

## TI 101K

Technical Information Surface Protection Linings  
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# KERABUTYL BS DIBt

Standard single-ply soft rubber lining for the protection of concrete components with national technical approval no. Z-59.21-64

## Base

Chlorobutyl rubber (CIIR) and chloroprene rubber (CR)

## Material Group

On-site rubber lining

## Description

Tempered, single-ply soft rubber lining based on chlorobutyl rubber (CIIR) and chloroprene rubber (CR).

Depending on the requirements, the layer thickness of the rubber sheet can be 2–4 mm.

## Use

Rubber lining is mainly used in the following applications:

- Sealing layer for sealing surfaces and secondary containments
- Sealing membrane
- Storage tanks

## Properties

- DIBt approval
- Tempered rubber sheet
  - Easy transport and storage without refrigeration for at least 24 months

## Physical Data

Property [unit], Test method	Value
Temperature resistance [°C]	80
Shore A hardness, DIN ISO 7619, ASTM D 2240	53 ± 5 (tempered)
Peeling strength [N/mm], DIN EN 14879-4	≥ 3
Tensile strength [MPa], DIN 53504	≥ 2
Elongation at tear [%], DIN 53504	≥ 400
Maximum surface pressure [MPa]	1
Density [g/cm <sup>3</sup> ], DIN EN ISO 1183-1, ASTM D 792	1.28 ± 0.02

Data are mean values of 4 mm thick vulcanized rubber samples.

## Chemical Resistance

Information of chemical resistance is available on request.

## Substrate

### Requirements

Application temperature	approx. 10–30 °C
Dew point distance	> 3 K
Dew point distance from 70% air humidity	> 5 K

### Concrete

Refer to DIN EN 14879-1 as well as to STEULER-KCH-Formsheet 010.

To achieve sufficient adhesive tensile strength, the substrate must generally be pre-treated in such a way that it is free of cement slurry, cement skin, loose and friable parts, structural defects and separating substances.

The residual moisture of cementitious substrates must not exceed 4 %.

The condition of the substrate must be documented by STEULER-KCH-Test-Record 006 (concrete).

For levelling and as a counter pole for the electrical leakage test, concrete substrates are filled with the conductive scraper coat KERA-POX EP 224 (see TI/VA 162) in a thickness of approx. 1-3 mm.

### Moisture

During application, the substrate must be kept dry. No moisture (condensate, mist, etc.) must get onto the material.

### Packaging / Shelf life

All components must be stored and transported dry. Unless otherwise specified, the minimum shelf life applies to a storage temperature of 20 °C. Higher temperatures reduce, lower temperatures increase the minimum shelf life. Keep the containers tightly closed (especially after material removal).

Component	Item number	Package	Content	Shelf life
Kerabutyl-BS-Sheet 2 - 4 mm	6076102205-405	Roll		24 Months
Keratex-Primer	5040307020	Hobbock	16 kg	12 Months
Keratex-Solution	5040341014	Hobbock	22 kg	12 Months
Keratex-Accelerator	5040342026	Drum	2 kg	12 Months
Keratex-Hardener E	5040025047	Bottle	0.75 kg	12 Months
KCH-Cleaner 1	5040016068	Canister	8.5 kg	24 Months

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

## Application

The rubber lining system KERABUTYL BS consists of the 1-component Keratex-Primer, the 3-component Keratex adhesive and the Kerabutyl-BS-Sheet.

### Keratex Adhesive

Component	kg/m <sup>2</sup>	Part by weight	kg / mix	Mix
Keratex-Solution	0.178	1.000	22.00**	1 l
Keratex-Accelerator	0.016	0.090	2.00**	60 ml
Keratex-Hardener E	0.006	0.035	0.75**	30 ml
<b>Total</b>	<b>0.200</b>		<b>24.75</b>	

\*\* pre-dosed package.

Concrete substrates must be pre-treated with KERAPOX EP 224 (see TI/VA 162). Apply the Keratex-Primer to the substrate. Then apply the Keratex adhesive twice. Wash the rubber sheet with KCH-Cleaner 1 and then apply the Keratex adhesive twice.

The rubber sheets are bonded to the substrate based on DIN EN 14879-4.

Pot life at 20 °C in hours (approx.)	2
Consumption primer per application in kg/m <sup>2</sup> (approx.)	0.15
Consumption adhesive per application in kg/m <sup>2</sup> (approx.)	0.2 (total consumption 0.8)

Consumption KCH-Cleaner 1 in kg/m <sup>2</sup> (approx.)	0.2
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The consumption figures already include the usual losses during application.

## Safety and Disposal

The following points should be observed:

- Sufficient ventilation and venting (especially in pits and tanks)
- No smoking and no fire
- Safety Data Sheets
- Observe hazard warnings and safety instructions on labels
- Wear required personal protective equipment (avoid skin contact with materials)
- Clean and protect hands with skin protection soap (no solvents!) and skin protection cream
- Wear a dust mask when grinding (e.g. for repairs)
- Operating instructions as per § 14 of GefahrstoffV (Toxic Substances Act) and TRGS 507 (Technical regulations for Hazardous Substances - Germany)
- Accident prevention regulations by the Liability Insurance Association for the Chemical Industries (Germany)
- Avoid direct contact of the materials with the flame, especially during welding work (welding beads) on site

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

## Cleaning of Equipment

Tools soiled with uncured materials can be cleaned with KCH-Cleaner 1. Only clean in well ventilated areas.

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This issue replaces all previous versions.