

DS 054

6 19.03.2020

EMAPUR PS 90 9-00

Polyurethane Top Coat

PAINT TYPE

EMAPUR PS 90 9-00 is a two-pack, gloss polyurethane top coat in TEKNOMIX tinting system. The hardener is an aliphatic isocyanate resin.

USAGE

Intended for final painting of areas of ships above the waterline, construction operating in industrial and heavy duty environment, bridges constructions.

SPECIAL PROPERTIES

High decorative, good adhesive to substrate, tough and flexible. Resistant to weathering, sun radiation, sanitary, fresh and sea water and periodic action of salt and alkali solutions, diluted acid solutions, oil, fuel oil, diesel and some thinners (gasoline, xylene). Coating in white colors shows a reflectivity of solar radiation above 70%.

TECHNICAL DATA

Mixing ratio Base (Comp. A): 100 parts by volume
 Hardener (Comp. B): EMAPUR utwardzacz 22 parts by volume

Pot life, +20°C 2 h

Solids 56±2% by volume

Total mass of solids abt. 800 g/l

Volatile organic compound (VOC) ok. 400 g/l

Recommended film thickness and theoretical spreading rate

Dry film(μm)	Wet film(μm)	Theoretical spreading rate (m ² /l)
50	90	11.1

Depending on destination and type of construction, other thickness of a single layer can be assumed than recommended in information. Typical coating thickness range using airless spray is from 40 to 60μm. Different dry film thickness than recommended causes change in theoretical spreading rate, wet film thickness, weight of dry film thickness, drying time, overcoating time and ready for handling time.

Practical spreading rate

The values depend on the application technique, Surface conditions, overspray, etc.

Drying time at +23°C/50% RH (dry film 50μm)

- dust dry
- touch dry

after 3 h
 after 8 h

Overcoatable, 50% RH (dry film 50μm)

surface temperature	by itself	
	min.	max.
+10°C	after 16 h	18 months or Extended**
+23°C	after 8 h	18 months or Extended**

* A completely clean surface is mandatory to ensure the best intercoat adhesion. If the maximum overcoating interval has been exceeded, the surface must be roughened before overcoating. Increase in film thickness and rise in the relative humidity of the air in the drying space slow down the drying process and effect the overcoating properties.

** Maximum overcoating interval can be extended in certain circumstances. To determine if extended overcoating interval is applicable please consult Teknos representative in written form.

Thinner

TEKNOSOLV 9521, TEKNOSOLV 433

Clean up

TEKNOSOLV 433

Finish

Gloss

Colours

The paint is included in the TEKNOMIX tinting system.

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:
OLD PAINTED SURFACES SUITABLE FOR OVERCOATING: Any impurities that might be detrimental to the application of paint (e.g. grease and salts) are removed. The surfaces must be dry and clean. Old, painted surfaces that have exceeded the maximum overcoating time are to be roughened as well. Damaged parts are prepared in accordance with the requirements of the substrate and the maintenance coating
 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

Mixing of the components

Take into consideration the pot life of the mixture when estimating the amount to be mixed at a time. Before painting the base and hardener are mixed in right proportion. Stir thoroughly down to the bottom of the vessel. Inadequate stirring or incorrect mixing ratio results in imperfect curing and impaired film properties.

Application conditions

The surface to be painted has to be dry. Minimum surface temperature -5 °C (surface frost- and ice-free) and at least 3°C higher than dew point; relative air humidity below 80% during the application and drying period.

Application

Before use stir the paint thoroughly.
 Apply by airless spray, brush, roller, and after dilution – conventional spray. Suitable airless nozzle size 0.011 – 0.013".
 Before use clean the spray gun and mixing vessels with a thinner TEKNOSOLV 433.

If a coating with better scratch resistance is needed, instead of the standard hardener EMAPUR UTWARDZACZ, use TEKNODUR HARDENER 7332-01 in the same mixing ratio. Using this hardener will not change the pot life and the drying properties of the coating.

Universal diluents or thinners cannot be used, since they may contain alcohol that will react with the hardener.

The hardener of the paint and the ready paint mixture contain isocyanates. In poorly ventilated areas and especially when using spray application we recommend the use of a fresh air mask. In short or temporary work a mask with combined filter A2-P2 can be used. In this case eyes and face are to be protected.

ADDITIONAL INFORMATION

The hardener can must be opened with caution, as pressure may develop in the can during storage.

The storage stability is shown on the label. Store indoors in a cool and dry place and in a tightly closed can. The hardener reacts with air humidity and therefore the opened can is to be kept carefully closed.

Use opened hardener within two weeks.

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.

TEKNOS Sp. z o.o.

03-885 WARSZAWA ul. Księcia Ziemowita 59 www.teknos.pl

TEL +48 22 67-87-004; FAX +48 22 67-87-995; e-mail: biuro@teknos.pl