honle group





Penloc[®] GT Series 2-Part Performance Structural Adhesives

System Properties

- Acrylic-based structural adhesives
- Adhesives for a wide range of materials
- Wide range of applications – from trade to mass production

Advantages

- Rapid curing
- Multipurpose
- Easy handling
- Ideal for automated application
- High strength and stability

For Bonding Numerous Material Combinations

The acrylic-based high-performance structural adhesives of the Penloc[®] GT series are ideal for bonding materials such as metal, glass, ceramics, wood and many plastics (except PE and PP).

The Penloc[®] GT adhesives are easy to handle and versatile in use.

The series comprises the two-component Penloc[®] products GTI, GTH-T, GTR, GTI-S and GTR-VT.

Adhesive Properties

- Suitable for bonding a wide range of materials
- Fast, flexible, versatile
- Wide range of applications from low volume to mass production
- Bonds quickly and reliably
- Universal use and simple handling
- High strength and stability
- Cures at room temperature
- Short curing times

Typical Applications

- Weather-resistant attachment of metal lettering, e.g. to stone façades
- Bonding corner brackets to window frames
- Bonding car roof racks
- Bonding sleeves (for lipstick, etc.)
- Cosmetics packaging (e.g. perfume bottles)
- Sensor enclosures
- Electric motor magnets
- Bonding metals with subsequent heat treatment (GTH-T)
- Use before powder coating (GTH-T)
- Bonding PMMA display cabinets



Easy Application

The convenient double cartridges are especially well suited for on-site use and manual application.



Dispensing with Static Mixer

To apply the adhesives from 50 g-cartridges, we recommend the use of an application gun and a microstatic mixer.

For bonds with gap sizes > 0,3 mm it is recommended to dispense the adhesive directly from the static mixer.



Precise Dispensing With Static Mixer and Needle

The needle is simply fitted to the static mixer and allows precise dispensing and exact positioning of the dispensed adhesive on the workpiece.



Dispensing from Drums

For industrial environments, dispensing from the drums can be easily incorporated into automated processes.

Depending on the dosing system, the adhesive can be applied bead-on-bead or with a meter-mix dispensing system.

The two components can also be applied separately to a workpiece, so that curing begins only after joining.

Penloc®	GTI	GTR	GTR-VT	GTH-T	GTI-S
Typical Applications	All-Purpose Adhesive for Steel, Aluminium, Chrome, Brass, Stone, Concrete, Wood, etc.	Structural and Repair Adhesive for Metals, Ceramics, Glass and Plastics	Gap-Filling Structural Adhesive, also Bonds Oily Surfaces, Can be Used for Vertical Workpieces	Bonds Metals, such as Steel, Stainless Steel, in Combination with Ceramics and FR4, also before Powder Coating	Bonds Plastics, Metals and Plastics with Metallised Surface
Viscosity (mPa / 25°C)	5,000	4,000	25,000	8,000	5,500
Color, Part A / Part B	Green / Pink	White / Blue	Light Yellow / Blue	Brown / Green	White / Blue
Handling Strength, min.	5 – 7	5	5	5 – 10	4 – 5
Final Strength, hrs.	4 - 6	4 – 6	4 - 6	4 - 6	12
TSR1) Steel (MPa)	27	21	21	28	22
TSR Alu. (MPa)	22	20	16	23	19
TSR Stainl. Steel (MPa)	21	_	20	27	20
TSR PC (MPa)	*5	2	2	-	4
TSR ABS (MPa)	*8	3	-	-	6
Temp. Stability (°C)	-30 to +150	-20 to +120	-20 to +120	-30 to +180	-30 to +120
Cartridges	10 g, 50 g	50 g	50 g	50 g	-
Big Packs	5 kg	5 kg	5 kg	5 kg	5 kg
Characteristics	Oil- and Fuelresistant, Strong Odour, High Force Transmission under Dynamic Load	Multipurpose, Rapid Curing, Easy Handling	Thixotropic, Non-Running, Gap-Filling, Bonds also Oily Surfaces	High Thermal Stability, Excellent Water Resistance, Good Impact Resistance, Extremely High Strength	Mild Odour, Well Suited for Automation from Large Pack Sizes, Flexible Bonds

¹⁾ Combined tension and shear resistance

 * Material breakage: the bond strength is greater than the test sample's internal strength

Convenient Packaging Sizes

Available in a range of packing types and sizes and for various applications and dosing methods, the Penloc® GTproducts are easy to handle according to your special requirements. The Penloc® adhesives are available in the following packaging sizes: 10 g double cartridge (Penloc® GTI only) 50 g double cartridge (except Penloc® GTI-S) 2 x 2,5 kg drum



Penloc[®] GTI: New 50ml Cartridge

The new $\mbox{Penloc}^{\circledast}$ GTI 50 ml system is configurated with two separate outlets to avoid cross-contamination.



Part No.: 08301009

- The advanced twist lock static mixer guarantees a perfect seal avoiding any unexpected cross-contaminations.
- The new 50 ml cartridges only can be used in combination with fitting static mixers. We recommend static mixer MB 5406 S, or mixer MB 0312 S for precise dispensing. Further mixers are available upon request.



	inner Ø (mm)	outer Ø (mm)	length (mm)	needle Ø required (mm)	inner Volume (ml)	mixing elements
MB 5406 S	5,4	7,0	59,3	1,5	0,94	6
MB 0312 S	3,2	4,8	63,5	1,0	0,49	12



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