



TECHNICAL DATA SHEET

PA-100-LV Polynate 100 LV

Description

PA-100-LV is a 100% solids, low viscosity twocomponent, polyaspartic system that, opposite to usual polyurea systems, has a gel time and a curing speed slow enough to allow manual application, while retaining a curing time still shorter than usual two-component polyurethane systems. **PA-100-LV** is delivered colourless or pigmented. Main applications includes flooring and multilayer combinations.

Features & Benefits

- UV Stable Resin
- Fast cure even at low temperatures.
- Good adhesions strength
- Hard and resistant, in one-coat application.
- Excellent gloss retention. Aliphatic polyisocyanate base.
- Does not yellow upon exposure to sunlight.
- Good weathering resistance.
- Improves corrosion resistance. Several studies show that these coatings exhibit a corrosion-inhibition potential in metal surfaces. Suitable for operating freezing rooms.
- Ideal for new construction and refurbishment. Easier and timesaving solution in contrast with classical epoxy and polurethane systems.

Packaging Kit

5kg Kit - Component A & B
14kg Kit - Component A & B

Coverage

Coverage varies widely due to the porosity and profile of different substrates.

PA-100-LV may be applied in 200 g/m² thick coats in 2 to 3 coats, depending on the chosen pigmentation.

* Coverage figures given are theoretical. Practical coverage rates may vary due to wastage factors and site condition, profile, and porosity of the substrate.

Substrate Requirements

Requirements as follows:

- The concrete substrate must be prepared mechanically to achieve an open texture surface using a captive shot blast machine or diamond grinding.
- Free from cracks and fissures. if any, they must be previously treated (we recommend Sindec Epoxy Crack Filler)
- Clean and dry, free of dust, loose particles, oils, organic residues, laitance, and contaminants.

*Inadequate preparation will lead to loss of adhesion and failure.

Tensile Adhesion Strength

>1.5 N/mm² to concrete

Compressive Strength

>25 N/mm² to concrete

Environmental Conditions

Optimum ambient temperature range is 15 – 25°C. Localized heating (electric powered warm air blower) or cooling equipment may be required outside this range to achieve ideal temperature conditions.

The substrate and uncured floor must be kept at least 3°C above the dew point to reduce the risk of condensation or blooming on the surface, relative humidity at less than 75%. (ideally between 50-65%) from before priming, to at least 48 hours after application.

Installations outside of the above parameters will affect the cure period, surface finish and strengths.

Mixing

Pour the hardener component B into the resin component A and mix both components for a minimum of 3 minutes using a low-speed paddle mixer (300-400 rpm). Use a spatula to scrape the sides and bottom of the bucket. To ensure proper mixing, pour the resin into a clean bucket and mix for 1 further minute.

Product Application

Apply by roller or spreader, when needed. Airless equipment is not recommended due to safety reasons. Reaction rate increases with the size of the mixtures; therefore it is advised not to mix more amount of product than that can be easily applied in a 15 minutes period. Otherwise, application could be difficult or the final appearance could be affected.

Technical Information

Curing Time	Conditions	Touch Dry (h)
	25°C, 25% rh 10°C, 60% rh	1 hour 2 hours
Shelf Life	Resin & Hardener:	12 Months
Pot Life	Temp 25°C	20 minutes
Storage	Keep between 10°C and 30°C. must be stored off the ground in original packaging, unopened and un-damaged. The ambient conditions must be dry and between 10°C and 30°C with no direct sunlight. Protect from frost.	

Chemical Resistance

See Chemical Resistance Chart.

Cleaning

Regular cleaning is essential to enhance and maintain the life expectancy, slip resistance and appearance of the floor. **PA-100-LV** can be easily cleaned using industry standard cleaning chemicals and techniques. Consult your cleaning chemical and equipment supplier for more information. It is recommended that a sample area of your cleaning chemical is tested in an inconspicuous spot before full use.



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Information on the final product

Hardness Shore	67D	
Mechanical properties	Maximum elongation: 10% Tensile strength: 35 MPa	
Chemical resistance	Surface contact, 24 hours, 25°C (5=ok, 0=not recommended)	
	Chemical	Results
	Water	5
	Xylene	2
	Ethyl acetate	1
	Acetic acid (concentrated)	0
	Bleach	4
	Hydrochloric acid (commercial)	4
	Ammonia	5
	Hydrogen peroxide	5
	Methyl alcohol	5
	Acetone	0
	Sodium hydroxide (40%)	0
	Diesel	5
	Sulphuric acid (40%)	5
Sulphuric acid (96%)	5	
Skydrol	0	
UV resistance	Colour stable under sunlight	
Abrasion resistance	20 mg (Taber, 500 c. CS-17, 1000 g)	

Appearance

Clear gloss finish.

Technical Advice

For further information on this or any other Sindec product, please contact our office.

Limitations

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be, >75% or if the surface temperature is <3°C above the dew point. Application should not commence when the substrate temperature or the ambient temperature is or is anticipated to be <10°C during the application or within the curing period.

The design strength of the substrate concrete surfaces must be a minimum of 25 N/mm² compressive strength at 28 days. Compact and cohesive pull of test must show a minimum resistance of 1.4 N/mm².

The manufacture of **PA-100-LV** is a batch process and despite close manufacturing tolerances, colour variation may occur between batches. Products from different batches should not be used on the same surface or surfaces close together. If mixed batches are unavoidable, it is best practice to use the different batches only in areas where the colour cannot be directly compared. Touching up should only be attempted using product from the same batch.

Disposal of Containers

Empty containers must be handled with the same precautions as if they were full. Treat empty containers as hazardous waste and transfer them to an authorized waste manager. If the containers still have some material left, do not mix with other product before considering the risk of potentially dangerous reactions.

Any remaining parts A and B of the same product should be mixed and allowed to cure before disposal.

Health & Safety

Before using this product, please ensure that you have received and read the product Material Safety Data Sheet. Refer to the hazard labelling on the product. Always wear gloves and goggles and avoid contact with skin and eyes.

Additional Information:

The information contained in this document, and all further technical advice given is based on our present knowledge and experience.

However, it implies no liability or legal responsibility on our part. No warranty or guarantee of product performance in the legal sense is intended or implied as the conditions of use and the competence of any labour involved in the application are beyond our control.

Properties and coverage rates shown are for guidance purposes only. The user of the product must determine the product's suitability for the intended purpose. We reserve the right to make any changes according to technological progress or further developments.

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