

PRODUCT INFORMATION A-60

General properties:

REMACOAT A-60 is a cold curing 2-component coating system based on pure polyurea. The two highly reactive liquid components with the name **REMACOAT A-60 ISO** and **REMACOAT A-60 POLY** are mixed together through high pressure spraying – and become a highly elastic material at ambient temperatures in approximately 20 seconds.

On account of the high reactivity of both liquid components, a post curing process using hot air or vapour in an autoclave is not necessary.

Due to its high elasticity, the coating system **REMACOAT A-60** is ideal for durably bridging cracks, and therefore prevents the ingression of moisture or aggressive media into the substrate.

Furthermore the coating system with the product name **REMACOAT A-60** has an especially high resistance to wet wear, friction wear and to impact wear under certain circumstances.

Chemical resistance (dry):

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

Description of product REMACOAT A-60 ISO :

Thermal resistance (dry):

Continuous stress : -40 °C ... +130 °C

Short stress : 150 °C

Fields of application:

- The coating system REMACOAT A-60 is used as a multifunctional surface protection in nearly all industries, because of its special qualities.
- Production of wear protection linings on simply profiled, large areas of steel plates, for example silos, grain elevators, bulk goods containers, conveyor troughs or pipes
- Manufacture of elastic forms
- Cold-storage chamber or low-temperature storage rooms
- Wrapping of foamed chemical materials with low bulk density
- Excellent weather-resisting properties at high ozone levels also under dynamic load
- Lining of geometrically complicated plant parts, especially in the wear protection sector
- Production of waterproof layers for the building industry

Polymeric base :	Diphenylmethanediisocyanate (isomeres and homologues)
Colour :	Colour of honey, transparent
Viscosity (25 ℃) :	2.000 – 3.500 mPa*s
Density (25 °C) :	1,07 – 1,11g/cm ³

Description of product REMACOAT A-60 POLY :

Polymeric base :	Mixture of Polyoxyalkylamines
Colour :	Beige, cloudy; available in different colours
Viscosity (25 °C) :	350 – 450 mPa*s
Density (25℃) :	0,98 – 1,02 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 =107 : 100
Gelification-Time	According to temperature of substrate
	approximately 24 – 29 sec.
Tack-free- Time	According to ambient temperature
	approximately 10 min.

REMA TIP TOP GmbH	Product information REMACOAT PI_REMACOAT_A-60.DOC	Index A from 02.07.2008
Page : 1/2	API	Substitutes Edition



Important : The Poly-component has to be stirred well before use.

Limit values for application:

Temperature range for application:	-10℃ - +50℃
Maximal relative humidity for application on steel/concrete:	98 %
Pay attention to the dew point limit:	min. $3^{\circ}C$ > dew point

Physical- mechanical characteristics:

Technological values	DIN- / ASTM - Standards	REMACOAT A-60
Density [g/cm ³]	EN ISO 1183 / -	$1,00 \pm 0,02$
Tensile strength [N/mm ²]	53504 / D-638	≥ 10
Tensile Elongation [%]	53504 / D-638	≥ 550
Module 100 [N/mm ²]	53504 / D-638	≥ 5
Hardness [Shore A]	53505 / D-2240	60 ± 5
Abrasion resistance[mm ³]	53516 / -	150 – 200
Rebound elasticity [%]	53512 / -	≥ 35
Tear growth resistance [N/mm]	ISO 34-1-2004 Methode A /	≥ 18

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- Standards	REMACOAT A-60
Surface resistance [Ω]	IEC 60167 / -	\geq 4,0 * 10 ¹¹
Water vapour permeability [g/m ² *d]	53122 / E-96	16 – 19 *
Water vapour permeation [ng/cm*h*Torr]	53122 / E-96	0,08 - 0,11 *
Peel strength (steel) [N/mm] Peel strength (concrete) [N/mm]	53531 / -	≥ 10 ≥ 9

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

Standard programme REMACOAT A-60 ISO and POLY

Form of delivery:

Name of product	Drum size	Reference-No.
REMACOAT A-60 ISO	20 kg	590 271-0
	215 kg	590 272-0
REMACOAT A-60 POLY	20 kg	590 273-0
	200 kg	590 274-0

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

REMA TIP TOP GmbH	Product information REMACOAT PI_REMACOAT_A-60.DOC	Index A from 02.07.2008
Page : 2/2	API	Substitutes Edition