2-component PU adhesive

493.25

Application:

Jowat® two-component adhesive 493.25 is used for bonding foils of soft PVC, soft foam-backed PVC foils and ABS/PVC foils by vacuum deepdrawing to various substrates like wood fibre complexes and injection-moulded parts consisting of ABS or ABS/PVC (Bayblend®). The adhesive is used for the lamination of flat surfaces and for edgefolding (one side application, contact procedure).
It can also be used for the production of laminated decorative interior automotive parts, such as door, side and pillar linings, consoles and dashboards.

Characteristics/ Directions for Use:

Jowat® two-component adhesive 493.25 excels by a wide range of possible applications and exhibits very good spraying properties on automatic equipment, high initial bond strength even at low reactivating temperatures, long open tack time and good resistance to ageing.

Processing temperature:
Optimum processing temperature of the adhesive and of the parts to be bonded is 18 – 25 °C. Cold materials must be stored at room temperature for 24 hours before processing.

Addition of crosslinking agent:
In order to achieve good resistance to heat and climate, it is inevitable to use Jowat® 2-comp. PU adhesive 493.25 with the addition of a crosslinking agent from the series 498.xx (for detailed information please refer to the test report of the first sample).

Add the crosslinking agent in a fine jet while stirring continuously, and use, if possible, an agitator. Avoid stirring too fast since this may cause foaming.

Partly emptied containers may not be used again, all residual amounts must undergo disposal.

Application:
Adhesive is applied generally onto one surface, the supporting substrate.

Application method:
By spray, gun type depending on application.

Material pressure [bar]:	approx. 3 ± 1
Spray pressure [bar]:	approx. 5 ± 1

Coating weight:
Approx. 150 g/m² wet. The exact quantity of average consumption can only be determined by extensive field trials. The data indicated above are based on in-house lab testing and are therefore not binding.

Pot life:
The pot life depends on the type of crosslinker and quantity, up to 8 hours.

Flash-off time:
At least 30 minutes at room temperature or a few minutes at 40 – 60 °C in a drying channel. Special care should be taken that the object temperature of the substrate will not surpass 40 °C.

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Open time:
The open tack time of the adhesive film depends on type and quantity of crosslinker added, in general up to 3 hours.

Appearance:	blue lazing (coloured for an easier detection during application)
Solvents:	ketones, esters

Our Application Technology Department and our Application Specialists will provide technical data to assist you in your choice of an appropriate product for your requirements. Please observe the information in the section “Remarks”.

General bonding requirements:
The properties (e.g. surface tension, plasticiser content…) and the conditioning of the substrates, as well as the processing conditions (e.g. ambient temperature, humidity…) will influence the processes of joining and bonding. Customer tests under consideration of everyday production conditions are therefore absolutely necessary to define stable process parameters and to ensure that the product is fit for purpose. For best bonding results, the materials to be bonded should be free of dust, oil, and grease, and be dry. Ideally, the minimum temperature should be at 18 °C. Avoid draught.

Specification:

Viscosity at 20 °C [mPas]: (Höppler, ball 4)	210 ± 40
Density at 20 °C [g/cm³]: (Jowat test method)	0.84 ± 0.01
Solids content, 2 h at 90 °C [%]: (Jowat test method)	16.0 ± 1.0

The values are always determined on the date of production.

Crosslinking Agent:
If not agreed otherwise, a mixing ratio of 100 : 5 parts by weight (adhesive : crosslinker) independent of the crosslinking agent is to be observed.

Cleaning:
Jowat® Cleaner 401.50.

Storage:
The product should remain stored in properly closed original containers, dry and cool (15 – 25 °C). For best-before date, please see container label.
After the elapse of the best-before date, it is essential that you again verify that the product is fit for your intended application.

Storage temperature:	not at temperatures below 0 °C; minimum storage temperature is +5 °C

Low temperature behaviour:
The adhesive may become gelatinous in cold rooms and when ambient conditions are problematic, also during transport at temperatures below +5 °C.

Before processing the adhesive should be allowed to warm up sufficiently in a heated room (18 – 22 °C) for a duration of 24 to 72 hours depending on the initial temperature.
Partly emptied cans must be closed tightly and their contents used as soon as possible. Exposure to moisture must be avoided.

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Packaging: Information about packaging types and units is available upon request.

Remarks: **For further information concerning safety, handling, transport and disposal, please refer to the Safety Data Sheet.**
The information on this data sheet is based on test results from our laboratories as well as on reported experience gained in the field by our customers. It can, however, not cover all parameters for each specific application and is therefore not binding upon Jowat, nor should it be relied upon in lieu of your own required testing. The information given in this leaflet does not represent a performance guarantee. Unless otherwise agreed with our customers, the values stated in the section “Specification” shall be regarded as the finally agreed upon product properties. No liability may be derived from the information contained herein nor from the information provided by our free technical advisory service.

Jowat Information

Gluing as one of the most efficient methods of bonding is constantly gaining importance and expanding into new areas of application. At the same time, the number of substrates to be bonded is also growing at an unprecedented rate. New methods and equipment to process adhesives are developed.

The in-house R & D departments of Jowat are responding with intensive efforts to keep pace with these constant changes. A highly qualified team of chemists and engineers is using the latest techniques and brightest ideas to provide the utmost in advice our customers and to make sure that they get the adhesive which meets their needs.

Our information is based on test results from our laboratories as well as on experience gained in the field by our customers. This advice, however, cannot cover all eventualities for each specific application and as such is not binding for us. Please, contact our technical service department in each case to find out what the actual technical state of development for the respective product is, and request the latest data sheet. Any use of our product without this precautionary measure would be your sole responsibility.

The processing company itself must therefore test the adhesives manufactured by us for suitability in each individual case. This applies to the first use of a sample as well as to modifications during an ongoing production.

We are therefore requesting all our new customers to test our adhesives for suitability on original parts at conditions equal to normal processing conditions. The bond has then to be subjected to the actual stress which it would undergo when in use and has to be assessed. This test is absolutely necessary.

Customers who undertake modifications during a running production are requested to pass this information on to us. Please notify us when machines are set to new parameters as well as when the substrates to be bonded are changed. Only then will Jowat be able to provide our most up-to-date information to the processor using our adhesives.

The information given in this leaflet is based on practical experience and on results of tests in our laboratory, and does in no way constitute any guarantee of properties. No liability may be derived from these indications nor from the recommendations made by our technical advisory service.