

# Product information

## PLAKAL 31



**Major use:** Machine made laminating and box covering work.  
Hand made paper-conversion.

**Description:** Plakal 31 is a protein-based powder adhesive. It shows a short open time and good flatlaying properties in 55 % solution. The protein adhesive has no foaming. There is no tendency of spinning during application.

Plakal 31 is especially suitable for application on laminating machines and boxcovering machines (e.g. Emmeci, Perondi, Crathern, Tünkers, etc.).

The protein adhesive remains elastic and free of tension during the drying process. There is no distortion of paper.

Plakal 31 is a natural product and colour deviation is normal. The variation in colour has no effect on the quality of the adhesive.

<b>Characteristics:</b> (55 % solution)	<b>Refractometer value:</b>	<b>53 %</b>
	Gelatinising power:	instantly, strong <sup>1)</sup>
	Gelation point:	33.3 °C <sup>2)</sup>
	Open time:	short <sup>1)</sup>
<b>Instructions for use:</b>	<b>Temperature:</b>	<b>45 - 65 °C</b>

The amount of adhesive per surface unit depends to a high degree on the machine type and the materials to be bonded.

- 1) This value was determined at 22°C and 40% relative humidity. It is subject to change through changing climatic conditions and changing concentrations of the solution.
- 2) The gelation or solidification point is defined as the temperature at which the protein adhesive gels (solidifies) under pre-defined conditions.

**Preparation directions:****Basic preparation (55 % solution):**

8 parts by volume Plakal 31 (550 g)  
5 parts by volume water (450 g)

**Warm preparation:**

Use hot water (70-80°C) and add Plakal 31 and stir in a vigorous way; until an homogeneous glue solution is obtained.

**Cold preparation:**

Use cold water and add Plakal 31 whilst stirring; allow the product to swell, preferably overnight. After that, melt the preparation in the glue tank.

The ready for use solution should be consumed within 24 hours.

**Storage:**

Dry and cool. Material is frost resistant.

**Storage life:**

Storage life of at least 1 year if storage conditions are observed.

**Delivery specifications:**

Appearance: light brown powder

Viscosity: 370 mPas ± 90 mPas<sup>3)</sup>  
(55 % solution)

Solid content: 100.0 %

**Form of delivery:**

Powder adhesive in 25-kg paper bags.

**Disposal:**

As a rule Plakal 31 is biodegradable or degradable in biological sewage plants. In case of doubt, contact your wastewater management authorities.

**Cleaning:**

Warm water. We recommend our separating and cleaning agent **PARTINOL**.

For further information please refer to our safety data sheet.

3) Viscosity measure with a Haake rotating viscosimeter at 60°C. As a rule the reading does not coincide with the reading from the viscosimeter on the machine.

The information in the present data sheet is based on current technical knowledge and experience and are without obligation. The aforesaid data and information do not release the worker from his duty of care, in particular his trial and test obligations.

As per 25. May 2010