



technicoll® 118

Low viscous, colourless solvent-based adhesive

Field of application

technicoll® 118 is a cold welding compound which is suitable for t-bonds and adhering small area surfaces of polycarbonate (Makrolon®). The bonding joint is transparent and UV-resistant.

Handling data and product data

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| Base | tetrahydrofuran |
| Viscosity (+20 °C) | < 5 mPas |
| Density | approx. 0.9 g/cm ³ |
| Colour | colourless |
| | change of colour does not influence characteristics of adhesion |
| Wet bonding time | approx. 5 to 10 seconds (one-sided application) |
| Further processing strength | after approx. 3 hours |
| Way of application | one- and two-sided |
| Thickener | flakes of polycarbonate (max. 15 %) |
| Processing temperature | +15 °C to +25 °C |
| Consumption | 150 - 250 g/m ² |
| Cleaning agent / material | technicoll® 8363 technicoll® 9902 (plastics cleaning spray) |
| Cleaning agent / tool | technicoll® 8362, technicoll® 9901 (spray) |
| Maximum time of storage | At least 3 years when stored in sealed original packaging in cool and dry places. Keep container closed! |
| Preferred storage temperature | +10 °C to +25 °C |
| Behaviour at low temperature | not susceptible to frost |

Resistance to temperature

As cold welding compound technicoll® 118 etches polycarbonate. The solvent will usually evaporate residue-free. Under best circumstances the resistance to temperature is similar to the one of the feedstock. Because variation may occur during the bonding process, the resistance to temperature may be lower.

Surface preparation

Bonding surfaces must be dry and clean, especially free of oil, grease or release agents. technicoll® 8363 is recommended for cleaning plastic surfaces.

Application

Sawn or milled edges of a polycarbonate are generally bonded at right angles. Substrates that will be bonded must fit accurately because small gaps will not be filled. Curing starts when the solvent of technicoll® 118 evaporates. Before bonding, clean adherents. Generally two preferred methods are as follows:

1. Dip the edge of one adherent in technicoll® 118. After 5 to 10 seconds of etching the surface, the joint components should be assembled.
2. Fix both adherents without adhesive in correct and final position. For well-defined bonding joints use corrosion resistant steel wire (\varnothing : approx. 0.1 to 0.5 mm) to assure a consistent distance of both surfaces to be bonded. Fill up the seam of the joint components with technicoll® 118 by using a bottle with attached cannula. Remove wire, if necessary and keep the bonding joint under light pressure (approx. 100 g/cm²).

Note

White colouration of the bonding seam is caused by condensed water (especially when room temperature is low).

Viscosity of technicoll® 118 can be increased by adding 10 - 15 % of flakes of polycarbonate (Makrolon®).

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Deviating information of earlier versions is invalid.

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.