PRODUCT INFORMATION REMACOAT C

General properties:

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

Due to 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.

Electrical properties:

Due to its electrostatic properties (related to the surface, volume, and derivation resistance), the 2-component coating system **REMACOAT C** (product name) is suitable for building up antistatic coatings to avoid risks of ignition due to electrostatic charge when flammable liquids of the danger classes AI, A II and B are stored.

Chemical resistance (wet):

The outstanding feature of the coating system **REMACOAT C** is its resistance to a wide variety of chemicals, particularly gasoline, aviation fuels, heating oil EL, unused and used oils for combustion engines. The minimum stress duration for the coating is 72 hours (secondary stresses)

The a.m. coating material can be used up to a temperature of +45°C (wet stress).

General Approval of German Institute for Construction Technology (DIBT):

The coating material REMACOAT C is approved by the German Institute for Construction Technology (DIBT) as an organic surface protection for concrete in storage, filling, loading and unloading equipment/facilities which are subject to the German water resources law (WHG 19).

Thermal resistance (dry):

Continuous stress : -40°C... +130°C

Short-period stress : 150 °C

Fields of application:

- Due to its derivation ability for electrostatic charges, the coating system **REMACOAT C** is mainly used in the following (petrochemical) plants/facilities:
- Secondary containment
- Washing and cleaning stations
- Coating of the outer wall of double walled tanks
- Petrochemical refineries
- Coating of oil pipelines
- Off-shore platforms

CERTIFICATE-No.: Z-59.12-304

Shelf life:

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

Description of product REMACOAT C ISO :

Polymeric base :	Diphenylmethanediisocyanate (isomers and homologues)
Colour :	amber, transparent
Viscosity (25°C) :	350 – 550 mPa*s
Density (25°C) :	1,10 – 1,14 g/cm^3

Description of product REMACOAT C POLY :

Polymeric base :	Mixture of Polyoxyalkylamines
Colour :	brownish; transparent, any colouring
Viscosity (25°C) :	750 – 950 mPa*s

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 2-component 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** **4 – 6 sec.**
Tack-free- Time	**According to ambient temperature** **15 – 18 sec.**
Important : The Poly-component has to be stirred well before use.	

Physical- mechanical characteristics:

Technological values	DIN- / ASTM - Standards	REMACOAT C
Density [g/cm^3]	EN ISO 1183 / -	0.99 ± 0.02
Tensile strength [N/mm^2]	53504 / D-638	≥ 15
Tensile Elongation [%]	53504 / D-638	≥ 250
Module 100 [N/mm^2]	53504 / D-638	≥ 15
Hardness [Shore D]	53505 / D-2240	30 ± 5
Abrasion resistance [mm^3]	53516 / -	≤ 200
Rebound elasticity [%]	53512 / -	≥ 35
Tear growth resistance [N/mm]	ISO 34-1-2004 Methode A / -	≥ 25

Final qualities are reached after 5 - 7 days.The technological values have been determined after 28-days of conditioning at ambient parameters (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 C
Surface resistance [Ω]	IEC 60167 / -	< 1,0 * 10^9
Volume resistance [Ω]	IEC 60093 / -	< 1.0*10^8
Derivation resistance [Ω]	ZH 1/200 / -	< 1.0*10^8
Pull off Strength (steel) [N/mm^2] Pull off Strength (concrete) [N/mm^2]	EN 24624 / -	≥ 6 ≥ 2
Peel strength (steel) [N/mm] Peel strength (concrete) [N/mm]	53531 / -	≥ 8 ≥ 4

Standard programme REMACOAT C ISO and POLY

Form of delivery:

Name of product	Drum size	Ref. No.
REMACOAT C ISO	20 kg 224 kg	590 270-0 590 267-0
REMACOAT C POLY	20 kg 200 kg	590 268-0 590 269-0

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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