

PRODUCT INFORMATION REMACOAT D-40-S

General properties:

REMACOAT D-40-S is a cold curing 2-component coating system based on polyurea. The two highly reactive liquid components with the name **REMACOAT D-40 ISO** and **REMACOAT D-40-S POLY** are mixed together through high pressure spraying – and become a highly elastic material within approximately 60 seconds at ambient temperatures.

On account of the long gelification and tack-free-time of **REMACOAT D-40-S**, this coating system is ideal for application to highly stressed industrial floorings. Thanks to the long gelification time, the 2K-coating system shows self-levelling characteristics, which make it possible to obtain an even layer thickness, especially in corners and edges, but also over large surface areas.

Chemical resistance (wet):

The outstanding feature of the coating system **REMACOAT D-40-S** is its resistance against a multitude of chemicals, particularly diluted acids (inorganic or organic ones), alkaline solutions, oils of different kinds and aqueous phases. The above mentioned material can be applied up to a temperature of 50 °C (Wet stress)

Thermal resistance (dry):

Continuous stress : -40 °C... +130 °C
Short-period stress : 150 °C

Description of product REMACOAT D-40 ISO :

Polymeric base :	Diphenylmethanediisocyanate (isomeres and homologues)
Colour :	Colour of honey, transparent
Viscosity (25 °C) :	350 – 550 mPa*s

Fields of application:

- The coating system **REMACOAT D-40-S** is used in nearly all industries as multifunctional surface protection, because of its special qualities.
- Significantly extended gelification, and tack free time / curing time
- Self-levelling characteristics (corners and edges)
- Even layer thickness in large application areas
- Significantly improved tear growth resistance
- Increased tensile elongation at the same hardness
- Smooth surface
- Ideal for outer pipe coating
- Furthermore, the coating system **REMACOAT D-40-S** is just as suitable for many application fields as the standard-system **REMACOAT D-40** is, but with the restriction that the coating of vertical areas or overhead spray application is only possible under certain conditions.

Shelf life:

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

Description of product REMACOAT D-40-S POLY :

Polymeric base :	Mixture of Polyoxyalkylamines
Colour :	beige, cloudy; any colouring
Viscosity (25 °C) :	1700 - 2000 mPa*s
Density (25 °C) :	1,19 – 1,23 g/cm ³

Limit values for application:

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

Hints for application:

Pre-heat temperature for both components	25 – 30 °C
Process temperature for both components	70 – 80 °C
Application	Spray with 2K-high pressure machines, airless
Mixing ratio (70 – 80 °C)	Volumetric Ratio : ISO : POLY = 100 : 100 Gravimetric Ratio : ISO : POLY = 94 : 100
Gelification Time	According to temperature of substrate 50 – 70 sec.
Tack-free- Time	According to ambient temperature 3 – 5 min.
<u>Important</u> : The Poly-component has to be stirred well before use.	

Mechanical-physical characteristics:

Technological values	DIN- / ASTM - Standards	REMACOAT D-40-S
Density [g/cm ³]	EN ISO 1183 / -	1,13 ± 0,02
Tensile strength [N/mm ²]	53504 / D-638	≥ 15
Tensile Elongation [%]	53504 / D-638	≥ 320
Module 300 [N/mm ²]	53504 / D-638	≥ 11
Hardness [Shore D]	53505 / D-2240	45 ± 5
Abrasion resistance [mm ³]	53516 / -	≤ 160
Rebound elasticity [%]	53512 / -	≥ 33
Tear growth resistance [N/mm]	ISO 34-1-2004 Methode A /	≥ 40

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 values :

Properties	DIN - / ASTM- Standards	REMACOAT D-40-S
Surface resistance [Ω]	IEC 60167 / -	≥ 1,0 * 10 ¹¹
Water vapour permeability [g/m ² *d]	53122 / E-96	6 – 8 *
Water vapour permeation [ng/cm ² *h*Torr]	53122 / E-96	0,04 – 0,06 *
Pull off Strength (steel) [N/mm ²]	EN 24624 /	≥ 6
Pull off Strength (concrete) [N/mm ²]	D-4541	≥ 3
Pull off strength (steel) [N/mm]	EN 24 624 /	≥ 10
Pull off strength (concrete) [N/mm]	ASTM D4541	≥ 5

*the values are determined for material thickness of 4 mm at a temperature of 38°C

Standard programme

Form of delivery:

Name of product	Drum size	Ref.No.
REMACOAT D-40 ISO	20 kg	590 286-6
	224 kg	590 289-7
REMACOAT D-40-S POLY	20 kg	590 309-2
	240 kg	590 310-2

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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