



VX Guardian PU PureSeal Top Coat is a two component aliphatic polyurethane resin for treatment, decoration and protection of flooring, has a shiny finishing and forms a hard, strong, continuous film, with excellent adhesion and mechanical properties as its excellent resistance to abrasion and stress that make it resistant to weathering, extreme temperatures and UV radiation. Is suitable for coating protection for traffick deck.

USES

- As a continuous surface coating for industrial resistant flooring or commercial use.
- Protection against UV rays on **TECNOCOAT** pure polyurea membrane or **DESMOPOL** polyurethane membrane on flat or sloped roofs, terraces and balconies.
- To coat epoxy resins on floor surfaces

Yield	-	150~250 g/m ²
Tack time at 23°C	-	+/- 2 hours
Repainting time at 23°C	-	6~24 hours
Dilution	-	DESMOSOLVENT (max 5%)
Application method	-	by brush, roller or "airless" equipment

GENERAL FEATURE



- It is a glossy and translucent polyurethane resin; completely aliphatic
- It is colored using PIGMENTS.
- It forms a continuous coating, easy to clean and maintain and resistant to algae and mould growth.
- It offers excellent resistance to cleaning products in chlorinated areas.
- VX Guardian PU PureSeal Top Coat should be applied in dry conditions avoiding the presence of humidity or water coming from the surface to be coated or the substrate, whether at the time of application or subsequently (pressure from phreatic water level).
- In the event there is humidity in the substrate at the time of application, consult the technical specifications of our primers where their maximum humidity ranges are specified.
- The final product is obtained by mixing 100% of the two components. If only part of the product is used, make sure that this ratio is always maintained to ensure that the final result retains the product's best qualities.
- VX Guardian PU PureSeal Top Coat can be applied on a variety of surfaces: concrete, cement, ceramics, **TECNOCOAT** or **DESMOPOL** membranes (for UV rays protection)

- Apply on dry, firm substrates, with a surface temperature of between 3 °C above dew point, an ambient temperature of at least 10 °C and relative humidity below 80%.
- Mix both components together well using a rod stirrer for around 2 minutes, or until the two components are completely mixed. Then, apply in thin layers.
- VX Guardian PU PureSeal Top Coat must be applied in thin layers, with roller, brush or airless spray equipment (nozzle: 0.007" to 0.011"; nozzle tip pressure, 180 to 200 kg/m²).
- It can be thinned using **DESMOSOLVENT**, up to 5% for applications with airless spray equipment.
- Do not apply on swimming pools or, in general, on surfaces that undergo total immersion.
- It has CE mark if it is used on the waterproofing systems, **TECNOCOAT P-2049**, based in pure polyurea or **DESMOPOL** system based on polyurethane, under european guide ETAG #005.

COLORS

The product comes in transparent neutral. It can be pigmented in any desired color on the RAL standard color chart.

Consult the conditions for delivery of pigmented color based on the order. (quantity and kind of coloration).

	Grey (type 7042)
	Red Brown (type 8004)
* For special pigmentations see page 2	
* The small kit is only supplied in a translucent color.	

YIELD

The yield of VX Guardian PU PureSeal Top Coat varies depending on the layers applied and the type of substrate. It is applied in thin layers, consumption is approximately 150 g/m²/layer, with a total consumption of 300 g/m².

PACKAGING

Metal tins in two different formats:

#1 LARGE KIT: 17,2 kg + 2,8 kg

#2 SMALL KIT: 4,3 kg + 0,7 kg (only in neutral color)

SHELF LIFE

Component A expires after 24 months, component B expires after 12 months, at temperatures between 5°C and 25°, provided it is stored in a dry place. Once the tin has been opened, it must be used immediately.

APPLICATION METHOD

In general, you should take the following factors:

- Repair the surface (fill in depressions, eliminate unevenness, eliminate any old water-proofing, etc.)
- Singular points preparation(perimeter, sinks / evacuations, expansion joints or structural)
- Clean up the surface or substrate, removing any dust, dirt, grease or efflorescence.
- The surface has to be enough compressive strength of adhesion of the membrane. If it were not so, we will proceed to apply our primers resins to achieve this target.
- In case of doubt of all above, apply before in a restricted area and to check

VX Guardian PU PureSeal Top Coat can be applied to many different surfaces and the procedure will vary depending on its nature or state.

Below we set out some of the application for the most common surfaces; for other surfaces not described, please contact our technical department.

TECNOCOAT/DESMOPOL, waterproofing membranes

- Clean up the surface or substrate, removing any dust, dirt, grease or efflorescence
- Apply PRIMER PU-1000/PRIMER EPw-1070, with a yield of approximately 50~70 g/m², if the time of application of membrane (**TECNOCOAT** or **DESMOPOL**) is over 24~48 h, and depending on the state of the substrate or the surface's porosity too.
- Apply by roll, thin layers of colored VX Guardian PU PureSeal Top Coat

Cement or concrete surfaces

- any depressions or voids should be repaired using a mix (ratio of $\pm 1:4$) of our epoxy resin PRIMER EP-1020 mixed with silica sand.
- fill joints with **MASTIC PU**, polyurethane mastic
- the concrete should be completely cured (concrete curing takes 28 days) or, in any case, the maximum level of humidity allowed for the substrate should be verified, depending on the primer used.
- any concrete laitance or release agents should be eliminated and an open pore surface achieved by grit blasting, milling or sanding.
- clean up the surface or substrate, removing any dust, dirt, grease or efflorescence.
- apply **PRIMER PU-1050**, with a yield approximately 250 g/m² (two layers) always depending on the state of the substrate or the surface's porosity.
- apply by roll, thin layers of colored VX Guardian PU PureSeal Top Coat



