

Manual system

DESCRIPTION

Two component, self-levelling coating based on resins. Prepolymers (Isocyanate) + Polyols and Amine Polyols

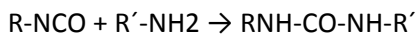
Coating applications based on EUROTAF SYSTEMS technology range from paint, where aesthetic appearance in combination with their adherence and hardness properties are vital, the protection of bridges and vehicle parking areas, to protective finishes for metal and concrete pipes, lorry platforms, etc.

History of Polyurea

- They are necessary PUR or PUA elastomers, with 100% solids for reaction injection moulding (RIM).
- Two components: High molecular weight (MW) Polyols, amine chain extenders and amine catalysts.
- Polyoxyalkylene-di and triamines, without catalysts.

Chemistry

Reaction of amines:



RECOMMENDED USE High performance coatings.

APPLICATIONS

Maintenance:

- Chemical plants.
- Power stations.
- Containers, retention and storage tanks.
- Industrial and agricultural machinery.
- Metal panels and shelters.
- Pipes.

Automotion:

- Lorry platforms.
- Undercarriage coatings (resistant to the impact from stones).

Construction and civil engineering:

- Coating for concrete.
- Floor coatings.
- Gypsum plastering, coating asbestos surfaces.
- Bridges and structures.
- Sprayed protective layers (waterproofing membranes).

Commercial vehicles:

- Buses
- Trains.
- Lorries.



INSTRUCTIONS

Mortar and concrete bases must be sound, slightly rough, free of grease, oil, loose particles or broken up parts, surface slurries and well levelled. Furthermore, we recommend that they have minimum resistances of 2.2 not only for compression strength at 25 N/mm² but also for tensile strength at 15 N/mm².

Priming: Apply the priming preferably by brush or roller. Priming shall be carried out according to the absorption of the base and the system applicable.

You can use our EUROTAFF 320 Consolidating agent for priming concrete.

Mixing: Eurotaff 300 is supplied as pre-dosed components:

PREPARATION SYSTEM:

- 1- Briefly stir **component A** (Polyol),
- 2- Briefly stir **component B** (Isocyanate).
- 3- Pour **component B** (small container) into the metal container of **component A**, which is the large-sized container.
- 4- Stir without creating air for a minimum 30 seconds.

APPLICATION

The same product can be used as a primer for layers no thicker than 150-200 microns.

Always remember that what you achieve with a thin layer of **PRIMER** is as follows:

- 1- Seal the pores and thus prevent pinholes or bubbles.
- 2- Make a better vapour barrier and allow it to dry in the shortest possible time.
- 3- If two priming layers are needed, this will guarantee greater product stability.
- 4- We can add silica (00-0.2) to the primer in the Polyol container of component a (Large container) always measuring less than 30% of the total (This is for the priming, for the finish we can reach up to 70%) when priming with fine silica (00-0.2) mixed with polyurea. What we achieve is that the silica helps to close all the pores of the concrete, wood, etc. and avoid pinholes.
- 5- Remember that all material breathe and this is especially so with concrete and wood. Therefore, preventing pinholes can be the fruit of good priming and good surface preparation.
- 6- Surfaces must always be clean. They must be sanded and prepared and although EUROTAFF 300 cold polyurea can be applied to very deteriorated and dirty surfaces, it is better if they are clean.
- 7- We have experience that, in cases of damp or in rainy conditions, the product can be applied in moderate rain and in thin layers.

FINISH

Depending on the thickness required, you can use:

Roller for thin layers of between 150 and 300 microns

Rubber trowel (Similar to those used for cleaning with water) for thicknesses of between 150 and 300 microns.

Notched trowel for thicknesses of between 500 microns and 2 mm but, if possible, always use accompanied by a **SPIKED ROLLER** so that the product can breathe and no bubbles are created.

The spiked roller is recommended for terminations that are over 500 microns thick because, when the spiked roller goes over the product, it can breathe and self-levelling is improved.

If we want a sun-resistant finish, (that does not discolour) you must choose dark colours such as red, dark grey, black, green, etc., or apply a last layer of Aliphatic Polyurea.





OTHER CONSIDERATIONS

The required thickness and hardness can be achieved by adding silica, corundum, aluminium shavings, gum rubber cuttings, etc. Polyurea admits strange bodies either in the mixture itself or sprinkled on top.

- 1 If mixing silica in the container itself, we can use up to 70% silica in the mix. (If making a mixture with a thickness of between 00 and 0.5 mm).
- 2 If sprinkling the silica, we can saturate with silica up to 1.5 mm.
- 3 If adding corundum, we will make very high strength and very hard flooring and we can either mix or sprinkle it. Here everyone has their own way of doing things. Mixes and saturations are acceptable of up to 100%, in other words, we can mix 1 kilo of polyurea with 1 kilo of corundum.
- 4 In the case of rubber, you can mix a maximum 10% because the volume of rubber is very high. Cold applied polyurea acts as a rubber compacter, you can do something similar to what we see in parks and gardens.
As everyone has their own way of doing things, do so. In other words, if dealing with new things, try them first using a small amount because everyone has a way of dealing with applications. The ones given here work, others have to be tried.

