

Technical Data Sheet

33.07.115E – 02/07

® KERAFLON

Fluoroplastic lining as protection from caking

Description

KERAFLON is a lining based on polytetrafluoroethylene (PTFE). The layer thickness ranges between 0.25 and 0.5 mm.

Typical uses

KERAFLON is used to protect rubber linings from caking. It is further used as barrier layer to prevent vapour diffusion. KERAFLON is predominantly used as a additional lining upon rubber lined plant components at flue gas desulfurization plants, above all in the absorber section where alternating suspensions occur, and at flue gas fans showing an increased risk of solid caking. KERAFLON is further especially suited as barrier layer in the absorber clean gas section preventing water vapour diffusion.

Properties

KERAFLON is distinguished by its outstanding anti-adhesive properties effectively preventing solid caking. In addition KERAFLON offers an excellent chemical resistance and tightness to diffusion of water vapour and various other substances.

Chemical resistance

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

Substrate

Soft rubber linings serve as substrate.

Surface pretreatment

The rubber surface shall be clean and free from separating substances. The surface shall be plane, i.e. the rubber lining joints have to be ground flat. The rubber lining surface shall be slightly ground and be cleaned after grinding using a vacuum cleaner or broom.

Application

The KERAFLON lining consists of the one-component Primer 1, the three-component adhesive BS and the KERAFLON sheet. The two-component adhesive B can also be used alternatively to the adhesive BS.

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
<u>Adhesive B</u>		
Solution B		
pre-accelerated	100	2.00
Keratex hardener E	3.1	0.06

Wipe off the slightly ground rubber lining surface using KCH cleaner 1, then apply adhesive BS (or B) three times. Apply Primer 1 on the etched side of the KERAFLON sheet, then apply adhesive BS (or B) twice. The KERAFLON sheet is firmly bonded by rolling it onto the substrate.

Cover the joints of the KERAFLON sheets with KERAFLON strips (thickness 0.25 mm) etched twice, or fill the joints with VULKODURIT B soft rubber mortar (see: Working Instruction 32.04.204E).

Pot life

Temper.	Adhesive BS / B
15°C	~ 160 min
20°C	~ 120 min
30°C	~ 55 min

Consumption

Primer 1: approx. 0.15 kg/m²
 Adhesive BS / B: approx. 0.2 kg/m² per coat
 KCH cleaner 1: approx. 0.2 kg/m²

Packing

The following standard quantities are available:

Primer1 23.00 kg
 Keratex primer 5.16 kg
 Solution BS 5.15 kg
 Solution B pre-accelerated 17.00 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:

KERAFLON sheet	24 months
Primer 1	12 months
Solution BS	12 months
Solution B pre-accelerated < 15 °C	6 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 are to 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	DIN EN ISO 1183-1	g/cm ³	2.17 ± 0.02
Hardness	DIN 53505	Shore D	55 ± 5
Tensile strength	DIN EN ISO 527	MPa	≥ 40
Elongation at tear	DIN EN ISO 527	%	≥ 250
Peeling strength	DIN 28055-2	N/mm	≥ 3
Max. surface pressure		MPa	6
Max. operating temperature		°C	100

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