Penloc GTH-T is a two component toughened acrylic adhesive to bond various metals such as steel, stainless steel, and aluminium as well as ceramics, FRP, etc.

Advantages:
- Excellent heat resistance
- Excellent water resistance and hot water resistance
- High viscosity
- Rapid bonding
- High bond strength
- Application requires no mixing

Storage conditions: dark, cold and dry place at room temperature
Shelf life: in unopened original container at least for 6 months

Technical Data

Color: transparent
Resin: acrylat

UNCURED PROPERTIES

Viscosity (Brookfield LVT/25 °C) [mPa·s] 8000 to 10000
Flash point [°C] > 90
Pot-Life [min.] approx. 2

Curing

Handling Strength 5-10 min.
Full Strength 4-6 hours

Lap Shear Strength (* material failure)

Stahl 28 N/mm²
Edelstahl 27 N/mm²
Aluminium 23 N/mm²

CURED PROPERTIES

Temperature Resistance -30 to 180 °C
Hardness [Shore D] 65 to 75
TECHNICAL DATASHEET

Penloc® GTH-T

Lap Shear Strength (Steel/Steel) [MPa] [PE-Norm P013] approx. 28
Lap Shear Strength (Edelstahl) [MPa] [PE-Norm P013] approx. 27
Lap Shear Strength (Aluminium) [MPa] [PE-Norm P013] approx. 23
Elongation at Break [%] approx. 5 [PE-Norm P060]

The surface must be clean, dry and free from fat and releasing agent. We advise a solvent which is able to absorb water, i.e. Panacol cleaner IP.

The adhesive can be dispensed out of a double syringe like a 1-component product. The syringe must stay 2 minutes before using vertical (needle at the top), therefore the enclosed air can rise to the top.

For white syringes - draw of the slide - remove cap with a screw driver - keep cap for relock.

For black syringes - hit cap hard on a solid ground, the two pins will bore through the cap and open the syringe.

"bead on bead": with smooth and constant pressure on a stamp the two components were pressed out. They have to applied one component and the other at the top.

Microstatic Mixer: both components will be mixed in the tube. During 3 minutes the substrates must be joined together.

Handling strength is reached after 5 - 10 minutes.

80% of bonding strength is reached after 1 hour.

Final strength is reached after 4-6 hours.

Adhesives and more...