APSE®
floor products since 1964

N. 417 - REV. 04/2025

# VERNILUX POL AS

ANTISTATIC POLYURETHANE RESIN-BASED COATING

## DESCRIPTION

VERNILUX POL AS is a thin-layer product based on aliphatic isocyanates and special conductive oxides. It can be used on its own or as a finish in the APSELIV AS conductive cycle.

## FIELDS OF USE

VERNILUX POL AS is specifically used for finishing resin cycles applied to concrete flooring in:

- Surgery rooms, hospitals;
- Explosives storage facilities;
- Computer data processing rooms;
- Flammable substance warehouses;
- Fuel refuelling areas;
- Areas and flooring containing magnetic robot guide lines;
- Electronic assembly plants and robotised warehouses;
- Premises containing hospital electrical equipment assembly centres;
- Chemical and pharmaceutical industries.

## PACKAGING

**Matt coloured finish**
Comp. A + B = 12 + 3 kg metal tins

**Glossy coloured finish**
Comp. A + B = 9 + 3 kg metal tins

## CONSUMPTION

For both glossy and matt coloured finishes, the approximate consumption is 0.120 - 0.150 kg/m$^2$ per coat, depending on the characteristics of the substrate to which it is applied and the application method. Two coats are recommended. Rougher surfaces and lower temperatures increase consumption and lengthen the hardening time of the material.

## MIXING RATIO

Comp. A : Comp. B = 12 : 3 (matt)
Comp. A : Comp. B = 9 : 3 (shiny)

## FEATURES AND BENEFITS

VERNILUX POL AS has following characteristics:

- Easy to apply;
- Excellent abrasion resistance;
- Excellent mechanical resistance;
- Good UV resistance;
- Good chemical resistance;
- Easy to clean, disinfect and decontaminate;
- Excellent resistance to oils, mineral and vegetable fats, and fuels;
- Excellent resistance to diluted acid and basic detergents;
- Excellent resistance to saline solutions;
- Excellent resistance to rubber-tyred traffic. Forms a smooth, perfectly sealed surface.

## CERTIFICATIONS

ISO 9001 certified quality management system (Certificate No. IT.17.0227.01.QMS).
APSE S.r.l is an active member of CONPAVIPER.

## SUBSTRATE PREPARATION

The substrates to be coated must be undamaged, dry, free of loose parts, dust, dirt, grease, oil and any other material that could compromise the adhesion of the product to the substrate.
Before carrying out the treatment, it is always necessary to sand the surface thoroughly, followed by vacuuming the dust produced using an industrial vacuum cleaner in order to ensure adhesion to the substrate.
If the surface is damp or there is no vapour barrier, it must be treated with approx. 500-1000 g/m² of UMIFOND 3C (see technical data sheet), then primed with one coat of VERNILUX AS. Then proceed in both cases by applying two coats of VERNILUX POL AS. Steel surfaces must be pre-treated with sandblasting in accordance with SSPC-SP10 to SA2½ grade. If sandblasting is not feasible, adequate mechanical cleaning must be carried out in accordance with the standards. Then apply APSEPRIMER NS 125 primer (see technical data sheet) and then VERNILUX POL AS.

APSE®
floor products since 1964

N. 417 - REV. 04/2025

# VERNILUX POL AS

ANTISTATIC POLYURETHANE RESIN-BASED COATING

## PRODUCT PREPARATION

Two-component product to be mixed at the time of use. Mix the two components separately, then pour the contents of component B into component A and homogenise the mixture with a low-speed electric mixer for a few minutes, until completely homogenised. Only mix quantities that can be used within the maximum working time.

## ANTI-SLIP FINISH

If you wish to give VERNILUX POL AS a finish anti-slip property, it is necessary to add, while continuing to mix, special micrometric fillers that are extremely resistant to wear, in a proportion of 5-10% by weight.

