl rubber (BIIR)

### Material Group

Workshop rubber linings

On-site rubber lining

### Description

Self-vulcanizing soft rubber lining based on bromobutyl rubber (BIIR). Depending on the requirements, the layer thickness of the rubber sheet can be 2 - 5 mm.

### Use

VULCOFERRAN 2206 is recommended as a protective lining for structural components made of steel that are subjected to chemical exposure.

Its primary spectrum of application includes the lining of flue gas scrubbers in power stations and garbage incineration plants, as well as linings for phosphoric acid plants, storage tanks, reaction vessels and pipelines.

The suitability for vacuum stress should be emphasised.

### Properties

VULCOFERRAN 2206 stands out for its excellent chemical resistance and a high resistance to diffusion, especially to steam.

Furthermore, VULCOFERRAN 2206 has the advantage of being a non-vulcanized rubber sheet, which facilitates the application to tanks having unwieldy geometrical dimensions and ensures exceptional adhesion to the steel substrate. VULCOFERRAN 2206 is bonded to the substrate with a bonding solution based on butyl rubber. Since outstanding adhesion values are achieved even under elevated service temperatures, this rubber lining system is particularly suited for application in vacuum-stressed environments.

### Physical Data

Property (unit), Test method	Value
Density [g/cm <sup>3</sup> ], DIN EN ISO 1183-1, ASTM D 792	1.17 ± 0.02
Shore A hardness, DIN 53505, ASTM D 2240	63 ± 5
Tensile strength [MPa], DIN 53504	≥ 3.5
Elongation at tear [%], DIN EN ISO 527, ASTM C 307	> 300
Peeling strength [N/mm], DIN EN 14879-4	≥ 4
Temperature resistance [°C]	100
Data are mean values	

\*) The values were determined at 4 mm thick rubber samples.

### Chemical Resistance

Information on the chemical resistance properties will be provided on request.

## Substrate

The recommended working temperature should have a temperature of approx. 10–30 °C, dew point distance min. 5 K.

With object temperatures below +10 °C rubber lining work must not be carried out.

Refer to DIN EN 14879-1 as well as to STEULER-KCH-Formsheet 030.

The steel surface shall be sandblasted to a metallic bright finish. A preparation degree of Sa 2 ½ as specified in DIN EN ISO 12944-4 and a roughness grade “medium (G)” as specified in DIN EN ISO 8503-1 must be achieved; minimum surface roughness Rz = 50 µm. After blasting, the formation of new rust must be prevented by suitable measures, e. g. priming directly.

The condition of the substrate must be documented by STEULER-KCH-Test-Record 003 (Steel) or STEULER-KCH-Test-Record 004 (Inspection of Grit Blasting Works).

During application, the substrate must be kept absolutely dry. Uncured material has to be protected from any kind of moisture (condensation, fog, precipitation or other water source).

## Packaging / Shelf life

All components must be stored and transported dry and frost-free. Unless otherwise specified, the minimum shelf life applies to a storage temperature of 20 °C. Higher temperatures reduce, lower temperatures increase the shelf life. The use of refrigerated containers should be considered on a project-by-project basis, especially when components are stored at temperatures below 20 °C in order to extend their shelf life. Keep the containers tightly closed (especially after material removal).

Components	Item number	Package	Content	Shelf life
Vulcoferran 2206 sheet 3-5 mm	6071652300–500	Roll		1 month 3 months < 15 °C
Adhesion-Solution 2206/L1	5040751020	Drum	16 kg	12 Months
Adhesion-Solution 2206/L2	5040759020	Drum	16 kg	12 Months
Accelerator 2206/L1	5040781081	Bottle	0.036 kg **	24 Months
Primer 1	5040271039	Drum	23 kg	12 Months
Primer 2	5040274001	Drum	25 kg	12 Months
KCH-Cleaner 1	5040016068	Drum	8.5 kg	24 Months
KCH-Diluent 9	5040015005	Canister	4 kg	24 Months
KCH-Diluent 14	5034003006	Drum	10 kg	24 Months
Interleaving linen	9012015			

For handling, transport and storage observe the relevant material safety data sheets.

## Application

The VULCOFERRAN-2206-rubber-coating consists of the 1-comp. primer Primer 1, the 1-comp. primer Primer 2, the 2-comp. adhesive, consisting of adhesive solution 2206/L1 and the VULCOFERRAN -2206-sheet.

**Note:** For workshop linings in which the sheets are vulcanised in the autoclave, the Bonding Solution 2206/L1 is used without the accelerator, for all other applications, the Bonding Solution 2206/L1 is used with the accelerator.

### Adhesive application

Mixing Ratio	Parts by weight (kg)
Adhesion-Solution 2206/L1	16
Accelerator 2206/L1	0.036

Spread the Primer 1 on the steel substrate. Then apply one layer of Primer 2 and two layers of adhesive. Spread the adhesive on the rubber sheet.

The rubber sheets are firmly bonded to the substrate by pressing as specified in DIN EN 14879-4.

### Consumption

Primer 1:	approx. 0.15 kg/m <sup>2</sup>
Primer 2:	approx. 0.20 kg/m <sup>2</sup>
Vulcoferran-Adhesion-Solution 2206/L1	approx. 0.60 kg/m <sup>2</sup>

## Safety and Disposal

- Sufficient aeration and de-aeration (especially in tanks and pits).
- No smoking/no fire
- Refer to the Safety Data Sheets
- Observe danger references and safety recommendation labels.
- Wear required personal protective equipment (avoid skin contact with materials)
- Clean and protect hands with skin protective soap and skin protection cream (no solvents)
- Wear a dust mask when sanding (e.g. for repairs).
- Instructions as per § 14 of GefahrstoffV (Toxic Substances Act) and TRGS 507 (Technical regulations for Hazardous Substances - Germany)
- Accident precautions issued by the Liability Insurance Association for the Chemical Industries (Germany)

Do not expose materials to heat or open flame, this applies in particular to welding works (weld beads).

Preferably consume residual quantities. Do not pour into a spout or dustbin! Collect separately for disposal in durable, lockable and labeled containers.

## Cleaning of Equipment

Tools soiled with uncured materials can be cleaned with KCH Thinner 14. Only clean in well ventilated areas.

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This issue replaces all previous versions.