

TEKNOPUR 300-812

elastomeric coating

PAINT TYPE	TEKNOPUR 300-812 is a two-pack, solvent-free elastomeric coating. Coating is applied by spraying. TEKNOPUR 300-812 is based on pure polyurea.
USAGE	Intended for use as waterproofing for bitumen roofs and concrete structures and as a coating for surfaces which require abrasion resistance e.g. transport wagons.
SPECIAL PROPERTIES	TEKNOPUR 300-812 withstands impacts, hard abrasion, chemicals and constant immersion in water. It will cure also in -20°C temperature. Coating yellows due to the impact of UV-light. When a surface with good colour retention is desired, the surface needs to be overcoated with e.g. TEKNODUR polyurethane top coat. The coating is usually applied to 500 - 3000 µm thickness. Available also a fire-retardant version TEKNOPUR 340FR.

TECHNICAL DATA

Mixing ratio	Base (Comp. B): Hardener (Comp. A): TEKNOPUR HARDENER 7245	1 part by volume 1 part by volume
Gel time	abt. 5 sec	
Solids	abt. 100 % by volume	
Total mass of solids	abt. 1190 g/l	
Volatile organic compound (VOC)	abt. 0 g/l	
Recommended film thickness and theoretical spreading rate	Dry film (µm)	Wet film (µm) Theoretical spreading rate (m ² /l)
	2000	2000 0,5
	3000	3000 0,3
	5000	5000 0,2

Practical spreading rate The values depend on the application technique, surface conditions, overspray, etc.

Drying time at +23°C / 50% RH

- tack-free	after about 12 sec
- may be walked on	after about 40 sec
- fully cured	after about 1 d

Overcoatable

surface temperature	by itself	
	min.	max.
0°C	after 4 min	after 24 h
+10°C	after 2 min	after 24 h
+23°C	-	after 24 h
+30°C	-	after 16 h

Clean up	TEKNOCLEAN 6496, TEKNOCLEAN 6481
Finish	Gloss
Colours	Black. Other colours by agreement.
SAFETY MARKINGS	See Safety Data Sheet.

DIRECTION FOR USE**Surface preparation**

Remove from the surfaces any contaminants that might be detrimental to surface preparation and painting. Remove also water-soluble salts by using appropriate methods. The surfaces are prepared according to the different materials as follows:

STEEL SURFACES: Remove mill scale and rust by blast-cleaning to preparation grade Sa 2½ (ISO 8501-1). The profile of the blast-cleaned surface must be at least coarse (reference comparator "G"). See standard ISO 8503-2 (G).

BITUMEN SURFACES: Remove from the surfaces any contaminants (e.g. grease and salts) that might be detrimental to painting. Surfaces to be painted must be dry and clean. Damaged parts are pretreated in accordance with the requirements placed by the substrate and the maintenance painting.

CONCRETE SURFACES: The concrete must be at least 4 weeks old and well-hardened so that all moisture from casting is bound and the surface dry. The moisture of the concrete must not exceed 97 % as relative humidity or 4% by weight (by 45 / BLY 7).

Dense laitance is to be removed from the concrete by shot-blasting, sanding or by sand blasting. Brittle and powdery top layers are treated so that the solid concrete containing aggregate is exposed. Thereafter all cement dust is removed by vacuum cleaner or brush. The concrete surface must be clean of anything that might hinder the adhesion.

The place and time of the preparation are to be chosen so that the prepared surface will not get dirty or damp before the subsequent treatment.

Application conditions

The surface to be painted has to be dry. During the application and drying period the temperature of the ambient air and the surface shall be above -10°C and the relative air humidity below 90%. The temperature of the surface to be painted must be at least +3°C above the dew point of the ambient air.

Application

Vertical surfaces:

On vertical surfaces the required thickness of paint layer is builded by spraying several bonded layers, in which case the coating underneath has time to harden to drip-free.

Paint is applied by hot twin-feed spray, e.g. Graco Reactor. The components are mixed in the pistol (e.g. Graco Fusion AP). The mixing chamber and nozzle are chosen by the object to be painted. Recommended spraying pressure is 150-160 bar.

For two component application the components must be kept at a temperature of +20 - +25° C before use so that they are fluid enough for the feed pumps. The base needs to be stirred thoroughly before use to ensure that the paint is uniform.

The ratio of the dosage pump must be 1 : 1. The heating shall be adjusted so that the temperature of the components is +75 - +80°C. The houses are heated to the same temperature. Temperature of the mixture in the nozzle must be at least +70°C.

The film thickness is controlled from reference plate by dry film gauge. The mixing ratio is ensured by controlling the pressure on the feed pumps and consumption of the components and also by measuring the hardness of the coating (Shore A).

Directions given by the manufacturer of the twin-feed spray are to be followed when working.

Concrete surfaces:

The priming is done with TEKNOFLOOR PRIMER 310F or TEKNOFLOOR PRIMER 306F epoxy varnishes according to the instructions given in the Data Sheet. The priming is also possible to be done with TEKNOPUR SEALER 100 moisture-curing polyurethane varnish.

Steel surfaces:

As a primer can be used TEKNOZINC 3233 moisture-curing polyurethane paint or TEKNOPUR SEALER 100 moisture-curing polyurethane varnish. The manufacturer should be contacted to check the suitability of other primers.

ADDITIONAL INFORMATION

The storage stability is shown on the label. Store in a cool place and in tightly closed containers.

Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.

The information of this data sheet is normative and based on laboratory tests and practical experience. Teknos guarantees that the product quality conforms to our quality system. Teknos accepts, however, no liability for the actual application work, as this is to a great extent dependent on the conditions during handling and application. Teknos accepts no liability for any damage resulting from misapplication of the product. This product is intended for professional use only. This implies that the user possesses sufficient knowledge for using the product correctly with regard to technical and working safety aspects. The latest versions of Teknos data sheets, material safety data sheets and system sheets are on our home pages www.teknos.com.



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