The product is diluted so it is not necessary for any thinner to accompany it, (in cases of extreme heat, accompany it with **EUROTAFF / 934** special polyurea thinner).

Spread it uniformly with a notched trowel, rake, roller, rubber rake, or Airless.

On horizontal or slightly sloping surfaces, apply several layers to achieve the required thickness.

As it is self-levelling, the marks from the notched trowel will quickly disappear.

OBSERVATIONS

Do not add water to the mixture.

Avoid applying outdoors when the atmospheric conditions can quickly dry the product (high temperatures, a lot of wind, etc.), because curing compounds cannot be used.

Prepolymers (Isocyanate) can affect skin and mucous membranes. We therefore suggest you use rubber gloves and protective goggles when handling. If there is contact with the eyes, wash them with plenty of clean water and quickly seek medical attention.

Always read the safety data sheets of any product before use. If you do not understand them, please contact our technical department.

STORAGE CONDITIONS

Keep in a dry place at temperatures between + 5 °C and + 30 ° C. Protect components A and B from frost.

CONSERVATION

12 months, from date of manufacture in well-sealed and non-deteriorated original containers.

PRESENTATION

Pre-dosed batches although batches can be made to order or to colour. Basic colours are Red and Grey.

Remember that the colours less affected by the Sun are dark ones: RED, GREEN, BROWN, BLACK.

Clear colours such as LIGHT GREY, WHITE, LIGHT BLUE, etc. need aliphatic protection from our EUROTAFF 500 aliphatic product.

CONSUMPTION

Approx. 1 kg/m² for 0.8 mm thick



TECHNICAL DATA

Type:
Colour:
Density:
Mix proportions by weight:
Pot life at 0°C.
Minimum: 500 microns Maximum:
Temperature of the base:

serie 300

Prepolymer (Isocyanate)- 2 component POLYOL
Ral Chart:
Approx. 1.25
Component A = 12.7 parts Component B = 5.2 parts.
Approx. 45 minutes
Unlimited
Between + 8 °C and + 28 °C

MECHANICAL STRENGTH

Compression		10 °C 75% R.H.	23 °C 50% R.H.	30 °C 40% R.H.
	1 day	=1.5 N/mm ²	=10 N/mm ²	=33 N/mm ²
	7 days	=36 N/mm ²	=50 N/mm ²	=58 N/mm ²
	28 days	=50 N/mm ²	=60 N/mm ²	=66 N/mm ²
Bending		Approx. =13 N/mm ²		
Adherence				
	7 days	The concrete breaks (100 %)		
	28 days	The concrete breaks (100 %)		

WAITING TIME 75% R.H.

	10 °C	20 °C
Passage of people	24 hours	15 hours
Light loading	3 days	2 days
Total hardening	14 days	7 days
Shorter times (to order)	2 hours	45 minutes

Applications conditions. Surface conditions

Hardness	15 Mpa (after 28 days curing).
Humidity content	Max. 5 %
Surface temperature	-20°C 80°C and 3°C above dew point
Relative humidity	Max. 85 %

Temperature conditions

	Minimum	Maximum
Atmosphere	-20 °C	35 °C
Base	-20 °C	25 °C
Minimum 3 °C above dew point		
Material	10 °C.	20 °C

*For roller * For spray gun up to 80 ° C.

Curing

Gel time	25 minutes at 20 °C.
Drying to the touch	180 minutes at 20 °C.
Curing starts	45 minutes at 20 °C.
Total curing	7 days

Tests

Eurotaff 300 POLYUREA 300 COLD/HARD



	Hardness Shore D					Average	Standard Deviation
After 1 second	69.00	69.00	69.00	69.00	69.00	69.00	0.00
After 15 seconds	62.30	62.10	62.10	61.00	62.10	61.92	0.52

FOOD CERTIFICATION

Health Register of C. R. y A. M., S. L.	
Spain	39.04651/VA. (Date 20/10/11).
Organism	Spanish Agency for Food Safety, Subdirectorate General for the Management of Food Risks. (Ministry of Health and Consumer Affairs).

Particular Products Register

Products	Name	Reference
		EUROTAFF 300 COMPONENT B
	EUROTAFF 300 COMPONENT A GREY	SITI 157/12
	EUROTAFF 300 COMPONENT A WHITE	SITI 158/12
	EUROTAFF 300 COMPONENT A RED	SITI 159/12
	EUROTAFF 300 COMPONENT A GREEN	SITI 160/12
	EUROTAFF 300 COMPONENT A BLACK	SITI 161/12
	EUROTAFF 300 COMPONENT A YELLOW	SITI 162/12
	EUROTAFF 300 COMPONENT A BLUE	SITI 163/12
Organisms	Toxicological Information Service, National Institute of Toxicology, Ministry of Justice.	

