

ACRIFIX® 1S 0126

1-Component Solvent Adhesive

Product and Use

Type

1-Component solvent adhesive
(viscous, clear, colorless to slightly yellowish).

Applications

For making T-bonds and bonding narrow areas of all kinds of uncrosslinked PLEXIGLAS®, preferentially for crack-free bonding also of lightly internally stressed parts, e.g. those made of extruded PLEXIGLAS® XT and injection moldings made from PLEXIGLAS® molding compound. Cracking only occurs in parts with extreme internal stresses.

ACRIFIX® 1S 0126 is only gap-filling to a certain extent. The bond is firm within a short time. Rapid further treatment possible. High ultimate strength. For other materials, conduct prior tests.

For commercial use only.

Working Instructions

Normally, a sawn or milled edge of one article is bonded at right angles to the original surface of another. The parts to be bonded must have a very accurate fit. Grooves and notches are only partially filled. Clean the adherents with petroleum ether or isopropyl alcohol before applying the adhesive.

ACRIFIX® 1S 0126 is applied from a nozzled bottle to the edge of one of the items to be bonded, which, starting from one side, is then placed in contact with the second.

After a short holding time, the bond is locked in position.

When bonding sawn edges, bubble formation can be reduced by smoothing the edges prior to bonding, either with a scraper or with fine, wet abrasive paper, grit 400 to 600 (if possible at right angles to the sheet edge), or by milling or diamond cutting.

Further Indications

If the product is stored in PE application bottles, it must be ensured that the adhesive is always fresh, as its composition changes by evaporation of predominantly one component and solvation is impaired.

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

Attention: When pre-bonding with ACRIFIX® 1S 0126, curing of ACRIFIX® 2R adhesives can be impaired.

ACRIFIX® 1S 0126 can turn yellow as a result of exposure to light; however, the yellowing has no effect on the adhesion.

To adjust the viscosity, ACRIFIX® 1S 0126 can be mixed with ACRIFIX® 1S 0127 in any ratio.

For further details, please see our Guideline, "Joining Ref. No.: 311-3"

Properties of Bonds

Initial bond

PLEXIGLAS® GS/PLEXIGLAS® GS: ~ 30 sec.

PLEXIGLAS® XT/PLEXIGLAS® XT: ~ 10 sec.

Subsequent treatment of bonded items

Not within the first three hours

Tensile shear strength

(v = 5 mm/min; butt joints, free from bubbles):

Material (with itself)	annealed (5 hrs at 80 °C)	
	non-annealed	
PLEXIGLAS® GS 0F00:	20 ± 5 MPa	30 ± 5 MPa
PLEXIGLAS® XT 0A000	25 ± 5 MPa	30 ± 5 MPa

Annealing increases the strength and also improves the weather resistance.

Appearance

Colorless clear.

Rather more bubbles with PLEXIGLAS® XT and fewer with PLEXIGLAS® GS. Bleeding may occur with colored parts to be bonded.

Storage/Transport

Keep container firmly closed, store in a cool place.
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Limitation of Liability

Our ACRIFIX® adhesives and other service products 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.

Typical Values

Properties	Values
Viscosity: Brookfield (20°C)	750 – 1000 mPa · s
Density (20 °C):	~ 1.14 g/cm ³
Refractive index n _D ²⁰ :	~ 1.42
Color:	Clear to yellowish, color does not affect bonding properties.
Flash point DIN EN ISO 13736:	>= 30°C
Solids content:	≤ 1%
Storage stability:	2 years after filling, if correctly stored
Storage temperature:	max.30°C
Packaging materials:	Colored glass and aluminum
Curing:	Physically, through evaporation and absorption in the bonded articles.
Cleaning agent for equipment:	Ethyl acetate

Safety Measures and Health Protection

Labeling according to Regulation (EC) 1272/2008

Danger, contains dichloromethane, nitroethane.



- Highly flammable liquid and vapor (H225)
- Harmful if swallowed. (H302)
- Suspected of causing cancer. (H351)
- Causes skin irritation. (H315)
- Causes serious eye irritation. (H319)
- May cause drowsiness or dizziness. (H336)
- Harmful to aquatic life with long-lasting effects. (H412)
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)
- Wear protective gloves/protective clothing/eye protection/face protection. (P280)
- IF ON SKIN (or hair):
Take off immediately all contaminated clothing. Rinse skin with water/shower. (P303+P361+P353)
- IF INHALED:
Remove person to fresh air and keep comfortable for breathing. (P304+P340)
- IF IN EYES:
Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. (P305+P351+P338)
- Dispose of contents according to local disposal regulations. (P501)

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Evonik is a worldwide manufacturer of PMMA products sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian continents and under the ACRYLITE® trademark in the Americas.

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