

PRODUCT INFORMATION

CHEMOLINE 55 (NR)

General properties

CHEMOLINE 55 is a black soft rubber material on the basis of Natural Rubber (NR) which can be vulcanised in the workshop in the autoclave by means of hot air or with steam alternatively.

The essential properties of soft rubber material **CHEMOLINE 55** are its strong properties of abrasion resistance against chemicals of moderate concentration, which contain a high amount of solids.

CHEMOLINE 55 can be used within temperatures of - 40 °C up to + 60 °C.

Fields of application

Due to its excellent abrasion resistance properties and its chemical resistance against moderate chemicals, **CHEMOLINE 55** is used world-wide in mineral processing installations as well as in the fertiliser industry. Here storage, filter and agitator vessels as well as various pipe spools are protected from erosion and corrosion caused through chemical, mechanical and thermal stress.

Shelf life

The **CHEMOLINE 55** lining material can be stored without any loss of quality for a period up to 6 month at a maximum temperatures of + 25 °C.

Under cool storing conditions (at a temperature of + 5 °C) **CHEMOLINE 55** can be stored 12 months. The DIN standard 7716 has to be observed.

Application on Steel

CHEMOLINE 55 is bonded on steel with the dual layer TIP TOP-bonding system **PRIMER PR 500-1 / PRIMER S 500-2** in combination with **REMACLAVE SOLUTION** or **ADHESIVE SOLUTION 33361**.

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 |
|-----------------------------------|------------------------|
| CHEMOLINE 55 un-vulcanised | 5 KV / mm (max. 20 KV) |
| CHEMOLINE 55 vulcanised | 5 KV / mm (max. 20 KV) |

Mechanical - Physical Characteristics

| Properties | Units | Standard | Value |
|------------------------------------|------------------------------|---------------|--------------------------|
| Polymer | | ISO 1629 | NR |
| Tensile strength determined on: | [MPa] S2 Bar | DIN 53504 | ≥ 24 ¹⁾ |
| Elongation at break determined on: | [%] S2 Bar | DIN 53504 | ≥ 520 ¹⁾ |
| Hardness | [Shore A] | DIN 53505 | 55 + 5 |
| Tear strength | [N/mm] | ISO 34-1 | ≥ 19 |
| Rebound resilience | [%] | DIN 53512 | ≥ 63 |
| Abrasion | [mm ³] | ISO 4649 | ≤ 100 |
| Density | [g / cm ³] | EN ISO 1183-1 | 1.13 + 0.02 |
| Thermal conductivity | [W/mK] | DIN 51046 | 0.26 |
| Surface resistivity | [Ω] | DIN IEC 60093 | 1×10^{12} |
| Volume resistivity | [$\Omega \cdot \text{cm}$] | DIN IEC 60093 | 3×10^{11} |
| Test voltage | [KV/mm] | EN 14879-4 | 5 |
| Bonding Strength on Steel | [N/mm] | ISO 813 | ≥ 3 |

¹⁾ 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*

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 ²] | Product-No. |
|-------------|------------|----------------|----------------------------|-------------|
| 10.000 | 1.100 | 3 | 11 | 528 3925 |
| 10.000 | 1.100 | 4 | 11 | 528 3932 |
| 10.000 | 1.100 | 5 | 11 | 528 3949 |
| 10.000 | 1.100 | 6 | 11 | 528 3956 |

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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