

KLEIBERIT 436 Supratherm

Aqueous PUR Adhesive

One-component / two-component laminating dispersion for deep drawing, membrane, and multiform pressing, as well as for hot sealing.

Fields of application

- 3D bonding of thermoplastic furniture foils to MDF or other fine-grained wood-based materials

Advantages

- Very good spraying properties
- Good activation
- As one component glue, high temperature resistance
- Can also be used as a two-component glue - temperature resistant up to 120°C, (depending upon profile form and laminating foil material)
- Good reactivation properties: also with hardener up to 72 hours

Properties of the glue

Base:	polyurethane dispersion
Specific weight:	approx. 1.1 g/cm ³
pH value:	approx. 8
Hardener:	5% KLEIBERIT 807.0
Pot life:	approx. 8 hours
Drying time:	30-60 minutes at normal temperature
Identification:	see our safety data sheet

Properties of the bond

- High heat resistance even without hardener
- Cold resistance down to -40 °C
- Good resistance, (to improve resistance to moisture and steam, always use a hardener)

Product no.	Color of dispersion	Color after drying	Viscosity at 20°C (mPa·s)*	Optim. nozzle Ø (mm)	Spray Pressure (bar)**	Reactivation temp. depending on climate cond.	Temp. resistance (°C)	
							1C	2C
436.2	blue	bluish transp	800 ± 200	1.2 1.7	3.0 4.0	from 50°C	90	120
436.3	white	trans	800 ± 200	1.2 1.7	3.0 4.0	from 50°C	90	120
436.4	white	white opaque	800 ± 200	1.2 1.7	3.0 4.0	from 50°C	90	120
436.5	white	fluorescent	800 ± 200	1.2 1.7	3.0 4.0	from 50°C	90	120
436.6	blue	bluish trans	2,200 ± 300	1.7 2.0	4.0 6.0	from 50°C	90	120
436.7	white	trans	2,200 ± 300	1.7 2.0	4.0 6.0	from 50°C	90	120
436.8	white	white opaque	2,200 ± 300	1.7 2.0	4.0 6.0	from 50°C	90	120
436.9	white	fluorescent	2,200 ± 300	1.7 2.0	4.0 6.0	from 50°C	90	120

*Brookfield RVT

**Determined at the output point of the pressure line

Nozzle diameter and pressure values were determined with a Sata Jet NR95.

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.

When hardener is being used, the glue and hardener must be thoroughly mixed together. Gradually add hardener and stir well. At normal temperatures the mixture can be processed for approx. 8 hours.

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.

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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 also dependent on the quality of the MDF.

It is recommended that two coats be applied to rounded edges and routed areas due to absorbency of the material.

Application quantity:

Depending on MDF quality

Smooth surfaces: approx. 40-80 g/m²

Rounded edges and routed areas approximately 100-120 g/m²

Allow the adhesive to dry. Exposure to heat will accelerate the process. Drying time at normal temperatures is approximately 30 minutes. The adhesive can be used for 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 hours before processing further.

Cleaning

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

Packaging

KLEIBERIT 436 Supratherm:

plastic canister, 10 kg net

plastic canister, 26 kg net

plastic drum, 120 kg net

Hardener

KLEIBERIT 807.0:

aluminium bottles, 0.5 kg net

carton with 6 aluminium bottles at 1 kg net each

carton with 12 aluminium bottles at 2.5 kg net each

can, 25 kg net

Additional packaging sizes available upon request.

Storage

KLEIBERIT 436 Supratherm can be stored in factory sealed containers at normal temperature (20°C) for approx. 9 months.

Do not store or transport below +5°C and above +30°C.

Protect from frost!

When exposed to frost KLEIBERIT 436 Supratherm can no longer be used.

Version 10/02/2022 lz; replaces previous versions

Disposal of containers and contents

Waste disposal key 080410

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.