

Technical Data Sheet

technicoll® 9491 1-component PUR Adhesive, flowable



Field of application

technicoll® 9491 is a multipurpose, flowable and fast curing adhesive. Curing is caused by humidity with an emission of CO₂. An increase of volume can be noticed. technicoll® 9491 is odourless, free of silicones and fulfils requirements of DIN EN 204-D4.

Handling data and product data

Base	polyurethane
Viscosity (+20 °C)	approx. 2000 mPas
Density	approx. 1.2 g/cm ³
Colour	brown
Open time	approx. 20 minutes
Pressing time	approx. 45 minutes at 23 °C
Way of application	one-sided
Processing temperature	+15 °C to +35 °C
Consumption	150 - 250 g/m ²
Cleaning agent / material	technicoll® 8363 technicoll® 9901 (metal cleaning spray) technicoll® 9902 (plastics cleaning spray)
Cleaning agent / tool	technicoll® 8362, technicoll® 9901 (spray)
Cleaning	Solid adhesive can only be removed mechanically
Maximum time of storage	At least 2 years when stored in sealed original packaging in cool and dry places. Close opened containers airtight, protect from moisture and use the content as quickly as possible.
Preferred storage temperature	+10 °C to +25 °C
Behaviour at low temperature	Not susceptible to frost. Densification at low temperature. Once adjusted to processing temperature: fully employable.

Favoured substances

- metals blank
- thermoplastics such as ABS, SAN, PVC, PUR
- thermosetting polymers (FRP, SMC, HPL)
- ceramics, cement
- rigid foams (PS, PUR, PVC-unplasticised)
- derived timber product

Not suitable for: PE, PP, PTFE (Teflon®), POM, silicone, EPDM, PVC-plasticised (faux leather)

Due to the large variety of possible materials and differences in adhesion behaviour hazard tests are mandatory before introducing the adhesive into the actual production process.

General indications

technicoll® 9491 crosslinks under the influence of humidity to a solid, flexible film. Humidity in the substrates or in the air can be sufficient. In practice, moisture is added by means of a water spray. The amount of humidity determines the open time and the required pressing times. The times specified are approximate values. Once those time intervals have passed, strength is generally achieved which makes it possible to process the bonded parts further. It is suggested to determine the exact times for each concrete application by performing suitability tests. During the process of hardening, the adhesive expands as it produces carbon-dioxide (small amounts of CO₂). Foaming behaviour depends on the amount of adhesive applied, on the degree of humidity and pressure. It is usually advantageous that the gaps are well filled this way. Please bear in mind that adhesive might leak from the gaps.

Substrate preparation

Bonding surfaces must be dry and clean, especially free of oil, grease or solvents. In many cases, surface roughening prior to bonding improves strength of bonded joint. It should be checked in each individual case, if it is necessary to achieve the desired strength.

Moisture supply

The moisture necessary for curing can or must, depending on the application, be added by lightly spraying water. Usually, water is sprayed onto applied adhesive film (in particular cases on the opposite side). The bonding surfaces should not be wet, but can be a little moist.

technicoll® 9491 requires sufficient moisture to cure. Supply moisture by lightly spraying water, when working with dense substrates, as those do not provide moisture on their own. This might also apply to other cases in order to achieve a faster setting of the adhesive and to neglect the natural fluctuations in the degree of humidity!

Technical status: 22.12.2015

Deviating information of earlier versions is invalid.

page 2/2

Special notice:

All information given on this data sheet is based on our knowledge and experience at the time of printing. The information is not binding. We advise to determine the suitability of our products with respect to their intended use and method of application. Therefore, a warranty claim cannot be granted.