

TI 124K Technical Information Surface Protection Linings Issue 18.09.2019 KERABUTYL HT

Soft rubber lining for the lining of containers with high operating temperatures and high chemical stress

Base

Bromobutyl rubber (BIIR)

Material Group

Workshop rubber linings

On-site rubber lining

Description

Soft rubber lining based on bromobutyl rubber (BIIR), designed for extremely high temperature loads. The usual layer thickness is 4 mm rubber. The rubber lining must be tempered or vulcanized after the installation in accordance with our department for application technology.

Use

As a protective lining for structural components made of steel that are subjected to chemical exposure. The product is thermally very stable and well suited for difficult geometries as well as vacuum stress.

Physical Data

Property (unit), Test method	Value
Density [g/cm ³], DIN EN ISO 1183-1, ASTM D 792	1.16 ± 0.02
Tensile strength [MPa], DIN 53504	≥ 5
Elongation at tear [%], DIN EN ISO 527, ASTM C 307	≥ 250
Peeling strength [N/mm], DIN EN 14879-4	≥ 4
Temperature resistance [°C]	150
Shore A hardness, DIN 53505, ASTM D 2240	70 ± 5
	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 $\frac{1}{2}$ 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 μ m. 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
Kerabutyl-HT-Sheet 4 mm	6076315400	Roll		6 Months < 15 °C
Adhesive HT	5040326021	Drum	15 kg	6 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

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

Application

Apply the primer 1, then the primer 2, to the steel substrate. Then apply the adhesive-HT twice to steel. Apply the adhesive-HT to the rubber sheets. The rubber sheets are firmly bonded to the substrate with rubber lining rollers pressing as specified in DIN EN 14879-4.

Consumption

Primer 1:	approx. 0.15 kg/m ²
Primer 2:	approx. 0.20 kg/m ²
Adhesive HT:	approx. 0.60 kg/m ²

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 STEULER UNIVERSAL CLEANER (Technical Information TI 190). Only clean in well ventilated areas.

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This issue replaces all previous versions.