

5 MIN PU hard

2-C PUR ADHESIVE

5 MIN PU hard is a thixotropic, odourless, black two-component polyurethane-based adhesive that cures at room temperature.

5 MIN PU hard is particularly suitable for bonding thermoplastics, SMC, PC, PUR, GRP, CFRP, ABS (conditionally), steel, aluminium, concrete and wood.



- Super fast curing
- High-strength, durable connections
- Can be used with many materials
- Finishing such as grinding, drilling, thread cutting is possible
- Can be overpainted after a few minutes
- Resistant to: water, oils, fuel, solvents, acids and alkalis
- Weather and ageing resistant

PHYSICAL SPECIFICATIONS

Composition		Component A Polyol	Component B MDI	MIXATION Polyurethane
Mixing ratio by weight		84	100	-
Mixing ratio by volume		100	100	-
Colour (visual)		black	amber	black
Consistency		liquid	liquid	Thixotrope
Viscosity	mPa·s	2.500	3.000	50.000
Relative density		0,98	1,17	1,08
Processing time	min			5
Curing mechanism		-	-	Polyaddition
Water solubility		-	-	indissoluble
Optimum processing temperature	°C	+10 / +30	+10 / +30	-
Flammable at °C		> 200	230	-

PROCESSING INFORMATION

5 MIN PU hard is available in double-chamber cartridges for application with a hand gun.

The mixing is done by using a static mixer with at least 16 elements.

A smaller number of mixing elements can lead to insufficient mixing as well as poor or no curing of the adhesive.

PREPARATION OF THE JOINING SURFACES

The durability of a bond depends on the correct preparation of the parts to be joined. To ensure an optimal bond, the materials should be roughened using an abrasive (e.g. [GP Foam Pad](#), Art. No. 5gp3). Cleaning with a suitable solvent is recommended as pre- and post-treatment.

For metals please use acetone (e.g. [acetone spray GP](#), art. no. 30660), for plastics please use a suitable solvent to avoid damage (e.g. [universal cleaning spray GP](#), art. no. gprs01).

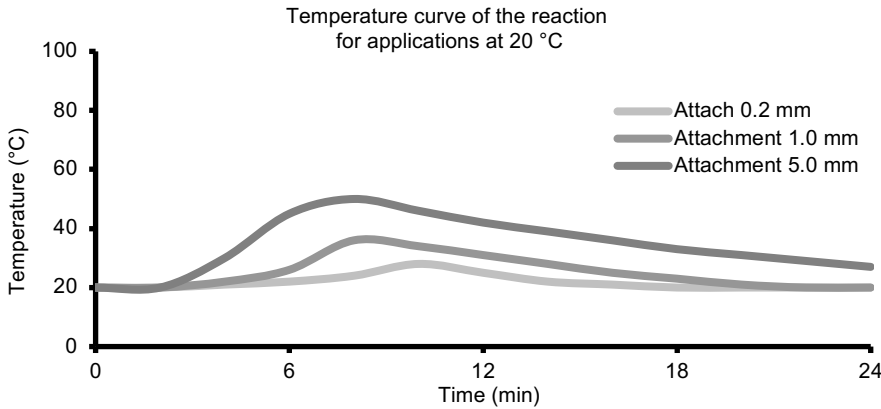
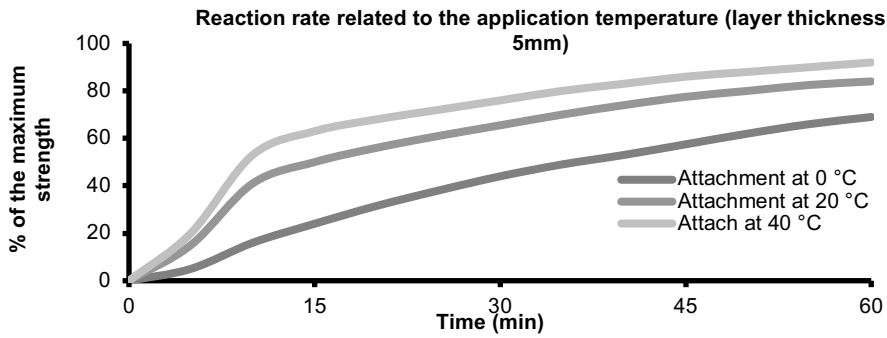
APPLICATION

The optimum processing temperature is between 20 °C and 25 °C.

