

(PAPERPORT)

Fao Simon

Regards

DEE

RIGHTON

(E + OE)

Product Description**ACRIFIX® 107****Type:**

Thin-bodied, clear yellowish solvent adhesive.

Applications:

For T-bonds and narrow bonded areas of all kinds of uncrosslinked PLEXIGLAS®, and particularly for craze-free bonds between internally stressed parts of extruded PLEXIGLAS XT or injection-moulded from PLEXIGLAS moulding powder.

Crazing only occurs on parts with extremely high internal stresses. ACRIFIX 107 is not gap-filling. The initial bond is quickly obtained. Further treatment possible within a short time. High ultimate strength. Test for use with other plastics.

Only meant for commercial use.

Working instructions:

Normally a sawn or milled edge of one part is bonded at right angles to the original surface of another. Avoid bonding in areas with a high stress level (e.g. around pin gates or in areas of varying wall thickness). The parts to be bonded must have a very accurate fit. Grooves and notches are only partially filled. Clean the adherends with petroleum ether or isopropanol before bonding. Either of two methods may be used:

(a) Lock the two parts in position without any adhesive. Introduce ACRIFIX 107 into the joint from a small nozzled bottle. The adhesive penetrates the joint by capillary action. From a sheet thickness of about 5 mm onwards, the parts should first be put together with the aid of spacers (e.g. stainless steel wire brads, c. 0.1 to 0.5 mm Ø) at right angles to the sheet edge, which are pulled out after introduction of the adhesive.

(b) The appropriate edge of one of the parts to be bonded is dipped into ACRIFIX 107 and placed in contact with the second part after allowing sufficient time for solvent action - PLEXIGLAS XT about 20 sec./PLEXIGLAS GS about 60 sec.

After a short holding time the bond is locked in position and a pressure of at least 100 g/cm² applied. When bonding sawn edges, bubble formation can be reduced by smoothing the edges with 400 to 600-grit paper (wet) or passing them over with a scraper and then wiping them repeatedly and vigorously with a cloth thoroughly soaked with ACRIFIX 107 (wear protective gloves) before the actual bonding process is started.

Properties:	
Viscosity (Brookfield A/12/20 °C)	≤ 15 mPa·s
Density/20 °C	~ 1.22 g/cm ³ Processing range 1.20 to 1.22 g/cm ³
Refractive index n _D ²⁰	≈ 1.408
Colour	Clear to yellowish; discolouration does not affect the bonding properties
Flash point/DIN 51 755	No flash point

(PAPERPORT)

Solids content	≤ 1 %
Storage stability	If correctly stored, 2 years after filling.
Storage temperature	max. 30 °C
Packaging materials	Glass and aluminium
Curing	Physically by evaporation and absorption in the bonded parts
Safety measures, exclusion of health risks:	
Marking according to (German) statutory order on dangerous substances, Appendix I, No. 2.2	Contains dichloromethane/nitromethane. Harmful by inhalation. Avoid contact with the skin.
Storage:	
Keep container tightly closed in a cool place.	

Note:

1. The maximum pot life of ACRIFIX 107 in an open dish is about 30 minutes, because its composition changes by evaporation of predominantly one constituent.

The composition can be checked via density measurement, using a glass hydrometer.

When the density has dropped to 1.20 g/cm³, the required value of 1.22 g/cm³ can be restored by adding ACRIFIX 108.

2. Whitening around the adhesive joint is due to water condensing from the air (especially if the room temperature is low).

Properties of bonds:	
	PLEXIGLAS FM = PLEXIGLAS moulding powder or injection mouldings
	PLEXIGLAS XT = extruded semifinished material
	PLEXIGLAS GS = cast semifinished material
Initial bond:	PLEXIGLAS FM/PLEXIGLAS FM ≈ 5 to 10 sec.
	PLEXIGLAS XT/PLEXIGLAS XT ≈ 5 sec.
	PLEXIGLAS GS/PLEXIGLAS GS ≈ 30 sec.
Tensile strength; v = 5 mm/min (butt joint: free from bubbles)	PLEXIGLAS FM/PLEXIGLAS FM ≈ 38 ± 5 MPa
	PLEXIGLAS XT/PLEXIGLAS XT ≈ 38 ± 5 MPa
	PLEXIGLAS GS/PLEXIGLAS GS ≈ 20 ± 5 MPa
	Annealing - eight hours at 60 °C - increases the strength by about 5 MPa and improves the weather resistance.
Further treatment of bonded parts	Not within the first three hours

(PAPERPORT)

Appearance	Clear-transparent. Rather more bubbles form with PLEXIGLAS FM and XT than with PLEXIGLAS GS. Bleeding may occur with coloured semfinished material and injection-moulded parts.
------------	---

For more information on safety measures, the exclusion of health risks when handling adhesives and on their disposal, see our safety data sheet (DIN 52900) or VDI-Richtlinie "Kunststoffkleben" ("Bonding of Plastics," guidelines of the Association of German Engineers) -VDI 3821. Available from Beuth Verlag GmbH, Burggrafenstraße 4-10, D-1000 Berlin 30.

® = registered trademark

MAKROLON® = reg. trademark of Bayer AG, Leverkusen

Our technical advice on the uses of our materials is given without obligation. The buyer is responsible for the application and processing of our products and is also liable for observing any third-party rights. Technical data concerning our products are typical values. Subject to alteration.

Important notice

This is an international English-language information prepared for several markets.

It is essential that the selection of particular materials and their methods of use conform with the requirements of national and local Building Regulations.

The availability of any particular product should be checked with your supplier.