

KLEIBERIT 431.7 Supratherm

Aqueous PUR Adhesive

Fields of application

- One-component laminating adhesive, for deep drawing, membrane and multiform pressing, as well as for hot sealing.
- 3D bonding of thermoplastic furniture foils to MDF or other fine-grained wood-based materials

Advantages

- Very good spraying properties even with smaller nozzle diameter
- Good activation
- Good temperature resistance up to 120°C (depending upon the processing conditions and the profile shape) – according to an in-house test method
- Good reactivation properties: reactivation time up to 72 hours
- No pot life as with two component adhesives
- After drying - transparent film
- FIRA certified according to BS 6222 Part 3 1999

Properties of the glue

Base:	polyurethane dispersion
Specific weight:	approx. 1.1 g/cm ³
pH value:	approx. 8
Colour:	white

Viscosity at 20°C:	2,000 ± 300 mPa·s
Optimal nozzle size:	1.0 – 1.4 mm
Spray pressure*:	4.0 bar

Reactivation temp.:	from 50°C
Drying time:	30-60 minutes at normal temperature
Identification:	see our safety data sheet

*determined at the output point on pressure line

Properties of the bond

- High heat resistance
- Resistant to cold temperatures down to -40 °C
- Can be reactivated up to 72 hours

Application techniques

The parts to be bonded must be dry and free from dust and grease. For application purposes, the environmental temperature and the temperature of the glue must both be approx. 20°C.

Stir before use!

KLEIBERIT 431.7 Supratherm should be filtered before further use, especially before spray application, in order to remove any polymer particles which may have formed during drying.

The adhesive is applied with a spray pistol, usually to one side of the material to be processed. If the diameter of the hose is too small, a decrease in pressure can occur.

Therefore, the air pressure should be determined directly at the pistol and should be approx. 2.0 bar. Further information and suitable equipment can be obtained from the pistol manufacturer.

When using a pressure vessel, the spray pressure and the diameter of the nozzle must be adjusted. In this case, the user must check to see which nozzle diameter and spray pressure is suitable. The surface quality after the spray application is always dependent on the quality of the MDF.

It is recommended to apply two coats to rounded edges and routed areas.

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Application quantity:

Smooth surfaces approximately 40-80 g/m²
 Rounded edges and routed areas approximately
 100 - 120 g/m² depending on MDF quality.

Allow the adhesive to dry. Exposure to heat will accelerate the process. Drying time at normal temperatures is approximately 30 minutes, activation up to 72 hours. Subsequent application (bonding) is performed by deep-draw or membrane-press thermal activation.

The necessary sealing time is dependant upon the material and ranges between 30 - 60 seconds. For membrane and multiform pressing, a sealing time of 30 - 90 seconds is usual.

Pay attention that sufficient pressure is applied (4-5 bar!)

Following sealing, allow the adhesive to set for at least 6 - 24 hours before processing further.

Cleaning

Application tools and equipment can be cleaned with water.
 Equipment must be dry before being filled again.

Packaging

plastic canister, 4.5 kg net
 plastic canister, 26 kg net
 IBC with inliner, 1.000 kg net

Additional packaging sizes available upon request.

Storage

KLEIBERIT Supratherm 431.7 can be stored in factory sealed containers at normal temperatures (approx. 20° C) for approx. 6 months. Protect from heat and sun light!

Do not store or transport at temperatures below +5°C and above +30 °C. Increased storage temperature decreases shelf life of the product greatly and can lead to pressure build up in the packaging.

Protect from frost! Frozen adhesive cannot be used any more.

Version 10/02/2022; replaces previous versions

Disposal of containers and contents

Waste disposal key 080409

Disposal of contents and/or containers should comply with all applicable federal, state and local regulations.
 Our containers are made of recyclable material.

Service

Our application department may be consulted at any time without obligation. The statements made herein are based on our experience gained to date. They are to be considered as information without obligation. Please test and establish for yourself the suitability of our products for your particular purposes. No liability exceeding the value of our product can be derived from the foregoing statements. This also applies to the technical consultancy service which is rendered free of charge and without obligation.