At a higher temperature, the processing and curing time is reduced.

The optimum layer thickness is 0.2 mm.

With a higher layer thickness, reaction heat is generated which can affect the joined parts and reduce the curing speed.

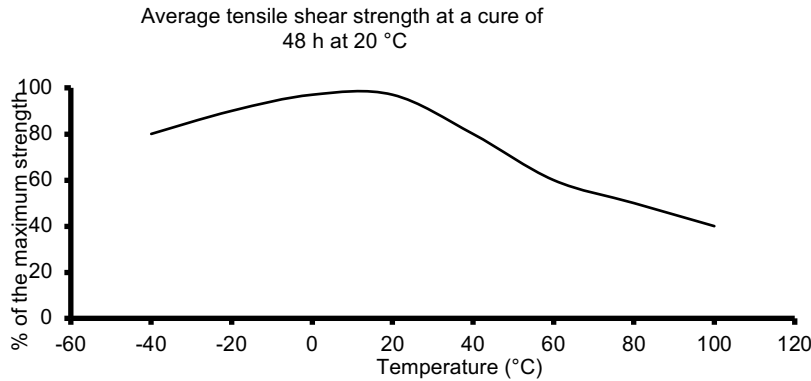


Typical reaction values
10 g product 20 °C

Processing time: 5 min
Curing time: 15 min
Time until end of reaction: 480 min
Temperature of the exothermic reaction: 50 °C

TYPICAL PROPERTIES AFTER CURING

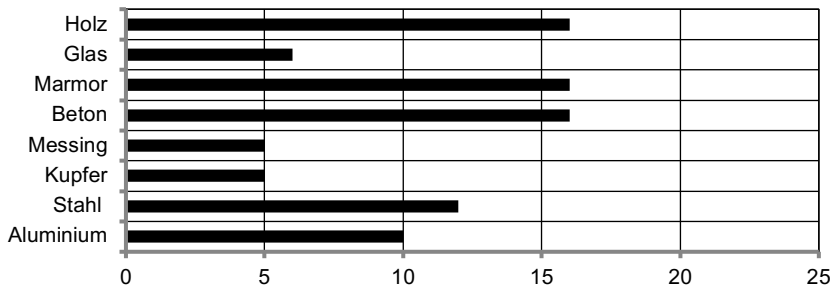
The following values are results of tests carried out on standard samples. The material samples with the size of 100 x 20 x 2 mm were glued on a surface of 20 x 20 mm. These values are for information only and are not product specifications.



Typical product values at 20 °C

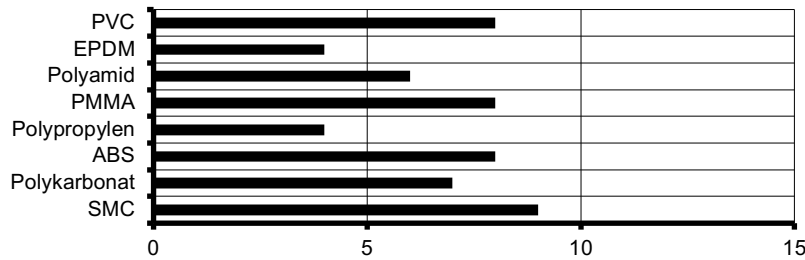
Hardness: 80 D
Tensile strength: 23 N/mm²
Elongation at break: 15
Specific
Resistance: 1.2x10¹⁵ Ωxcm
Operating temperature: - 36 / +100 °C

