PRODUCT INFORMATION

CHEMOLINE 9

General Properties

CHEMOLINE 9 is a black, soft rubber material with a polymer basis of nitril-butadiene rubber, which can be vulcanized in the workshop using hot air or alternatively using steam in autoclaves.

The most salient features of the lining material CHEMOLINE 9 are its excellent chemical resistance to diluted mineral acids, bases, aqueous phases, seawater and in particular, its outstanding resistance to non or weak polar agents for example benzene hydrocarbons, mineral oil, grease, petrol, solvent agents and vegetable respectively animal fat or oil.

This lining material is applicable in a temperature range extending from -20 °C to +90°C.

Application Examples

On account of its excellent chemical resistance to non or weak polar agents, the lining material CHEMOLINE 9 is widely used as an industrial surface protection system in the petrochemical and steel industry and particularly in the water reprocessing plants and off-shore area.
With the application of the lining material CHEMOLINE 9, steel components that are exposed to severe chemical, mechanical and thermal process conditions, such as storage bins, filter cells, mixing tanks, electroplating tanks can be effectively protected against corrosion.

Shelf life

CHEMOLINE 9 lining material can be stored without any loss of quality for a period of up to 6 month at a max. temperature of 25 °C.

Under cool storage conditions (at a temperature of +5 °C) the material can be stored for a period of 12 months. The conditions specified within DIN standard 7716 must be observed.

Application to Steel Surfaces

The lining material CHEMOLINE 9 is bonded to the steel using the TIP TOP Two-Layer Primer System PR 500-1/S 500-2 in combination with the adhesive NBR-solution TC 7000. The DIN-Standards EN 14879-1, EN 14879-4 and DIN EN ISO 12944-4 must be complied with.

Induction Testing of the Lining

The test to determine whether the lining is free from pores is conducted in accordance with DIN EN 14879-4 using a spark induction device (high voltage test). The induction test is conducted using either the Elmed-Isotester II RT or alternatively the Uniontester.

The test voltage is to be set as follows:

Lining Material	Test Voltage
CHEMOLINE 9 unvulcanized	4 KV / mm (max. 25 KV)
CHEMOLINE 9 vulcanized	4 KV / mm (max. 25 KV)

Mechanical / Physical Characteristics

Properties	Unit	Test Standard	Value
Polymer		DIN ISO 1629	NBR
Tensile strength	[MPa]	DIN 53 504	≥ 9
Elongation at break	[%] Stab S2	DIN 53 504	≥ 400
Hardness	[Shore A]	DIN 53 505	60 ± 5
Abrasion	[mm³]	DIN ISO 4649	≤ 250
Density	[g / cm³]	DIN EN ISO 1183-1	1,29 ± 0,02
Compression Set – RT/3[d]	[%]	DIN 53517	9
Compression Set – 70°C/3[d]	[%]	DIN 53517	11
Bonding strength on steel	[N / mm]	DIN ISO 813	≥ 3
Electrical surface resistance	[Ω]	DIN IEC 60093	10^9
Test voltage	[KV / mm]	DIN EN 14879-4	4
Temperature of use	[° C]		≤ 90

The data provided in the foregoing are based on extensive tests and represent approximate values that are characteristic for the product, however they do not comprise any guaranteed properties.

We reserve the right to make modifications, insofar as such changes are in the interests of technical progress and do not modify the product to any great extent.

Basic Program CHEMOLINE 9

Availability and dimensions

Rubber sheets in PE-film rolled up on cardboard cores. Packaged in cardboard boxes, suspended freely.

Length [mm]	Width [mm]	Thickness [mm]	Order Quantities [m²]	Product-No.
10.000	1.100	3	- 22	528 2360
10.000	1.100	3	- 66	
10.000	1.100	3	- 330	
10.000	1.100	3	> 330	
10.000	1.100	4,5	- 11	528 2350
10.000	1.100	4,5	- 44	
10.000	1.100	4,5	- 209	
10.000	1.100	4,5	> 209	
10.000	1.100	6	- 11	528 2340
10.000	1.100	6	- 33	
10.000	1.100	6	- 165	
10.000	1.100	6	> 165	

TIP TOP Oberflächenschutz Elbe GmbH, Heuweg 4, D-06886 Wittenberg
Phone: (0 34 91) 6 35 – 50, Fax: (0 34 91) 6 35 – 5 52