

# PRODUCT INFORMATION

## **CHEMOLINE 15 (EPDM)**

### **General Properties**

**CHEMOLINE 15** is a black, soft rubber material with a polymer basis of EPDM-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 15** are its excellent chemical resistance to diluted mineral acids, especially highly concentrated phosphoric acid, bases, aqueous phases, seawater and in particular, its outstanding resistance to polar agents for example alcohols, esters and glycols (also some typical cooling and brake fluids).

**CHEMOLINE 15** is especially suitable for linings in areas where potable water is present (KTW-Approval – Category D1). Furthermore **CHEMOLINE 15** demonstrates also superior properties against influences caused by ozone, weathering and heat oxidation.

This lining material is applicable in a temperature range extending from - 40 °C to + 120°C.

### **Fields of Application**

On account of its excellent chemical resistance to polar agents, the lining material **CHEMOLINE 15** is widely used as an industrial surface protection system in the construction industry and steel industry and particularly in the water treatment plants, off-shore area and fertilizer industry.

With the application of the lining material **CHEMOLINE 15**, steel components that are exposed to severe chemical, mechanical and thermal process conditions, such as storage vessels, filter cells, mixing tanks, electroplating tanks can be effectively protected against corrosion.

### **Shelf Life**

**CHEMOLINE 15** lining material can be stored without any loss of quality for a period of up to 6 months at a maximum 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 standard DIN 7716 must be observed.

### **Application on Steel**

**CHEMOLINE 15** is bonded on steel by means of TIP TOP two-coat primer system **PRIMER PR 500-1 / PRIMER S 500-2** in combination with **CEMENT TC 5000**.

The standards EN 14879-1, EN 14879-4 and EN ISO 12944-4 have to be observed.

## Spark Test

The spark test (Holiday Test) is carried out according to EN 14789-4. An earthed high-voltage spark tester Elmed-Isotest II RT or alternatively the Wegener Spark Tester WEG 20/22 must be used.

The test voltage has to be set as follows:

Lining material	Test voltage
<b>CHEMOLINE 15</b> un-vulcanised	4 KV / mm (max. 20 KV)
<b>CHEMOLINE 15</b> vulcanised	4 KV / mm (max. 20 KV)

## Mechanical - Physical Characteristics

Properties	Units	Standard	Value
Polymer		ISO 1629	EPDM
Tensile strength determined on:	[MPa] S2 Bar	DIN 53504	≥ 5
Elongation at break determined on:	[%] S2 Bar	DIN 53504	≥ 500
Hardness	[Shore A]	DIN 53505	65 + 5
Abrasion	[mm <sup>3</sup> ]	ISO 4649	< 300
Density	[g / cm <sup>3</sup> ]	EN ISO 1183-1	1.40 ± 0.02
Compression Set 25 % Deformation 70 h / 70 °C in hot air	[%]	DIN ISO 815	≤ 60
Bonding strength on steel	[N/mm]	ISO 813	> 3
Test voltage	[KV/mm]	EN 14879-4	4
Operating temperature	[°C]		≤ 120
Surface resistivity	[Ω]	DIN IEC 60093	10 <sup>10</sup>
Volume resistivity	[Ω x cm]	DIN IEC 60093	10 <sup>11</sup>
<b>After immersion in tap water at 95 °C / 21 d</b>		<b>BS 903</b>	
Surface resistivity	[Ω]	DIN IEC 60093	10 <sup>10</sup>
Volume resistivity	[Ω x cm]	DIN IEC 60093	10 <sup>10</sup>

The information given above is based on approved test results and represents statistical product data, which does not however necessarily guarantee the specific properties of the product.

We reserve the right to changes to technical specifications without prior notice, provided they ensure technical improvement without major modifications of the product itself.

## Basic Program *CHEMOLINE 15*

### Availability and Dimensions

Rubber sheets with PE separating sheets on hard core. Freely suspended in cardboard boxes.

Length [mm]	Width [mm]	Thickness [mm]	Quantity [m <sup>2</sup> ]	Product-No.
10.000	1.100	3	11	528 1800
10.000	1.100	4	11	528 1810
10.000	1.100	5	11	528 1820
10.000	1.100	6	11	528 1830

This data sheet is for informational purposes only. All data provided herein is based on in-depth research and testing, however no liability whatsoever can be assumed. Since we are constantly endeavouring to up-date and improve our products, we recommend noting the index and issue date indicated on this data sheet and to inquire as to whether any properties have changed in the interim. This Product Information Sheet replaces all prior issues. Please contact our Technical Consultant for detailed information in case of ambiguities.

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