

PRODUCT DESCRIPTION

Modified acrylate | 1 part | solvent-free | room temperature curing | anaerobic

- ▶ Interlocking all types of screw joints, screw fastening or threaded bar connection against vibration and impact load
- ▶ Force and friction locking combined with a waterproof sealing and corrosion protection as the bonding result
- ▶ Applied forces shared over the fill range of each for the prevention from fatigue failure or breakage
- ▶ CMR-free

Thread locker	Fixation	Sealing
✓	✓	✓

✓ suitable - not suitable

CURING PROPERTIES

This adhesive can be cured at room temperature. Typical curing parameters are listed in the table below.

Curing*	Time
Pot life	5 – 20 min
Handling strength	45 – 300 min
Final strength	6 – 24 h

*depending on Cu²⁺ concentration

The curing times are only provided as a guideline. They are derived from curing a laboratory sample without affixed substrates in a laboratory environment. Actual cure times can vary based on part size, configuration, adhesive volume, temperature control, and the Cu²⁺ concentration.

The final bond strength of the adhesive is achieved no sooner than 12 h after the bonded components are removed from the oven.

TECHNICAL DATASHEET

PENLOC®E-NL



TECHNICAL DATA

Resin	Methacrylate ester
Appearance	Blue
Strength classification	Middle strength
Max gap size [mm]	0.1

Uncured Material

Viscosity [mPas] (Brookfield LVT, 25 °C, Sp.4 /30 rpm) <i>Test instruction P001</i>	4,000 – 7,700
Density [g/cm³] <i>Test instruction P004</i>	1.0

Cured Material

Typical operating temperature [°C]	-55 – 150
Dielectric strength [kV/mm] <i>DIN EN 60243</i>	9
Compression shear strength [MPa]	10
Breakaway torque [Nm]	20
Prevailing torque [Nm]	15

TRANSPORT/STORAGE/SHELF LIFE

Package type	Transport	Storage	Shelf life*
Bottle	At room temperature max. 25 °C	At room temperature max. 25 °C	Delivery min. 3 months max. 6 months
Can			

***Store in original, unopened containers!**

INSTRUCTIONS FOR USE

Surface preparation

The surfaces to be bonded should be free of dust, oil, grease, mold release, or other contaminants in order to obtain an optimal and reproducible bond. For cleaning we recommend the cleaner IP® from Hoenle, or a solution of Isopropyl Alcohol at 90% or higher concentration.

Application

Our products are supplied ready to use. Depending on packaging they can be applied by hand directly from the container or by using compatible dispensing systems and automation.

For assistance with dispensing and curing questions, please contact our Applications Engineering department. To obtain best results, the adhesive and substrates to be bonded may not be cold and should be allowed to warm to room temperature prior to processing.

Storage

Store uncured product in its original, closed container in a dry location. Any material removed from the original container must not be returned to the container as it could be contaminated. Hoenle cannot assume responsibility for products that were improperly stored, contaminated, or repackaged into other containers.

Handling and Clean-up

For safe handling information, consult this product's Material Safety Data Sheet (MSDS) prior to use. Uncured material may be wiped away from surfaces with organic solvents. Do not use solvents to remove material from eyes or skin!

DISCLAIMER

The product is free of heavy metals, PFOS and Phthalates and is conform to the current EU-Directive RoHS.

THE VALUES NOTED IN THIS TECHNICAL DATA SHEET ARE TYPICAL PROPERTIES AND ARE NOT MEANT TO BE USED AS PRODUCT SPECIFICATIONS.

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