

TECHNICAL PAMPHLET

US Formliner Platinum

castable polyurethane elastomer

PROPERTIES

US Formliner Platinum PU is a solvent-free, rubbery-elastic, liquid, two-component polyurethane, cold-curing, almost shrinkage-free, after curing sliceable and grindable. It shows high chemical resistance against aqueous alkali, especially concrete. Its standard color is gray.

APPLICATIONS

US Formliner Platinum PU is used for manufacturing flexible models, fittings, formliners and molds ensuring exact reproduction of surface contours and textures. Easy stripping of castings is enabled by using suitable US Formliner release agents. US Formliner Platinum PU is particularly suitable for making formliners for the manufacture of structured exposed concrete.

TECHNICAL DATA

property	value	method
hardener:	for USF Platinum	
mixing ratio (base : hardener):	10 : 1	(according to weight)
workable temperature:	60 °F – 85 °F	
viscosity of base component:	2800 mPa·s	ISO 2555
pot life (200-g-mixture at 70 °F):	approx. 15 – 20 min	
earliest demolding (at 70 °F):	24 h	
full chemical and mechanical loading after:	7 – 10 days	
density:	1.40 g/cm ³	
hardness:	50 Shore A	DIN 53505
tensile strength:	1.7 N/mm ²	DIN 53504-S2
elongation at break:	500 %	DIN 53504-S2
tear resistance:	10 N/mm	ASTM D 624-B
heat resistance (dry heat):	150 °F	
heat resistance (under concrete):	140 °F	
color:	gray	

These data are typical guide values. They are not intended for the generation of specifications.

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SURFACE PREPARATION

The model surface must be dry and clean. Absorbent surfaces should be sealed to facilitate the subsequent demolding and to avoid improper curing. For this, US Formliner PUR-Sealant can be used if the surface is solvent-resistant. Subsequently, 2 – 3 layers of US Formliner Mold Wax are applied. Each layer has to dry completely.

When applying several layers of elastomer, the preceding layer should be still slightly sticky but sufficiently cured to bear the load of the following application. If the surface is completely cured, it must be roughened by grinding before further material can be applied.

PROCESSING

Any contamination with moisture, including condensation, sweat or excessive humidity, must strictly be avoided. Before processing, the base component has to be stirred up thoroughly. Add the hardener (B) to the base component (A) and mix them until homogeneous. Transfer the mixture into a second receptacle and stir it up again. When stirring, avoid trapping air. Once mixed the processing of the material must be completed within the pot life.

METHOD OF PROCESSING

Full cast or front cast.

CLEANING OF EQUIPMENT

To clean tools and equipment, use dry, absorbent cloths. Soaking the cloth with US Formliner EK-PU Thinner can help with the removal of stubborn residues. Immersion in solvents is not sufficient.

SPECIAL REMARKS

To ensure dimensional accuracy and maximum life period, molds made of US Formliner Platinum PU are preferably stored in their supporting mold under admittance of air. Prolonged compression may lead to irreversible deformation. The molds must be protected against UV irradiation and direct insolation.

PACKAGING SIZES

pails: 22 kg (48.4 lb);

jars: 1 kg (2.2 lb).

The stated weights for rubber pails are the sum of both the hardener and base components. The hardener is shipped in separate containers to the base material.

STORAGE

Store in a dry place at room temperature. US Formliner Platinum PU is storable for 6 months from delivery when kept in the closed original packaging at about 65 °F. Opened drums must be closed airtight right after use.

SAFETY

Protect skin and eyes from material splashes. Ensure adequate ventilation when handling this product. Please consult the relevant safety data sheet and observe the indications on the label of the package.

US Formliner Platinum PU exclusively consists of components that are registered on the TSCA inventory or exempt from registration.

This pamphlet is intended solely as an application directive. It does not claim to be binding and valid for all modes of application. A preliminary test under operation conditions is highly recommended.

This version replaces all previously published technical pamphlets concerning US Formliner Platinum PU, stating them as no longer being valid.