Ceramic surfaces

- Ceramic surfaces should not have empty joints or loose elements or parts. These should be filled with **MASTIC PU**, complemented with **TECNOBAND 100** on the joints if necessary.
- For rapid and efficient cleaning of the surface use pressurized water and check that it evaporates completely. Also verify that all dust and other physical contaminants have been eliminated.
- next apply the required primer; in these cases of non-porous surfaces use the water-based epoxy **PRIMER EPw-1070**.
- apply by roll, thin layers of colored VX Guardian PU PureSeal Top Coat

Painted surfaces

- if the existing paint is in good conditions, clean the surface with a mixture of water and industrial detergent. Leave to dry.
- remove the existing paint if it does not offer good bonding conditions and eliminate any substrate in poor condition as this could hamper VX Guardian PU PureSeal Top Coat bonding.
- clean up and leave to dry
- apply **PRIMER EPw-1070**, with a yield of approximately 250 g/m² (two layers) always depending on the state of the substrate or the surface's porosity. Apply the necessary layers to coat fully.
- apply by roll, thin layers of colored VX Guardian PU PureSeal Top Coat.

APPLICATION TYPES

If so required, VX Guardian PU PureSeal Top Coat can be applied with a non-slip finish as follows:

multilayer system with SILICA SAND

- apply a initial coat of TECNOTOP 2C
- spread with SILICA SAND, over the still wet resin
- finally, apply a finish coat of colored TECNOTOP 2C

TECNOPLASTIC F/C system

- apply an initial coat of VX Guardian PU PureSeal Top Coat blended with **TECNOPLASTIC F/C** (maximum 8%, recommended ±5 %)
- followed by a overlayer of VX Guardian PU PureSeal Top Coat. Certificate system as even with the ENV 12633: 2003 (slipperiness of floor) to get a classification CLASS 3 (Rd> 45), , according to dosage (consult our technical department).



COMPLEMENTARY PRODUCTS

VX Guardian PU PureSeal Top Coat may be complemented with the following products as a means of protection or to improve its physical-mechanical properties depending on its exposure, the desired finish or the type of substrate.

- **PRIMER EP-1020:** mixed with silica sand in a ratio of $\pm 1:4$, or calcium carbonate in ratio $\pm 1:2$, this is used to fill in depressions in concrete surfaces, rapidly providing a firm and fast drying even base.
- **PRIMER PU-1050/PRIMER EPw-1070/PRIMER PUc-1050/PRIMER PU-1000:** these several resins are applied on the substrate beforehand to improve bonding and level the surface, as well as regulating the humidity in the substrate (see permitted levels in their technical specifications). Consumption may vary depending on the type of support, nature or surface texture. Consult the technical specifications of each product or our technical department.
- **TECNOPLASTIC F/C:** this plastic powder, once mixed with VX Guardian PU PureSeal Top Coat forms a rough surface, conforming even to norm ENV 12633:2003 (floors slipperiness), to achieve Class 3 (>45 slip resistance), depending on dosage (consult our technical department).
- **TECNOBAND 100:** cold bond deformable band made up of an upper layer of non-woven textile and lower layer of viscoelastic self-adhesive coating, which together allow it to adapt to the shape of the substrate. This band is ideal when dealing with structural joints and overlapping metal materials.
- **MASTIC PU:** polyurethane mastic for filling joints (use together with **TECNOBAND 100** when necessary).

HANDLING AND TRANSPORT

These safety recommendations for handling, are necessary for the implementation process as well as in the pre-and post, on exposure to the loading machinery.

- Respiratory Protection: When handling or spraying use an air-purifying respirator.
- Skin protection: Use rubber gloves, remove immediately after contamination. Wear clean body-covering. Wash thoroughly with soap and water after work and before eating, drinking or smoking.
- Eye / Face: Wear safety goggles to prevent splashing and exposure to particles in air.
- Waste: Waste generation should be avoided or minimized. Incinerate under controlled conditions in accordance with local laws and national regulations.

Anyway, consult the safety data sheet of the product(MSDS) or contact our technical department.



PROPERTIES

VALUES

Density at 23 °C	±1,30 g/cm ³
% solids in weight	±50%
Pot life at 23 °C	> 1 hour
Adherence to concrete at 23 °C	>1,5 MPa (N/mm ²)
Support temperature range	8 °C~30 °C
Environmental temperature range	8 °C~ 35 °C
Repaint time at 23 °C and 60% relative humidity	4~24 hours
Max. relative environmental humidity	80%
Tack free time at 23 °C and 60% relative humidity	±2 hours
Transitability at 23 °C	±24 hours
Application method	by roll or airless machine
Dilution (machine application)	DESMOSOLVENT (max. 5%)

Disclaimer: The information and the recommendations relating to the application and end use of this product are given in good faith and are based on the information provided by the manufacturer of the product and/or the Company's current knowledge and experience in connection with the product when properly stored, handled and applied under normal conditions and no liability of final function at the job site is assumed. In practice, the differences in materials substrates and actual size conditions are such that no warranty in respect of merchantability of or fitness for particular purpose, nor any liability by the Company will be accepted for misuse, misreading or derivation from recommended guidelines in respect of this product and the user shall determine the suitability of the product for his intended use and all risks and liability in connection therewith. The information contained in the brochure may change at any time without notice.

