

**VULCANIZED NATURAL RUBBER (NR) BASED ON HARD RUBBER (EBONITE)
UNDER PRESSURE AND HEAT**

DESCRIPTION

Technodurit 1020 AC is graphite-filled hard rubber lining based on natural rubber (NR) resistant to abrasion that can be applied on site and vulcanized hot water, free steam or autoclave.

APPLICATION

Technodurit 1020 AC is recommended as a protective lining for steel equipments that are exposures to high chemical attack. It can be used in flue gas scrubbers, as well as storage tanks and reaction vessels that are in high temperature ranges. You can consult our general supervisor for details.

Grit blasting of SA 2 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 $R_z = 50 \mu\text{m}$. After blasting, the formation of new rust must be prevented by suitable measures, e.g. immediate application of a primer. The substrate temperature should be between 10 - 30 °C, dew point distance min. 5 K. Relative air humidity $\leq 75 \%$.

For stainless steel and grey cast iron, the single-component Technosil 52 Primer 1 and the single-component Technosil 52 Primer 2 are applied instead of the pre-coat compound. Spread the pre-coat compound on the substrate and then apply the Technosil 52 adhesive AD. For stainless steel and grey cast iron, spread the Primer 1 on the substrate, followed by the Primer 2 and then apply two coats of the Technosil 52 adhesive AD.

VULCANISATION

It is cured under 4 Atm pressure at 140°C for 330 minutes with steam and 240 minutes with hot air. After vulcanization, it is cooled under 4 Atm pressure for approximately 360 minutes.

USAGE

- Factories and production facilities
- Evaporator tanks
- Chemical areas
- Washing units
- Vacuum tanks
- Gas systems

PROPERTIES

- Smooth surface features
- Abrasion resistant
- Resistant to various chemicals
- Dirt-proof and hygienic
- Suitable for steel
- Available in black and brown color

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TECHNICAL PROPERTIES

Description	Value
Color	Black, Brown
Hardness, Shore D	75 ± 5 (DIN 53505)
Tear strength load at break, MPa	DIN 53504 > 20
Ultimate elongation, %	DIN 53504 < 1,5 – 3
Density	1.38 ± gr/cm ³ (DIN 53479)
Maximum Operation Temperature	+100, - 5°C
Shelf Life	6 months in 5°C

CHEMICAL PROPERTIES

- Excellent resistance to sea water and salt solutions,
- Excellent resistance in phosphoric acid, caustic (max. 50%), soda tanks,
- Excellent resistance to diluted acids,
- Excellent resistance to strong mineral acids,
- Excellent resistance to wet chlorine gas,
- Excellent resistance to impacts,
- Excellent resistance to Hydrochloric acid (Max. 37%) and Sulfuric acid (60% and up to 80°C)

TRANSPORT AND STORAGE

Material should be used latest within 90 days after production under normal conditions. The use of sheets, with hardness higher than of 30 Shore A is not recommended. Therefore the material should be stored at – 5°C for longer periods.

TESTING

3 kV/mm spark test.

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