



PANADUR

coating your ideas



Technical Data Sheet
PANADUR 1K Primer-PUA

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PANADUR 1K Primer-PUA

PANADUR 1K Primer-PUA is a one component reactive primer based on silanes.

Range of Applications

PANADUR 1K Primer-PUA is used in particular as:

- a primer for structural steel substrates to be coated with PANADUR polyurea products or
- as active adhesion promoter between old and new PANADUR polyurea coatings.

Product Benefits

- Easy to use
- Low viscosity
- Low consumption
- Excellent adhesion promotion
- Transparent
- Isocyanate-free

Technical Data

Raw material base	One-component, silane-based primer dissolved in an alcohol mixture
Density (DIN EN ISO 1183-3 at 23 °C)	Approx. 0.8 g/cm ³
Dynamic viscosity (DIN 53019, measuring system 13, at 20 °C)	Approx. 20 mPa·s
Proportion of active ingredient	Approx. 2 – 15 %
Permissible surface and ambient temperature during processing	5 °C to 30 °C (at least 3 °C above dew point, non-condensing; note the dew point chart; in order to avoid condensation keep close to ambient temperature)
Maximum permissible relative humidity	Max. 65 %
Permissible material temperature during processing	10 to 30 °C
Consumption	80 to 100 g/m ² on smooth substrates (depends on substrate)
Shelf life	Stable for at least 6 months (applies to unopened, original containers stored at 15 – 25 °C; avoid exposure to direct sunlight and lower temperatures, store dry, well-sealed and upright)

Curing Times

Time frame for recoating	At least 30 min to max. 24 h
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These data refer to 23 °C / 50 % relative humidity; times may vary at different ambient conditions.



Physico-Chemical Properties

Color	Transparent
Solvent	Mixture of alcohols and aromatic compounds
Flash point	Approx. 12 °C

Processing Guidelines

General information:

Before processing starts, all provided documents must be entirely read and understood.

Preliminary tests with original materials under comparable conditions are necessary to ensure material compatibility and adhesion.

It is strongly recommended to keep detailed process records for every process step and the entire duration of the construction site.

It is not allowed to dilute the material with any type of additives, e.g. solvents, diluents or plasticizers.

The application is to be performed by a specialized company. If the scope is a remediation project, the application must be supervised by a qualified expert.

Uses which are not specifically mentioned in this technical data sheet may only be performed after consultation and written confirmation by PANADUR GmbH.

Surface preparation:

A careful preparation of the surface is absolutely essential for a durable coating.

The substrate to be coated must be properly and professionally prepared. After preparation, the surface must be sound, clean and dry. It must be free of rolling skin, rust, oil, grease, scale, oxidation products as well as substances that prevent adhesion (e.g. silicones, release agents). Before coating, prepare the substrate using a suitable method, such as sanding, blasting or Blastrac shot blasting to a standard grade of cleanliness of Sa 2 ½ (in accordance with DIN EN ISO 8501-1). Afterwards use PANADUR Silicone remover for cleaning.

The adhesion and material compatibility towards old coatings must be verified by applying test areas in preparation of the actual coating process.

Note the dew point distance (the substrate and ambient temperatures must be 3 °C above the dew point) before, during and after application.

Processing:

Open the container of PANADUR 1K Primer-PUA directly before use and fill the necessary amount of primer in a new container. Tightly close the delivered container immediately and use promptly.

Evenly apply PANADUR 1K Primer-PUA thin to the prepared and dry substrate, until the complete surface is primed. Distribute the product using a primer brush, a roll or a soft, wide brush.

After application, the primer coating must not be exposed to moisture in order to achieve the end properties as listed above.

Tool cleaning:

The used tools must be thoroughly cleaned immediately after use, and, if necessary, also occasionally. A proper cleaning agent must be chosen based and tested according to the used system. Please also observe the instructions of the equipment manufacturer.

If the curing process has started, it is no longer possible to clean any used tools.



Supplemental Products

- PANADUR Silicone remover

Storage

Protect material from temperatures > 30 °C, frost (T < 5 °C) and humidity. Do not expose uncured components to direct sunlight. Store and transport containers upright and tightly closed.

Further information may be found in the corresponding safety data sheets.

Protective Measures

The relevant protective measures are to be followed during processing and application. This is to be determined by risk assessment. Suitable protective clothing including respiratory mask must be worn during processing.

PANADUR 1K Primer-PUA contains solvents, what makes an appropriate ventilation necessary. If the ventilation is not sufficient, wear a fresh air mask. Avoid inhalation of vapours and skin contact.

Wear appropriate safety equipment (clothes, gloves), when handling the material. After contact with skin, rinse with soap and lots of water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

Do not eat, smoke or handle open fire during processing.

The instructions and safety advice on the containers should be observed during application. Further details may be found in the corresponding safety data sheet.

Completely cured PANADUR 1K Primer-PUA is physiologically harmless.

GISCODE: RE 1

Environmental Information

The uncured material is harmful to aquatic organisms and may cause longer-term adverse effects in water.

Do not allow material to enter water, sewers or groundwater.

Further details may be found in the corresponding safety data sheet.

Important:

When handling our products, the essential physical, safety-related, toxicological and ecological data are to be taken from the appropriate material safety data sheets. Relevant provisions, such as the ordinance of hazardous substances, are to be observed.

Disclaimer:

The information above, in particular the suggestions for processing and use of our products, is based on our knowledge and experience under normal circumstances, provided that the products have been properly stored and used. Due to differences in materials and surfaces as well as diverging operating conditions, it is not possible to guarantee a particular result or to be held liable, regardless of the legal relationship, based on these references or on a verbal consultation unless we are found guilty of intention or gross negligence. In such a case, the user must prove that he/she transmitted all information in writing in a timely and accurate manner to PANADUR GmbH which was necessary for PANADUR GmbH to make an appropriate and promising assessment. The user must evaluate the suitability of a product for its intended purpose. Product specifications are subject to change. Proprietary rights of third parties must be observed. Furthermore, our respective current terms and conditions of sale and delivery apply. Only the latest version of each technical data sheet and the corresponding safety data sheets apply which are to be requested from us.