

## PRODUCT INFORMATION

### **CHEMOLINE 10 (CIIR/CR)**

#### **General properties**

**CHEMOLINE 10** is a black soft rubber material on the basis of chlorbutyl rubber (polymer blend based on CIIR/CR).

Above mentioned 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 (intermolecular 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.

The **CHEMOLINE 10** lining material enables surface protection of structural steel and concrete parts of any size.

The essential properties of soft rubber material **CHEMOLINE 10** are its strong resistance to mineral acids, bases, aqueous phases, and especially its excellent diffusion resistance to gases like sulphur dioxide, nitrogen oxide and saturated water vapour.

Above mentioned lining material can be used within temperatures of – 40 °C up to + 85 C, other conditions should be confirmed by REMA TIP TOP.

#### **Fields of application**

Due to its resistance to numerous chemicals the lining material **CHEMOLINE 10** is worldwide used in the chemical, chlorine and steel industry, in mineral processing installations as well as in the field of environmental protection. Here, structural steel parts subject to high chemical, mechanical and thermal stress, such as storage bins, filter cells, mixing tanks, crystallizers and FGD plants can be protected from corrosion by using the **CHEMOLINE 10** lining material

#### **Shelf life**

**CHEMOLINE 10** lining material can be stored without any loss of quality for a period of up to 18 month at a max. temperature of + 25 °C. The DIN standard 7716 has to be observed.

#### **Application on steel**

The lining material **CHEMOLINE 10** is bonded onto steel by using the CFC-free adhesive system METAL PRIMER PR 304 / CEMENT BC 3004. The DIN standards 28 051, 28 053, 28 055 and DIN EN ISO 12 944-4 have to be observed before, during and after application.

|           |                          |                            |
|-----------|--------------------------|----------------------------|
|           | Chemoline 10 (CIIR / CR) | INDEX L of 23.03.2005      |
| Page: 1/3 | API                      | Replaces issue: 22.01.2005 |

### **Induction test of the lining**

The porosity test is carried out according to the German standard DIN 28 055 with a spark tester (high voltage test). For induction test the Elmed-Isotester II RT or alternatively the Uniontester has to be used.

The test voltage has to be set as follows:

| Lining material     | Test voltage             |
|---------------------|--------------------------|
| <b>CHEMOLINE 10</b> | 2.5 KV/mm (max. 12,5 KV) |

## **Mechanical - Physical Characteristics**

| Properties                           | Units                | Standard     | Value                 | Value                 |
|--------------------------------------|----------------------|--------------|-----------------------|-----------------------|
|                                      |                      |              | A                     | B                     |
| Polymer                              |                      | DIN ISO 1629 | CIIR / CR             | CIIR / CR             |
| Tensile strength determined on:      | [MPa]<br>S2 Bar      | DIN 53 504   | ≥1,5                  | ≥3                    |
| Elongation at break determined on:   | [%]<br>S2 Bar        | DIN 53 504   | ≥400                  | ≥350                  |
| Hardness                             | [Shore A]            | DIN 53 505   | 50 ± 5                | 65 ±5                 |
| Rebound resilience                   | [%]                  | DIN 53 512   | ≥8                    | ≥8                    |
| Density                              | [g/cm <sup>3</sup> ] | DIN 53 479   | 1.24 ± 0,02           | 1.24 ± 0.02           |
| Bonding strength on steel            | [N/mm]               | DIN ISO 813  | ≥ 3                   | ≥4                    |
| Surface resistant                    | [Ω]                  | DIN 53 482   | 2.5 x 10 <sup>8</sup> | 2.5 x 10 <sup>8</sup> |
| Electrical resistant                 | [Ω . cm]             | DIN 53 482   | 8 x 10 <sup>7</sup>   | 8 x 10 <sup>7</sup>   |
| Test voltage                         | [KV/mm]              | DIN 28 055   | 2.5                   | 2.5                   |
| Max. permanent operating temperature | [° C]                |              | ≤ 85                  | ≤ 85                  |

A Technological values at time of delivery

B Technological values after completion of 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 10*

### Availability and dimensions

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

| Length [mm] | Width [mm] | Thickness [mm] | Quantity [m.] | Product-No. |
|-------------|------------|----------------|---------------|-------------|
| 20.000      | 1.100      | 2              | 22            | 528 3963    |
| 10.000      | 1.100      | 3              | 11            | 528 3970    |
| 10.000      | 1.100      | 4              | 11            | 528 4230    |
| 10.000      | 1.100      | 5              | 11            | 528 4247    |
| 10.000      | 1.100      | 6              | 11            | 528 4254    |

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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|-----------|--------------------------|----------------------------|
|           | Chemoline 10 (CIIR / CR) | INDEX L of 23.03.2005      |
| Page: 3/3 | API                      | Replaces issue: 22.01.2005 |