Average tensile shear strength (N/mm²) - of different materials -



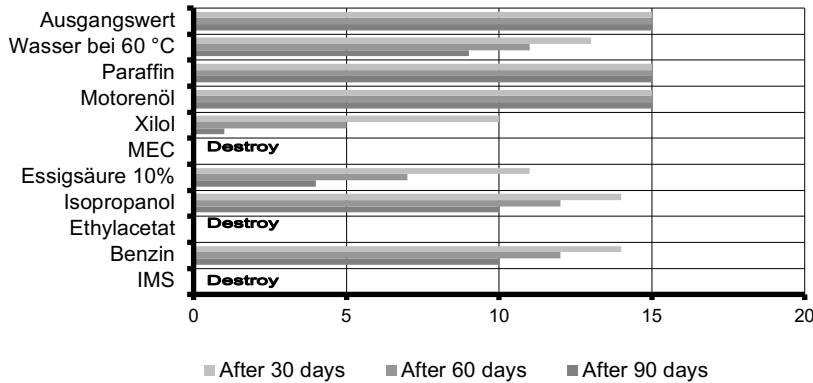
Test temperature 20 °C on typical metal-metal bonds.
48 hours Curing at 20 °C
Pre-treatment: Sandblasting and degreasing with acetone.

**Average tensile shear strength (N/mm²)
- of plastics -**



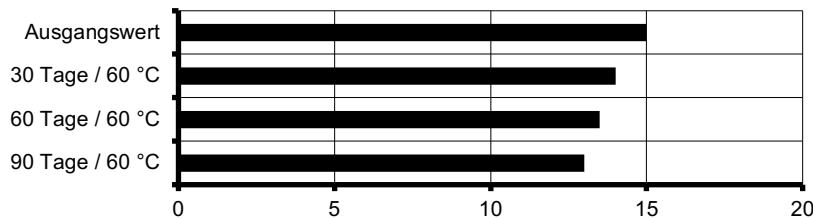
Test temperature 20 °C on typical plastic-plastic joints.
48 hours Curing at 20 °C
Pre-treatment:
Sand and degrease with isopropyl alcohol (IPA).

**Average tensile shear strength (N/mm²)
- after storage in various media -**



Test investigations carried out at 20 °C.
Immersion for 30, 60 and 90 days at 20 °C to typical Steel-steel connections.
48 hours Curing at 20 °C.

**Average tensile shear strength (N/mm²)
- after storage under the influence of heat -**



Test temperature 20 °C performed on typical steel-steel bonds after ageing at 60 °C.
At the end of 3 thermal cycles, each with a duration of 24 hours from -40 °C to +100 °C, no changes in the average shear strength could be detected.

DELIVERY FORM

5 min PU hard	PU	Incl. static mixer	Article number
50 ml cartridge	1 piece 6 pieces in a carton	GPQ 05-17	gpu05h050.01 gpu05h050.06
B cartridge:	1 piece	GPH 05-17B	gpu05h050B.01
50 ml cartridge	6 pieces in a carton	GPH 05-17B	gpu05h050B.06

PROCESSING EQUIPMENT

Description	Article number
Hand gun GP 1:1 50 ml	1h050gp1
Static mixer GPQ 05-17	1gpq05-17
B cartridge:	
Static mixer GPH 05-17B	1gph05-17B

PRECAUTIONARY MEASURES

Chemicals can be processed safely, for this the specific precautions must be observed and the risk assessment from your company must be followed.

Chemical substances must be kept away from food. To avoid injuries and allergic reactions, the use of personal protective equipment such as impermeable rubber or plastic gloves, safety glasses and disposable protective clothing is mandatory. For detailed information, please refer to the safety data sheet.

Hands must be washed thoroughly with warm water and soap before breaks and toilet visits and after each working day. The skin is then dried with disposable paper towels - no textiles (see skin protection plan). The use of solvents to clean the skin is not recommended.

Ensure sufficient ventilation and/or extraction in the work rooms.

Safety data sheets / Article info: <https://shop.goessl-pfaff.de>

STORAGE

5 Min PU hard can be stored dry at room temperature in the unopened original packaging.

The expiry date is indicated on the product labels.

NOTE

Our technical application advice, whether verbal, in writing or by means of tests, is given to the best of our knowledge, but is regarded only as non-binding information, also with regard to any third-party property rights, and does not release you from your own examination of the products supplied by us for their suitability for the intended processes and purposes. Application, use and processing of the products are beyond our control and are therefore exclusively your responsibility. Gößl + Pfaff GmbH guarantees that the products comply with the respective specifications. Gößl + Pfaff GmbH accepts no responsibility in the event of damage or accidents that may occur when using the products. The responsibility of Gößl + Pfaff GmbH is limited to the refund or replacement of products that do not comply with the stated specifications.