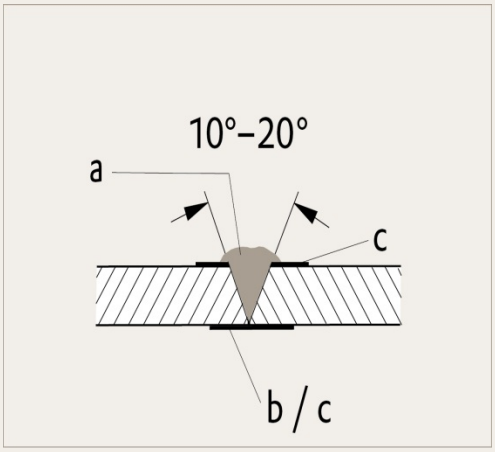
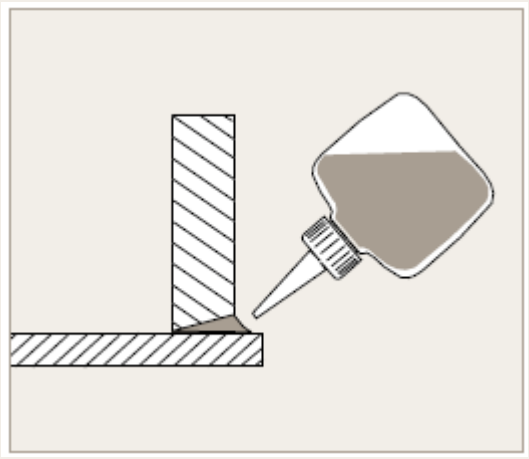
Technical Information

ACRIFIX® 2R 1074

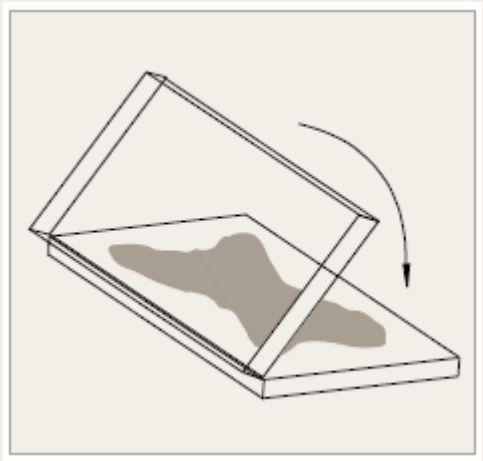
2-Component Polymerization Adhesive



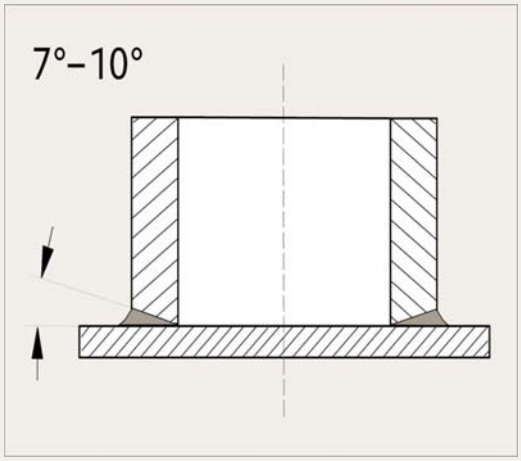
V-groove:
a = Adhesive
b = Adhesive tape with nonadhesive center strip
c = Adhesive polyester or PE-tape



Angle joint:
Application of adhesive by PE glue dispenser



Area bonding:
Apply adhesive as a four-lobed dollop; fold down cover carefully from the edge.



Bonding a tube end

Product and Use

Type
2-Component polymerization adhesive.
Clear, slightly purplish, viscous solution of an acrylic polymer in methyl methacrylate, which cures completely upon addition of ACRIFIX® CA 0020.

Applications
Preferably used for bonding acrylic (PMMA), i.e. PLEXIGLAS® GS, PLEXIGLAS® XT or parts made from PLEXIGLAS® molding compounds with each other, but also for other materials such as ABS, CAB, PS, PVC, SMS, UP and wood. . The cured joints are almost colorless and **free from wrinkles**. ACRIFIX® 2R 1074 is only suitable for bonding interior items not exposed to water.

