

Application Instructions / Technical Data Sheet

CAIRCON - Clear PUR Universal Varnish

CAIRCON 2K PU Wood Varnish is a high-quality 2K clear polyurethane varnish particularly suited for parquet and stair surfaces. Its high abrasion resistance and resistance to chemicals and loads provide optimum protection for heavily used wooden floors.

The varnish is also well suited to other wood surfaces, particularly furniture and interior fittings. It is easy to apply with a brush, roller or spray gun and provides a durable, yellowing-resistant finish with optimum protection from light. Its simple application makes it particularly suitable for joiners and cabinetmakers, as well as for domestic use.

For metal applications, it is ideal for coating facades, machinery and steel structures, as well as aluminium, zinc sheet, galvanised steel and plastics indoors and outdoors.

Suitable for surfaces coated with 2K polyurethane or acrylic topcoats; not **suitable for 1K alkyd resin paints**.

In addition, the varnish can be used as a concrete floor coating or boat/yacht varnish (interior use) and performs both as a primer and as a protective sealer. Its coating film is characterised by hardness, toughness and elasticity.

Step 1. Substrate preparation

Depending on the substrate, preparation or cleaning is required:

1. **General:** The substrate must be dry, clean, sound, free from grease and free from contaminants and separating substances, such as algae, moss, resins, waxes and oils. For thorough pre-cleaning, we recommend using our **CAIRCON Special Degreaser**.
2. **Iron and steel:** Clean and sand if necessary (remove rust, scale and mill scale).
3. **Zinc:** Clean with zinc cleaner and a Scotch-Brite sponge, then rinse with water.
4. **Aluminium:** Clean, sand and degrease with silicone remover.

If third-party products are used for substrate preparation, verify their compatibility and a satisfactory final result by preparing a test area BEFORE coating. When third-party products are used, no liability can be accepted for a proper application result.

Step 2. Mixing components

1. Mix the material in the correct mixing ratio immediately before application (2 parts base varnish to 1 part hardener). First stir the base compound, then add the hardener and mix intensively with a slow-running mixer or a drill with mixing paddle at max. 450 rpm until a streak-free, uniform colour is obtained.
2. **Pot life:** approx. 2-3 hours at 20°C (depending on ambient temperature and humidity).

Important: Before coating larger surfaces, always prepare a test area first and check adhesion and the required colour once dry.

Step 3. Application

1. **Application** methods: The material can be applied by brush or **roller**. **2K PU Wood Varnish** can be applied with mohair, pile, velour, smooth felt, Royal or Rolloplan **paint rollers**. **Foam rollers** are unsuitable. Always work wet-on-wet for a uniform appearance. When rolling, apply the material evenly (comply with the specified coverage) and cross-roll.

2. **Multi-coat application:** In order to achieve an adequate wearing layer and opacity, and because the low layer thickness entails a risk of damage to the sealer film under greater mechanical stress, it is always recommended **that 2 coats be applied**.

3. **The** varnish should be recoated after approx. 8-10 hours. Use a new roller for each new coat to achieve an even result.

Drying times

Please note: these times apply only at an optimum air temperature of 20-25°C and humidity of 40-60% and may vary when these conditions change.

dust dry	recoatable	final hardness
approx. 40-60 minutes	after 8-10 hours	approx. 7 days

Technical data

Optimum application conditions	Air temperature: 20-25°C; surface temperature > 15°C; relative humidity: 40-60%. Air velocity: min. 0.4 m/s (ensure good ventilation).
Gloss level	satin gloss/matt
Areas of application	Interior, exterior
Coverage	approx. 5-8 m ² /L per coat (depending on surface condition and absorbency of the substrate)
Shelf life	Varnish approx. 24 months, hardener approx. 12 months when properly stored in the range from +5°C to +25°C; store dry, cool and protected from frost, moisture, sunlight and heat sources.
Temperature resistance	150°C-180°C

Storage and labelling in accordance with the Hazardous Substances Ordinance / BetrSichV

Protect from frost and moisture. Keep away from children, heat and open flames. Close paint containers tightly when not in use to prevent curing. Further labelling under the currently applicable hazardous substances regulations can be found in the associated safety data sheets and labels.

Recommended additional products:

Cleaning	CAIRCON - Special Degreaser
Tools	CAIRCON Floor Roller, CAIRCON Brush Set



Warnings and safety information

Component A (base)

Component B (hardener)

Hazard pictograms:



GHS07
Exclamation mark



GHS02
Flame

Signal word: Warning

Hazard statements for physical hazards:

- **H226** Flammable liquid and vapour.

Hazard statements for health hazards:

- **H317** May cause an allergic skin reaction.
- **H336** May cause drowsiness or dizziness.

Hazard statements for environmental hazards:

- **H412** Harmful to aquatic life with long lasting effects.

Supplemental hazard statements:

- **EUH066** Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

- **P101** If medical advice is needed, have product container or label at hand.
- **P102** Keep out of reach of children.
- **P103** Read carefully and follow all instructions.

Precautionary statements - Prevention:

- **P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- **P261** Avoid breathing dust/fume/gas/mist/vapour/spray.
- **P280** Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Precautionary statements - Response:

- **P303 + P361 + P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- **P304 + P340** IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary statements - Disposal:

- **P501** Dispose of contents/container at a suitable recycling or disposal facility.

Hazard pictograms:



GHS07
Exclamation mark



GHS02
Flame

Signal word: Danger

Hazard statements for physical hazards:

- **H225** Highly flammable liquid and vapour.

Hazard statements for health hazards:

- **H317** May cause an allergic skin reaction.
- **H319** Causes serious eye irritation.
- **H336** May cause drowsiness or dizziness.

Supplemental hazard statements:

- **EUH066** Repeated exposure may cause skin dryness or cracking.
- **EUH204** Contains isocyanates. May produce an allergic reaction.

Precautionary statements - Prevention:

- **P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- **P233** Keep container tightly closed.
- **P261** Avoid breathing dust/fume/gas/mist/vapour/spray.
- **P280** Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response

- **P370 + P378** In case of fire: Use sand, earth, extinguishing powder or foam to extinguish.

Precautionary statements - Storage

- **P403 + P235** Store in a well-ventilated place. Keep cool.