

PRODUCT INFORMATION REMACOAT FDA

General properties:

REMACOAT FDA is a cold curing 2-component coating system based on aliphatic polyurea. The two highly reactive liquid components **REMACOAT FDA ISO** and **REMACOAT FDA POLY** are mixed together through high pressure spraying – and become a highly elastic material at ambient temperatures in approximately 8 - 10 seconds.

REMACOAT FDA, is suitable for direct contact with dry foodstuff according to the requirements of the EC Directive 2002/72/EC and the German Regulations on Commodities (“Bedarfsgegenständeverordnung”).

A detailed list of all the foodstuff or groups of foodstuff, which may come into direct contact with the coating, is available on request.

Due to its light fast properties, **REMACOAT FDA** is ideal for topcoating, where the visual aspect is essential.

Chemical resistance (wet):

REMACOAT FDA is similar as other polyurea materials, resistant against saline solutions, diluted non oxidizing acids and alkaline solutions at temperatures of up to +45 - 50 °C.

Description of product REMACOAT FDA ISO :

Polymeric base :	HDI- Isocyanates
Colour :	Colour of honey, transparent
Viscosity (25 °C) :	1.200 – 1.700 mPa*s

Limit values for application:

Temperature range for application:
Maximum relative humidity for application to steel/concrete:
Pay attention to the dew point limit:

-10 °C - +50 °C
98 %
min. 3 °C >dew point

Hints for the application:

Pre-heat temperature for both components	25 – 30 °C
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 = 111 : 100
Gelification-Time	According to temperature of substrate approximately 8 – 10 sec.
Tack-free- Time	According to ambient temperature approximately 25 – 30 sec.
Important : The Poly-component has to be stirred well before use.	

Thermal resistance (dry):

Continuous stress : -40 °C... +90 °C

Short stress : 110 °C

Fields of application:

The coating system **REMACOAT FDA** is used as a multifunctional surface protection in many food-processing and agricultural operations, because of its special qualities. On account of the physical and mechanical characteristics of this coating system, the wear resistance is also guaranteed at a high level.

- Excellent suitability for direct contact with dry foodstuff according to the requirements of the EC Directive 2002/72/EC.
- Cold-storage chamber or low-temperature storage rooms
- Light fast Coating system for all application, where the visual aspect is essential

Shelf life:

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

Description of product REMACOAT FDA POLY :

Polymeric base :	Mixture of Polyoxyalkylamines
Colour :	White
Viscosity (25 °C) :	350 – 650 mPa*s

Physical- mechanical characteristics:

Technological values	DIN- / ASTM - Standards	REMACOAT FDA
Density [g/cm ³]	EN ISO 1183 / -	1,03 ± 0,02
Tensile strength [N/mm ²]	53504 / D-638	≥ 15
Tensile Elongation [%]	53504 / D-638	≥ 100
Module 100 [N/mm ²]	53504 / D-638	≥ 8
Hardness [Shore D]	53505 / D-2240	45 ± 5
Abrasion resistance [mm ³]	53516 / -	≤ 300
Rebound elasticity [%]	53512 / -	≥ 35
Tear growth resistance [N/mm]	ISO 34-1-2004 Methode A /	≥ 20

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 %).

Chemical-physical characteristics:

Properties	DIN- / ASTM - Standards	REMACOAT FDA
Surface resistance [Ω]	IEC 60167 / -	≥ 5,0 * 10 ¹¹
Water vapour permeability [g/m ² *d]	53122 / E-96	11 – 13 *
Water vapour permeation [ng/cm ² *h*Torr]	53122 / E-96	0,04 – 0,08 *
Pull off strength (steel) [N/mm]	EN 24 624 /	≥ 7
Pull off strength (concrete) [N/mm]	ASTM D4541	≥ 3

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

**Standard programme
REMACOAT FDA ISO and POLY**

Form of delivery:

Name of product	Drum size	Reference-No.
REMACOAT FDA ISO	20 kg	590 279-0
	224 kg	590 280-0
REMACOAT FDA POLY	20 kg	590 282-0
	192 kg	590 281-0

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:

REMA TIP TOP GmbH
Business Unit Industrie
 Gruber Straße 63
 85586 Poing

Telephone: +49-(0) 81 21 / 7 07 – 2 55 or -106
Fax: +49-(0) 81 21 / 7 07 – 2 22
e-mail: bernd.dietz@tiptop.de