



Sole UK Distributors Of
REINHARDT-TECHNIK
Metering, Mixing &
Dispensing Systems



Bonham Drive, Eurolink Industrial Estate
Sittingbourne, Kent. ME10 3RY
Tel 01795 427888 Fax 01795 479685
Email: sales@eurobond-adhesives.co.uk
Web: www.eurobond-adhesives.co.uk

Technical Data Sheet Penloc 1:1HP Toughened Acrylic Adhesive

Penloc 1:1HP is a high strength, toughened acrylic adhesive which will bond most metals, plastics, wood, glass and composites to themselves or in any combination.

Penloc 1:1HP is a unique two part adhesive. It is applied from cartridge via a mixer nozzle. Penloc 1:1 HP produces clean, no waste bonds.

Penloc 1:1HP has excellent heat and water resistance with a rapid cure time of between 3-5 minutes depending on room temperature. Once fully cured (typically one hour) bonded assemblies can be treated with high temperature paint baking finishes, i.e Powder Coat, Enamelling and Dip Coat and can withstand 180°C.

Penloc 1:1HP can achieve high bond strengths and does not cause distortion, burns or welding spots, eliminating costly refinishing.

TYPICAL PROPERTIES

Colour (mixed):	Opaque Pale Green
Viscosity:	10,000 cps
Specific gravity:	1.00
Temperature Range:	-55°C to +200°C
Handling strength:	3-5 minutes
Working strength:	60 minutes

HANDLING PRECAUTIONS

Penloc 1:1 HP is an industrial structural adhesive produced from a chemical process. It is important to refer to the Material Safety Data Sheet for the correct method of handling and storage before commencing its use.

IMPORTANT SURFACE PREPARATION

The bond area on both substrates should be abraded with a medium grit emery paper in one direction only, then cleaned with Isopropyl alcohol and dried with a clean cloth prior to bonding. **DO NOT** use petroleum based products eg. Methylated Spirit or White Spirit to clean surfaces as these will degrade the adhesive and lead to bond failure in time.

TENSILE SHEAR kgf/cm²

MATERIAL	10 hrs@ 20°C	AFTER 20hrs @ 180°C
Steel/Steel	211	199
Stainless Steel/Stainless Steel	275	260
Aluminium/Aluminium	180	180

Samples tested measured 25mm x 12.5mm at a pull speed of 10mm per minute.

WATER AND SOLVENT RESISTANT TEST UNIT: N/mm²

	250 hrs	1000hrs
Water	24.5	24.5
10% solution of salt	24.5	21.6
10% solution of caustic soda	19.6	17.6
Methanol	8.8	1.5
Toluene	9.3	6.9
Petroleum	23.5	12.3
Engine Oil	24.5	24.5

The information supplied on this Technical Data Sheet is a result of our own in-house testing, the results of which are intended as a guide only. Customers intending to use the product should satisfy themselves as to its suitability before commencing its use and not rely solely on the information provided.

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