Storage/Transport
Keep in the original container, in a cool place.
UN 1133

Working Instructions
Preparing the Parts to Be Bonded
Degrease the surfaces to be bonded with ACRIFIX® TC 0030, isopropyl alcohol or petrol ether. Internally stressed parts must be annealed before bonding in order to avoid stress cracking. The annealing conditions depend on the type of material, the degree of forming and the thickness of the parts to be bonded. Parts made of extruded and injection-molded acrylic should be annealed as a matter of principle. Typical annealing times – also for cast acrylic – are 2 to 4 hours in an airflow oven at 70 to 80 °C.

Preparing the Adhesive
Add 3 to 6 % ACRIFIX® CA 0020 to ACRIFIX® 2R 1074 and stir until no more striation is visible. In the covered container, air bubbles may be allowed to rise to the surface of the adhesive. Avoid vacuum degassing.
As soon as the ACRIFIX® 2R 1074 mixture becomes thick and noticeably warm (end of pot life), it should no longer be used.

Bonding Technique
Fix the parts to be bonded in the desired position and apply suitable adhesive tape to seal the joint and to protect surrounding areas (see drawings). Introduce ACRIFIX® 2R 1074 into the joint either directly from the mixing vessel or by means of a glue dispenser or disposable syringe, and avoid bubble formation.

Other Measures
Roughening-up with abrasive paper (grit 230 to 320) improves the adhesion to untreated surfaces of cast acrylic. Severely stressed bonds or those intended for outdoor exposure should be annealed for 2 to 4 hours at 70 to 80 °C **immediately after** curing. ACRIFIX® 2R 1074 must not get into closed cavities (e. g. double glazing, tube interiors), since the curing process is severely hampered at such sites, and there is a risk of stress cracking in the bonded parts.
If cavity adhesion cannot be prevented, the cavity must be rinsed gently with water for at least 20 minutes.
In case of tube adhesions it is also recommended to gently blow air through the tube during bonding.
For more details see our Guideline “Joining, Ref. No. 311-3”.

Properties of Bonds
Further treatment of bonded parts:
3 to 6 hours after curing, sanding and polishing after 24 hours

Tensile shear strength (v = 5 mm/min):

Material (to itself)	non-annealed	annealed (5 hrs at 80 °C)
Cast acrylic:	32-38 MPa	38- 44 MPa
Extruded acrylic:	30-36 MPa	36- 42 MPa

Appearance
Almost colorless to slightly yellowish. The joint whitens upon exposure to water. With higher amounts of ACRFIX® CA 0020 and ACRIFIX® TH 0032, and temperatures > 70°C, discoloration is possible.

Limitation of Liability
Our ACRIFIX® adhesives and other auxiliary agents were developed exclusively for use with

our PLEXIGLAS® products and are specially adjusted to the properties of these materials. Any recommendations and guidelines for workshop practice therefore refer exclusively to these products.

Claims for damages, especially under product liability laws, are ruled out if made in connection with the use of products from other manufacturers.

For further information on safety measures, the exclusion of health risks when handling adhesives and on their disposal, see our Safety Data Sheet.

Availability according to the current sales range.

Safety Measures and Health Protection

Labeling according to (EC) 1272/2008
Danger, contains methyl methacrylate

Highly flammable liquid and vapour. (H225)
Causes skin irritation. (H315)
May cause an allergic skin reaction. (317)
May cause respiratory irritation. (H335)

Keep away from heat/ sparks/open flames/hot surfaces. — No smoking. (P210)
Avoid breathing dust/fume/gas/mist/vapours/ spray. (P261)
Wear protective gloves/protective clothing/eye protection/ face protection. (P280)
IN CASE OF CONTACT WITH SKIN: Wash with plenty of soap and water. (P302+P352)
Dispose of contents in accordance with local regulation. (P501)

Typical values

Properties	Values
Viscosity; Brookfield II/12/20 °C:	450 a 550 mPa · s
Density (20 °C):	~ 1,02 g/cm3
Color:	clear, slightly purplish
Flash point (DIN 53213):	~ 10 °C
Storage stability:	2 years after filling, if correctly stored
Storage temperature:	max. 30°C
Packaging materials:	glass, aluminum
Thinner:	max. 10%ACRIFIX® TC 0030
Cleaning agents for equipment:	ACRIFIX® TC 0030 or ethyl acetate
Curing / pot life (at 200 g adhesive, 20 °C) with 3 % ACRIFIX® CA 0020:	~ 50 min / ~ 20 min

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