

Technical Data Sheet

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® VULCOFERRAN A45-V

Soft rubber lining to protect steel components On-site rubber lining

Description

VULCOFERRAN A45-V is a pre-vulcanised soft rubber lining based on natural rubber (NR). The layer thickness may range between 4 and 6 mm depending on the requirement.

Typical uses

VULCOFERRAN A45-V is used to protect steel components from chemical and mechanical attack. VULCOFERRAN A45-V linings are predominantly applied in structural components which are exposed to chemical and mechanical stresses.

Properties

In addition to its resistance to a wide range of chemicals, VULCOFERRAN A45-V avails of good mechanical properties.

VULCOFERRAN A45-V further avails of the advantages pre-vulcanised rubber sheets offer, like problemfree storage and transportation without cooling for at least 36 months. VULCOFERRAN A45-V can be exposed to stress immediately after application without extensive vulcanisation measures being required.

Chemical resistance

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

Substrate

Steel components may serve as substrate. The steel structures to be rubber lined shall comply with the requirements of DIN EN 14879-1.

Surface pre-treatment

Steel: The steel surface must be blasted to a metallic white finish. A preparation degree of Sa 2 ½ as specified in DIN EN ISO 12944-4 and a roughness degree of "medium (G)" as specified in DIN EN ISO 8503-1 must be achieved; minimum roughness $R_z = 50 \mu\text{m}$ (Segment 2). After blasting, the steel surface must be primed.

Application

VULCOFERRAN A45-V is bonded to the substrate using the adhesive BS systems. For priming Keratex primer is used.

Mixing ratios	Parts by weight (kg)	Parts by volume (l)
<u>Adhesive BS</u>		
Solution BS	100	2.00
Accelerator BS	9	0,12
Keratex hardener E	3,4	0.06

Spread the primer on the steel substrate, then apply two layers of adhesive. Treat the rubber sheet with KCH cleaner 1 and brush it twice with adhesive. The rubber sheets are firmly bonded to the substrate by rolling as specified in DIN 28055-1.

Pot life

Temperature	Adhesive BS
15°C	approx. 160 min
20°C	approx. 120 min
30°C	approx. 55 min

Consumption

Keratex primer	approx. 0.15 kg/m ²
Adhesive BS	approx. 0.2 kg/m ² per application
KCH cleaner 1:	approx. 0.2 kg/m ²

Packing

The following standard quantities are available:

Keratex primer	5.16 kg
Solution BS	5.15 kg
Accelerator BS	5.25 kg
Keratex hardener E	0.75 kg
KCH cleaner 1	8.50 kg

Storage

The products shall be stored in a cool and dry place. With a storage temperature of 23°C the minimum shelf life is as follows:

VULCOFERRAN A45-V sheet	36 months
Keratex primer	12 months
Solution BS	12 months
Accelerator BS	12 months
Keratex hardener E	12 months
KCH cleaner 1	24 months

Higher temperatures will shorten the shelf life of this products. The packaging drums are to be kept tightly shut and are to be resealed each time material has been removed. All liquid products must be stored frost-free.

Safety

Adequate ventilation shall be provided during the execution of all work. Ventilation is compulsory for all work carried out in pits and closed rooms. All vapours that are produced during processing must be continuously suctioned off at floor or bottom level.

Only such amount of material effectively required to continue work is to be stored at the working place. The instructions for the prevention of fire and explosion are to be observed if required.

Please note and ensure that even smallest quantities of the individual components and/or prepared mixtures are not allowed to reach the sewerage.

All regulations for the prevention of accidents stipulated by the employer's liability assurance association, the regulations for the prevention of accidents prescribed at the site of application and the TRGS 507 „Surface treatment in rooms and tanks“, as well as the safety precautions listed on the packing (label) required by the provisions of the Hazardous Materials Ordinance shall be adhered to. The operating instructions pursuant to § 14 GefStoffV as well as the EC safety data sheets are to be complied with.

Technical data	Test specification	Unit	Parameter
Density top layer	DIN EN ISO 1183-1	g/cm ³	1.04 ± 0.02
Shore hardness	DIN 53505	Shore A	45 ± 5
Tensile strength *	DIN 53504	MPa	≥13
Elongation at tear *	DIN 53504	%	≥ 450
Peeling strength	DIN 28055-2	N/mm	≥ 3
Abrasion resistance	DIN 53516	mm ³	< 190
Max. operating temperature		°C	80

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

The technical data contained herein represents the current state of our product knowledge and is intended to furnish general information regarding our products and their application spectrum. In view of the diversity and multitude of application possibilities, this data should be regarded solely as general information, which does not guarantee any specific properties and/or suitability of these products for each concrete case of application. Consequently, when ordering a product, please contact us for detailed information relative to the properties required for a specific application. Our technical service will, upon request, furnish a profile of characteristics for the concrete application without delay.

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شرکت کسری نماینده رسمی KCH آلمان