

PRODUCT INFORMATION REMACOAT A-80

General properties:

REMACOAT A-80 is a cold curing 2-component coating system based on polyurea. The two highly reactive liquid components with the name **REMACOAT A-80 ISO** and **REMACOAT A-80 POLY** are mixed together through high pressure spraying – and become a highly elastic material within a few seconds, at ambient temperatures.

On account of the high reactivity of the two liquid components, a post curing process with hot air or steam in an autoclave is not necessary. However, it is possible to accelerate the cross linking process by post curing with hot air.

Due to its high elasticity, the coating system **REMACOAT A-80** is ideal for durable crack bridging and thus prevents the ingression of moisture or aggressive mediums into the substrate.

Furthermore, the coating system with the product name **REMACOAT A-80** is especially resistant to friction wear.

Thermal resistance (dry):

Continuous stress : -40 ℃... +130 ℃

Short-period stress : 150 ℃

Description of product REMACOAT A-80 ISO :

| Polymeric base : | Diphenylmethanediisocyanate (isomeres and homologues) |
|--------------------|--|
| Colour : | Colour of honey, transparent |
| Viscosity (25°C) : | 700 – 1:000 mPa*s |
| Density (25°C) : | 1,11 – 1,14g/cm ³ |

Chemical resistance (wet):

The outstanding feature of the coating system is its chemical resistance against saline solutions, as well as diluted non oxidizing acids and alkaline solutions at temperatures of up to $40 \,^{\circ}$ C.

Fields of application:

- The coating system **REMACOAT A-80** is used in nearly all industries as multifunctional surface protection, because of its special qualities.
- Bridges
- Lagoons of waste water and coating of pools
- Cold-storage chambers or low temperature storage rooms
- Wash- and cleaning stations
- Coating of the outer wall of double walled tanks
- Coating of oil pipelines
- Tunnels
- Terraces
- Sea water desalization plants
- Lining of severage systems
- Water storage facilities

<u>Description of product</u> <u>REMACOAT A-80 POLY :</u>

| Polymeric base : | Mixture of Polyoxyalkylamines |
|--------------------|----------------------------------|
| Colour : | Beige, cloudy (any colouring) |
| Viscosity (25°C) : | 1.350 – 1600 mPa*s |
| Density (25℃) | 1,02 – 1,04 g/cm ³ |

Shelf life:12 months if stored in closed original drums under storage conditions according to DIN 7716.

Hints for application:

| Pre-heat temperature for both components | 25 – 30 ℃ | |
|---|---|--|
| Process temperature for both components | 70 – 80 ℃ | |
| Application | Spray with 2K-high pressure machines, airless | |
| Mixing ratio (70 – 80 °C) | Volumetric Ratio : ISO : POLY = 100 : 100 | |
| | Gravimetric Ratio : ISO : POLY =109 : 100 | |
| Gelification – Time | According to temperature of substrate | |
| | approximately 10 – 12 sec. | |
| Tack-free- Time | According to ambient temperature | |
| | approximately 60 sec. | |
| Important : The Poly-component has to be stirred well before use. | | |

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Limit values for application:

Temperature range for application: Maximum relative humidity for application to steel/concrete: Pay attention to the dew point limit: -10 ℃ - +50 ℃ 98 % min. 3 ℃ > dew point

Physical- mechanical characteristics:

| Technological values | DIN- / ASTM - Standards | REMACOAT A-80 |
|---------------------------------------|--------------------------------|---------------|
| Density [g/cm ³] | EN ISO 1183 / - | $1,04\pm0,02$ |
| Tensile strength [N/mm ²] | 53504 / D-638 | ≥ 14 |
| Tensile Elongation [%] | 53504 / D-638 | 385 - 475 |
| Module 100 [N/mm ²] | 53504 / D-638 | ≥11 |
| Hardness [Shore A] | 53505 / D-2240 | 90 ± 5 |
| Abrasion resistance[mm ³] | 53516 / - | $140\pm30\%$ |
| Rebound elasticity [%] | 53512 / - | ≥ 40 |
| Tear growth resistance [N/mm] | ISO 34-1-2004 Methode A / - | ≥ 25 |

Final qualities are reached after 5 - 7 days. The technological values are determined after 28-days conditioning at ambient parameter (T = 23 ± 2 °C; Air humidity = 40 - 60 %). 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.

Chemical-physical characteristics:

| Properties | DIN - / ASTM- | REMACOAT A-80 |
|---|---------------|-------------------------|
| | Standards | |
| Surface resistance [Ω] | IEC 60167 / - | ≥1,0 * 10 ¹¹ |
| Water vapour permeability [g/m ² *d] | 53122 / E-96 | 12 – 14 * |
| Water vapour permeation [ng/cm*h*Torr] | 53122 / E-96 | 0,05 - 0,09 * |
| Peel strength (steel) [N/mm] | 53531 / - | ≥ 10 |
| Peel strength (concrete) [N/mm] | | ≥ 9 |

*the values are determined for material thickness of 4 mm at a temperature of 38 $^{\circ}{\rm C}$

Standard programme REMACOAT A-80 ISO and POLY

Form of delivery:

| Name of product | Drum size | Reference-No. |
|--------------------|-----------|---------------|
| REMACOAT A-80 ISO | 20 kg | 590 293-8 |
| | 222 kg | 590 291-4 |
| REMACOAT A-80 POLY | 20 kg | 590 292-1 |
| | 208 kg | 590 295-2 |

Please pass this data sheet to the person in charge of coating application. Above data and recommendations are based on extensive tests and are to be considered only as guidelines without any obligations. As we are continuously developing and improving our products we recommend to consider the date of this data sheet and, if necessary, to ask if there were changes in the meantime. In case of further questions please contact one of our technical advisors for detailed information at:

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