

PRODUCT INFORMATION

CHEMOLINE 70 CN (CIIR/PVC)

General properties

CHEMOLINE 70 CN is a black soft rubber material on the basis of chlorobutyl rubber and polyvinyl chloride (CIIR/PVC), equipped with a bonding layer, which is reactive and easy to bond.

This lining material is bonded onto steel, concrete and many other substrates by means of special TIP TOP contact adhesives, according to the cold bonding system.

As the vulcanisation (intramolecular cross-linkage) has already been carried out during manufacturing, neither subsequent thermal treatment nor longer waiting times until complete vulcanisation are required after completion of the lining operation – the lining material can be put under chemical, mechanical and thermal stress immediately after the lining is completed.

CHEMOLINE 70 CN enables surface protection of structural steel and concrete parts of any size.

The essential properties of **CHEMOLINE 70 CN** lining material are its strong resistance to mineral acids, bases, aqueous phases and especially its excellent resistance for concentrated hydrochloric acid.

The above mentioned lining material can be used from - 30 °C to + 80 °C.

Fields of application

Due to its resistance to numerous chemicals, the lining material **CHEMOLINE 70 CN** is worldwide used as surface protection in the chemical, steel industry, and especially in the electroplating. Here, structural steel parts which are subject to high chemical, mechanical and thermal stress, such as acid pickling tanks and galvanic baths can be protected from corrosion by protection with the **CHEMOLINE 70 CN** lining material. A test report of the TÜV Nord / Hannover, confirming the excellent resistance of **CHEMOLINE 70 CN** against concentrated hydrochloric acid at 60 °C and 32 % hydrochloric acid at + 80 °C, is available.

Shelf life

The **CHEMOLINE 70 CN** lining material can be stored without any loss of quality up to 24 months at temperatures of max + 25 °C.

The DIN standard 7716 has to be observed in storage.

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Application on steel

CHEMOLINE 61 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 has to be set as follows:

Lining material	Test voltage
CHEMOLINE 70 CN	4 KV / mm (max. 20 KV)

Mechanical - Physical Characteristics

Properties	Units	Standard	Value
Polymer		ISO 1629	CIIR / PVC
Tensile strength determined on:	[MPa] S2 Bar	DIN 53504 ASTM D 638	≥ 3.0 ¹⁾ ≥ 2.5 ²⁾
Elongation at break determined on:	[%] S2 Bar	DIN 53504 ASTM D 638	≥ 450 ¹⁾ ≥ 400 ²⁾
Hardness	[Shore A]	DIN 53505 ASTM D 2240	53 ± 5 ¹⁾ 57 ± 5 ²⁾
Density	[g/cm ³]	EN ISO 1183-1	1.17 ± 0.02
Bonding strength on steel	[N/mm]	ISO 813	≥ 4
Surface resistivity	[Ω]	DIN IEC 60093	3.5×10^{11}
Volume resistivity	[$\Omega \cdot \text{cm}$]	DIN IEC 60093	1.5×10^{11}
Test voltage	[KV/mm]	EN 14879-4	4
Operating temperature	[°C]		≤ 80

¹⁾ Press vulcanisation

²⁾ Autoclave 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.

Basic Program **CHEMOLINE 70 CN**

Availability and dimensions

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

Length [mm]	Width [mm]	Thickness [mm]	Quantity [m.]	Product-No.
10.000	1.100	3	11	528 8140
10.000	1.100	4	11	528 8157
10.000	1.100	5	11	528 8164
10.000	1.100	6	11	528 8171

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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