

# ELAPRO 1k-CRYL

TD112 Processing Instructions

## Quick guide

- Processing of the substrate and the material
- Assess the need for an adhesive primer (see TD113)
- Apply a base coat of ELAPRO 1k-CRYL
- Lay ELAPRO Vlies and press down with a dry roller
- Apply a covering layer of ELAPRO 1k-CRYL wet-on-wet

## Processing-relevant data

Relative humidity	0 to 75%
Processing temperature	+10 to +35°C
Substrate temperature	+5 to +60°C
	Min. 3°C above the dew point
Residual substrate moisture	Dry to slightly damp
Consumption <sup>1</sup>	Min. 3.5 kg/m <sup>2</sup>
Processing time <sup>2,3</sup>	25 min.
Rainproof <sup>3</sup>	After 1 hour (20°C/50% RH)
Walkable <sup>3</sup>	After 24 hours (20°C/50% RH)
Crosslinking complete <sup>3</sup>	After 72 hours (20°C/50% RH)
Recoatible / Interruption of work	Unlimited, once cleaned

<sup>1</sup>On highly absorbent or uneven substrates, the total consumption may exceed 3.5 kg/m<sup>2</sup>.

<sup>2</sup>Avoid direct sunlight. The container must be sealed airtight during extended breaks from work.

<sup>3</sup>Measurements made at 20°C and a relative humidity of 50%. The values specified are affected by weather conditions like humidity, temperature and wind. The temperature and humidity must permit the coating to harden in the hours after application.

## Hardening times



## Preparing the substrate

The surface must be clean, dry, smooth, level and stable. Dust, oil, grease and other separating substances must be removed. Bubbles must be burst and levelled to form a stable surface. Concrete and cement substrates as well as tiled surfaces must be prepared by removing material. Grinding increases the surface and is therefore recommended to achieve better adhesion.

Application on residual damp mineral substrates is possible. We always recommend conducting an adhesive primer test, see "Adhesive primer test".

Water exchange areas can have an adverse effect on the waterproofing and must be avoided. Insufficient slopes to the drain can also cause harmful algae growth, puddles and water retention.

Gaps and cavities up to 5 mm must be filled beyond the edges with ELAPRO 1k-CRYL, then bridged with a section of ELAPRO Vlies and

## Processing information

Specialists and trained personnel must assess whether the substrate is appropriate and carry out subsequent preparatory works. Only in this way is lasting, sustainable waterproofing possible.

finally coated with a covering layer of ELAPRO 1k-CRYL. Gaps and cavities larger than 5 mm must be filled with a suitable material (e.g. ELAPRO QuickRepair) and then filled flush with the surface and covered with a base coat of ELAPRO 1k-CRYL. Lay a section of ELAPRO Vlies in the base coat while it is still liquid, and then coat it with a covering layer of ELAPRO 1k-CRYL.

## Preparing the material

Before using ELAPRO 1k-CRYL, stir it well but slowly to avoid adding air bubbles - stir down into the corners of the container. The product is thixotropic. The longer the material is stirred, the more it liquefies. When left to stand - both in the container and after application - it solidifies again. Ideally, apply the product with a roller (short-fibre roller, paintbrush, notched squeegee). ELAPRO 1k-CRYL must not be diluted.

## Primer

A check must be conducted to assess whether an adhesive primer is necessary. ELAPRO 1k-CRYL is compatible with all ELAPRO primers. See document TD113 ELAPRO 1k-CRYL Primer Recommendation for an overview of substrates for which an adhesive primer is required. We always recommend an adhesive primer test in the event of uncertainty. Please read the processing information at the end of this document on the adhesive primer test. If an adhesive primer is used, it must be stirred before processing and applied as a thin film with a solvent-resistant soft paint roller. After drying for roughly min. 15 minutes, it can be recoated with an ELAPRO liquid plastic. You can also apply liquid plastics later. If the surface becomes soiled in the meantime, it must be cleaned again. The adhesive primer does not have to be reapplied. The efficiency of the adhesion between the substrate and adhesive primer can also be influenced by external conditions like direct solar irradiation and heated substrates. Under the conditions described, we recommend double the consumption of the adhesive primer used.

### Primer recommendation\*

It is essential that the surface is cleaned. Grinding increases the surface and is therefore recommended to achieve better adhesion. Concrete and cement substrates as well as tiled surfaces must be prepared by removing material.

Substrate	Substrate preparation
Concrete and screed (used surfaces)	ELAPRO Primer UN
Concrete and plaster (details, connections)	Primer not necessary
Bitumen sheet, slated/sanded	Primer not necessary
Glass	Primer not necessary
Wood (untreated)	Primer not necessary
Timber-based materials (glued laminated timber, OSB among others)	Primer not necessary
Clinker brick	Primer not necessary
EPDM	ELAPRO Primer KS
EVA	ELAPRO Primer KS
FPO/TPO	ELAPRO Primer KS
GRP	ELAPRO Primer KS
PVC (sheets)	ELAPRO Primer KS
PVC (hard)	Primer not necessary
Aluminium	ELAPRO Primer UN
Stainless steel	ELAPRO Primer UN
Copper	Primer not necessary
Steel	ELAPRO Primer UN
Zinc	Primer not necessary
Other substrates	See TD113

\*We always recommend conducting an adhesive primer test, see "Adhesive primer test".

### Base coat

At least 2.0 kg/m<sup>2</sup> ELAPRO 1k-CRYL is applied to the substrate as an even base coat.