## METHOD OF APPLICATION

The mixed product can be applied using a short-haired roller, spray or airless spray (4:1). For best results, apply two coats of the product, crossing the strokes and taking care not to exceed the recommended doses. Apply VERNILUX POL AS no later than 48 hours after applying epoxy and polyurethane coatings at +20°C. Depending on the type of application, the product can be diluted with the appropriate DILUPOL thinner at a ratio of 3÷5 %.
Apply the product at temperatures between +8°C and +35°C.

## MEASUREMENT OF ELECTRICAL CONDUCTIVITY

For conductivity measurements, at least one test must be carried out for surface areas up to 10 m², 10–20 tests for areas between 10 and 100 m², and at least 10 tests per 100 m² for larger areas.
Measurements must be taken at points at least half a metre apart.
If a measurement does not meet the specified parameters, repeat it at a point approximately 30 cm away.
If the new value is acceptable, the area is to be considered acceptable.
Measurement values can be significantly influenced by environmental conditions, the type of instrument, the personnel carrying out the measurements or actively participating in the tests, etc. It is advisable to carry out preliminary sampling for acceptance and to establish the testing and instrumental verification methods in advance.

## CURING

Refer to the table below for drying times (at 20°C) and curing times.

| | |
|---|---|
| Workability time (Pot-life) | 2 hours |
| Setting time | 6-8 hours |
| Walkability | 24 hours |
| Minimum recoating time | > 72 hours at +10°C<br>> 24 hours at +20°C |
| Maximum recoating time | < 96 hours at +10°C<br>< 48 hours at +20°C |
| Ready for contact with aggressive chemicals | 5 days |

## WARNINGS

- Do not use if the container is damaged.
- The UNI 8298/4 standard considers any colour changes to be irrelevant for the purposes of chemical resistance.
- The temperature of the substrate and the uncured product must be at least 3°C above the dew point to reduce the risk of condensation or whitening on the finish.
- Low temperatures and high humidity levels increase the likelihood of whitening.

## CLEANING OF TOOLS

The tools used for mixing and applying the material can be cleaned with DILUPOL thinner for epoxy products. Hardened material on tools and mixers can be removed mechanically.

## HEALTH AND SAFETY WARNINGS

For information on safety regulations, hazard statements and cautionary advice, rely on the latest MSDS by making a request to:
ufficiotecnico@apsebg.it

## STORAGE

Shelf life of 12 months when stored in original packaging in a dry, moisture-free place.
Store at temperatures between +5°C and +25°C.

## DISPOSAL

Dispose of contents and/or container in accordance with local regulations.

APSE®
floor products since 1964



# VERNILUX POL AS

ANTISTATIC POLYURETHANE RESIN-BASED COATING

## PRODUCT TECHNICAL DATA

### PHYSICAL CHARACTERISTICS OF THE TWO COMPONENTS (at +20°C)

| FEATURE | STANDARD | RESULT | |
|---|---|---|---|
| | | COMPONENT A | COMPONENT B |
| Appearance | - | Liquid | Liquid |
| Available colors | - | Colored | Transparent |
| Specific gravity | EN ISO 2811-1 | 1,30 g/cm$^3$ | 1,10 g/cm$^3$ |
| Viscosity | EN 8490 | 300 cps | 300 cps |

### PHYSICAL CHARACTERISTICS OF THE MIXTURE (at +20°C)

| FEATURE | STANDARD | RESULT |
|---|---|---|
| Color | - | Colours on request |
| Consistency of the mixture | - | Fluid |
| Specific gravity | EN ISO 2811-1 | 1,31±0,05 g/cm$^3$ |
| Dry residue | EN ISO 3251 | 61% at 10 min. at 150°C |

### PRODUCT PERFORMANCE IN OPERATION (at +20°C)

| FEATURE | STANDARD | RESULT |
|---|---|---|
| Resistivity | UNI EN 1081 | 1x106Ω |
| Taber abrasion resistance after 7 days at +23°C (CS 17 wheel, 1000 revolutions 1000 g) | EN ISO 5470-1 | 35 mg |