

## PRODUCT INFORMATION

### **CHEMOLINE 55 CN (NR)**

#### **General Properties**

**CHEMOLINE 55 CN** is a black, soft rubber lining material on a polymer base of natural rubber, which is outfitted with an adhesive-friendly reactive contact layer (sublayer). The lining material is bonded to steel, concrete and many other substrates using the cold bonding technique with special TIP TOP contact adhesives.

Since the intramolecular cross-linkage (vulcanisation) is already carried in the workshop, there is no need for thermal post treatment after termination of the lining works nor are any prolonged waiting periods required for the vulcanization process to be completed. This means that the lining material may be exposed to chemical, mechanical and thermal stress immediately upon completion of the lining application.

By using the **CHEMOLINE 55 CN** lining material, both steel and concrete structural components of any size or shape can be provided with a surface protection system.

The most salient features of the lining material **CHEMOLINE 55 CN** are its excellent abrasion resistance to chemicals of medium concentration that have a high solids content.

This lining material is applicable within a temperature span ranging from – 40 to + 60 °C.

#### **Field of Application**

By reason of its exceptional capacity of resistance to wear as well as its chemical resistance to chemicals of medium concentration, **CHEMOLINE 55 CN** is utilized worldwide as an industrial corrosion protection system, particularly in ore processing plants and the fertilizer industry. Thus, structural components made of steel, such as storage and filter tanks, agitator tanks as well as pipelines that are subjected to chemical, mechanical and thermal loads can be effectively protected against abrasion and corrosion with **CHEMOLINE 55 CN**.

#### **Shelf life**

**CHEMOLINE 55 CN** lining material can be stored without any loss of quality for a period of up to 24 month at a maximum temperature of + 25 °C.

#### **Application to Steel Surfaces**

**CHEMOLINE 4 CN** is bonded onto steel by using the CFC-free **METAL PRIMER PR 304** in combination with **CEMENT BC 3004**. Alternatively the adhesive system **METAL PRIMER PR 300 / CEMENT BC 3000** can be used.

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 the EN 14879-4. An earthed high-voltage spark tester Elmed-Isotest II RT or alternatively the Wegener AC Spark Tester WEG 20/22 must be used.

The test voltage is to be set as follows:

Lining Material	Test Voltage
<b>CHEMOLINE 55 CN</b> vulcanised	4 KV / mm (max. 20 KV)

## Mechanical - Physical Characteristics

Properties	Unit	Test Standard	Value
Polymer		ISO 1629	NR
Resistance to tear determined using:	[MPa] S2 Bar	DIN 53504	≥ 24
Elongation at tear determined using:	[%] S2 Bar	DIN 53504	≥ 520
Hardness	[Shore A]	DIN 53505	55 ± 5 <sup>1)</sup>
Resistance to tear propagation	[N/mm]	ISO 34-1	≥ 19
Rebound resilience	[%]	DIN 53512	≥ 63
Abrasion	[mm <sup>3</sup> ]	ISO 4649	≤ 100
Density	[g/cm <sup>3</sup> ]	EN ISO 1183-1	1.13 ± 0.02
Adhesive strength to steel	[N/mm]	ISO 813	≥ 4
Test voltage	[KV/mm]	EN 14879-4	4
Operating temperature	[°C]		≤ 60

<sup>1)</sup> Press vulcanisation

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.

## Standard Program **CHEMOLINE 55 CN**

### Availability and dimensions

Rubber sheets in PE-film rolled up on cardboard cores.

Length [mm]	Width [mm]	Thickness [mm]	Quantity [m <sup>2</sup> ]	Product-No.
10,000	1,100	3	11	528 9895
10,000	1,100	4	11	528 9905
10,000	1,100	5	11	528 9912
10,000	1,100	6	11	528 9929

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.

**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**