### Non-woven inlay

Lay the non-woven material into the mass while it is still wet immediately after applying the base coat. The base coat must not have formed a skin. The non-woven material must be inserted without wrinkles, air bubbles and cavities. To do so, press it down with a dry nylon paint roller, to ensure comprehensive saturation. When properly saturated, the non-woven material takes on a dark colour. Non-woven material layers must overlap at least 10 cm on foreign material and at least 5 cm on adjacent fleece. The material must always be applied to the same layer thickness between the overlapping ends of the non-woven material for lasting crosslinking. We recommend our pre-moulded non-woven material parts for internal and external corners.

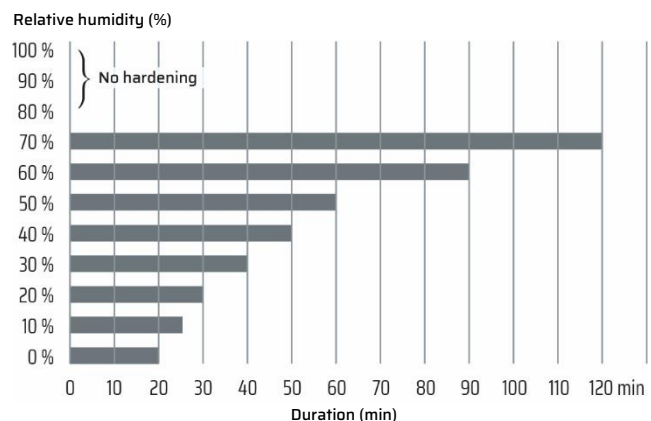
**Note on elevated requirements for waterproofing or fire protection:** Inserting the ELAPRO Vlies 110 creates a homogeneous waterproofing layer thickness of 2.1 mm. For elevated waterproofing or fire protection requirements, ELAPRO Vlies 120 can be used with a higher material consumption to achieve a layer thickness of 2.4 mm.

### Covering layer

Apply at least 1.5 kg/m<sup>2</sup> wet-on-wet as an even covering layer on the ELAPRO Vlies. Do not leave any areas of non-woven material exposed. ELAPRO 1k-CRYL must be applied 5 to max. 10 mm beyond the ends of the non-woven material. Remove the adhesive tapes immediately. Seal the container during breaks from work.

**Note on top layers and wearing layers:** ELAPRO 1k-CRYL is suitable as a long-term waterproofing for used surfaces (e.g. balconies, loggias and pergolas). For permanent mechanical loads due to frequent access or spot loads caused by table or chair legs, flexible liquid waterproofing is not suitable. For this application, an additional used and wearing layer is required. As an alternative, the alkali-resistant ELAPRO 1k-CRYL can be covered with tiles. To do so, fire-dried quartz sand (approx. 3.0 kg/m<sup>2</sup>) is laid across the full surface, grain-on-grain in an additional wet layer of ELAPRO 1k-CRYL (approx. 0.3 kg/m<sup>2</sup>). The quartz sand improves the strong adhesion of the tiles. After hardening, the tile cement can be applied.

### Rainproofing (20°C)\*



\*Important! Values can deviate if weather conditions like humidity or temperature change during hardening.

### Adhesive primer test

An adhesive primer test is always recommended. Based on Swiss standard SIA 281/2, coat a prepared substrate test area of at least 30 x 30 cm with ELAPRO 1k-CRYL and ELAPRO Vlies (following the same steps laid out in the processing instructions). Please leave a 10 cm strip at the edge of the non-woven material as a gripping surface. After fully hardening for 5 days, pull on the exposed gripping surface to check the adhesion. If the temperature during this time is less than 15°C, you must wait 7 days. The material can only be processed on the substrate tested if the adhesion is very strong. Depending on the substrate material and properties, the adhesive primer test should be performed directly with the respective ELAPRO Primer required (See TD113 ELAPRO 1k-CRYL Primer Recommendation).

### Disposal

#### Product residues

Liquid:	AVV 08 04 10
Hardened:	AVV 08 04 10

#### Packaging

Not fully empty:	AVV 08 04 10
Empty/drip-free:	AVV 15 01 02

Note: Product residues and packaging must be disposed of properly in compliance with the European List of Waste Materials (AVV/formerly EAK).

### Hazard warnings

None

### Occupational safety

We recommend that you wear protective glasses and gloves.

### Compatible system components

- ELAPRO Primer KS / UN
- ELAPRO Vlies 110 / 120 / Moulded non-woven material parts
- ELAPRO SFB
- ELAPRO Cleaner

### Associated documents

Please refer also to the following documents:

- TD111 Technical Data Sheet
- TD113 Primer Recommendation
- TD114 Safety Data Sheet
- TD811 Dew Point Table

### General information

All information provided here serves only to describe the material and is based on tests and results achieved in practical use. As a result, no liability can be accepted for its accuracy or completeness. Advice is provided to the best of our knowledge and does not release users from testing by accredited specialists such as planners and experts. Colour deviations or changes do not affect the products' technical parameters. The times specified are reduced at higher ambient and surface temperatures and extended at lower ambient and surface temperatures. All data is subject to changes without notice. The data sheet shall cease to be valid 5 years after publication. The latest version must always be used. It is available in the download area on our website [www.elapro.de](http://www.elapro.de). The details and recommendations in this product information correspond to the current state of our knowledge and are provided to inform the buyer. They do not release the buyer from assessing the products for suitability and use on the respective substrate. The products described must only be processed as a system with the system components mentioned here. We guarantee flawless quality within the framework of our terms of delivery and payment.

### Safety instructions

All safety instructions on the containers, the technical product information and the safety data sheets and relevant local, national and EU regulations must be complied with. Personal occupational health and safety must be observed.