

PRODUCT INFORMATION

REMACOAT A-70-S

General properties:

REMACOAT A-70-S is a cold curing 2-component coating system based on polyurea. The two highly reactive liquid components with the name **REMACOAT A-70-S ISO** and **REMACOAT A-70-S POLY** are mixed together through high pressure spraying – and become a highly elastic material at ambient temperatures within a few seconds.

On account of the long gelification time or tack-free-time of **REMACOAT D-70-S**, this coating system is especially suitable for application to geometrically complicated plant parts, in the field of wear protection.

Due to its high elasticity, the coating system **REMACOAT A-70-S** 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-70-S** has an especially high resistance to wet wear.

Chemical resistance (wet):

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.

Thermal resistance (dry):

Continuous stress : -40 ℃... +130 ℃

Short stress : 150 ℃



REMA TIP TOP GMBH	PRODUCT INFORMATION PI_REMACOAT_A-70-S.DOC	INDEX G FROM 02.07.2007
Page : 1/5	API	Substitutes Edition F



Product advantages:

- The coating system **REMACOAT A-70-S** is used as a multifunctional surface protection in nearly all industries on account of its special qualities, and it has the following advantages over the standard-coating REMACOAT A-80:
- Considerably extended gelification time, tack-free time / curing time
- Self-levelling characteristics of the material (corners and edges)
- Even layer thickness in large application areas
- Smoother surface
- Increased rebound elasticity
- Ideal for the coating of geometrically complicated plant parts in the wear protection sector, for example screening machines.
- Furthermore, the coating system REMACOAT A-70-S is just as suitable for many application areas as the standard-system REMACOAT A-80 is, but with the restriction that the coating of vertical areas or overhead spray application are possible only under certain conditions.

Description of product REMACOAT A-70-S ISO :

Polymeric base :	Diphenylmethanediisocyanate (isomeres and homologues)
Colour :	Colour of honey, transparent
Viscosity (25 °C) :	1500 - 2100 mPa*s
Density (25 °C) :	1,07 – 1,11g/cm ³

<u>Description of product REMACOAT A-70-S POLY :</u>

Polymeric base :	Mixture of Polyoxyalkylamines
Colour :	beige, cloudy; available in different colours
Viscosity (25 ℃):	1.250 – 1.500 mPa*s
Density (25°C) :	1,03 – 1,07 g/cm ³



REMA TIP TOP GMBH	PRODUCT INFORMATION PI_REMACOAT_A-70-S.DOC	INDEX G FROM 02.07.2007
Page : 2/5	API	Substitutes Edition F



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 °C
Application	Spray with 2K-high pressure machines, airless
Mixing ratio (70 – 80 ℃)	Volumetric Ratio : ISO : POLY = 100 : 100
	Gravimetric Ratio : ISO : POLY =103 : 100
Gelification Time	According to temperature of substrate
	approximately 18 – 22 sec.
Tack-free- Time	According to ambient temperature approximately 5 min.
Important : The Poly-compone	ent has to be stirred well before use.

Limit values for application:

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



REMA TIP TOP GMBH	PRODUCT INFORMATION PI_REMACOAT_A-70-S.DOC	INDEX G FROM 02.07.2007
Page : 3/5	API	Substitutes Edition F



Physical- mechanical characteristics:

Technological values	DIN- / ASTM – Standards	REMACOAT A-70-S
Density [g/cm ³]	EN ISO 1183 / -	1,01 ± 0,02
Tensile strength [N/mm ²]	53504 / D-638	≥ 7
Tensile Elongation [%]	53504 / D-638	≥ 350
Module 100 [N/mm ²]	53504 / D-638	≥ 6
Hardness [Shore A]	53505 / D-2240	70 ± 5
Abrasion resistance[mm ³]	53516 / -	≤ 200
Rebound elasticity [%]	53512 / -	≥ 45
Tear growth resistance [N/mm]	ISO 34-1-2004 Methode A / -	≥ 15

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-70-S
	Standards	
Surface resistance [Ω]	IEC 60167 / -	≥ 2,5 * 10 ¹¹
Water vapour permeability [g/m ² *d]	53122 / E-96	13 – 15 *
Water vapour permeation [ng/cm*h*Torr]	53122 / E-96	0,06 - 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 $^{\circ}\mathrm{C}$



REMA TIP TOP GMBH	PRODUCT INFORMATION PI_REMACOAT_A-70-S.DOC	INDEX G FROM 02.07.2007
Page : 4/5	API	Substitutes Edition F



Standard programme REMACOAT A-70-S ISO and POLY

Form of delivery:

Name of product	Drum size	Reference-No.
REMACOAT A-70-S ISO	20 kg	590 275-0
	225 kg	590 276-0
REMACOAT A-70-S POLY	20 kg	590 277-0
	208 kg	590 278-0

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



REMA TIP TOP GMBH	PRODUCT INFORMATION PI_REMACOAT_A-70-S.DOC	INDEX G FROM 02.07.2007
Page : 5/5	API	Substitutes Edition F