

LOXEAL 36-10

Description

Multipurpose highly-toughened structural adhesive.

Recommended for structural bonding of many materials: metals, ferrite, ceramic, marble, glass, concrete, wood and some plastics (polyester, ABS, rigid PVC). Not indicated for rubber, soft materials, PE, PP and PTFE.

Bondings are well resistant to water, gasoline and oils.

Physical properties

Related to product extruded through the proper mixer nozzle
The predetermined ratio between the two components is 1:1 and 2:1.

	Part A	Part B
Composition:	epoxy resin	amine
Colour:	colourless/transparent	amber
Viscosity (+25°C - Pa s):	14 - 28	10 - 25
Mixing ratio vol.:	1 : 1, 1 : 2	
Specific weight (g/ml):	1.13	1.02
Gap to fill:	0,1 - 2,0 mm	
Shelf life:	1 year in unopened packaging at +5°/+25°C	

Curing properties at +25°C (typical)

Usable/Pot life :	90 - 150 minutes**
Functional cure time :	12 - 24 hours (1)
Colour after mixing :	amber
Shear strength (at +25°C on steel ISO 4587):	
Mixing ratio 1: 1	12 - 18 N/mm ²
Mixing ratio 2: 1	15 - 20 N/mm ²
Peeling strength (ISO 4578):	25 - 40 N/25mm
Temperature range:	
Mixing ratio 1: 1	-40°C +80°C
Mixing ratio 2: 1	-40°C +80°C, peaks at +100°C

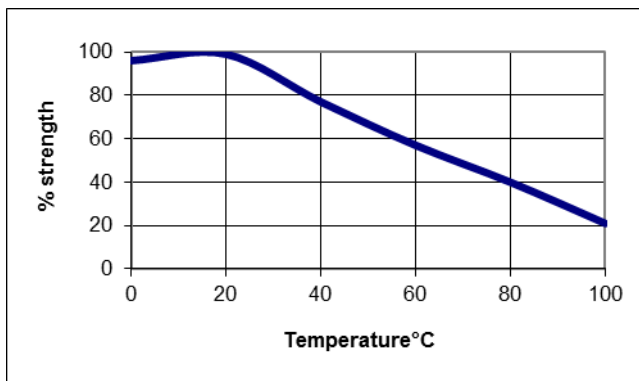
**Time detected on a 2g total mass mixture A+B

(1) Final strength properties are reached after 6-7 days at room temperature

Environmental resistance

The graph below shows the mechanical strength of the product (%) vs. temperature.

Specimen steel - ISO 4587



Chemical resistance

Aged at indicated temperature under conditions below after 24 hours from polymerisation.

Substance	°C	Resistance after 100 h	Resistance after 500 h	Resistance after 1000 h
Motor oil	40	excellent	excellent	excellent
Water	25	excellent	excellent	excellent
Gasoline	25	excellent	excellent	excellent
Cooling gas	25	excellent	excellent	excellent

* For information on resistance with other chemicals, contact Loxeal Technical Service

Directions for use

1. Surfaces preparation

For best results we recommend to scratch the surfaces with a tool and then to degrease and clean with Loxeal Cleaner 10 or Acetone and let dry for a few seconds.

2. Mixing

The resin and the hardener need to be mechanically mixed before use in the ratio of weight and/or volume in compliance with technical specifications until a homogeneous colour is reached. Products are available in dual cartridges with static mixers (provided separately) allowing a direct and correct product application on the substrates to bond, completely discarding the first 3/5 cm of the extruded product. Avoid excess of product blend because heating produced by chemical reaction may cause risk and loss of product.

3. Pot life

Pot life of the mixed product may vary from few minutes to some hours at room temperature according to the resin and the hardener used. Higher temperature reduces the pot life. Apply product at temperature higher than +15°C.

4. Assembly

Parts to be bonded shall be assembled immediately after product application and kept close until full polymerization without providing any mechanical stress.

5. Cleaning

Excess of product can be removed with Acetone or any other solvent based cleaner compatible with the substrates to bond. Application tools and dosing systems shall be cleaned before the product is hardened. Cured product can be removed only mechanically.

Warnings

This adhesive is not approved for usage neither with pure nor with gaseous oxygen.

Storage

Keep product in a cool and dry room at no more than +25°C. To avoid contaminations do not refill containers with used product. For further information on applications, storage and handling contact Loxeal Technical Service

Safety and handling

Consult Material Safety Data Sheet before use

Note

The data contained herein, obtained in Loxeal laboratories, are given for information only; if specifics are required, please contact Loxeal Technical Department. Loxeal ensures abiding quality of supplied products according to its own specifics. Loxeal cannot assume responsibility for the results obtained by others which methods are not under Loxeal control. It is user's responsibility to determine suitability for user's purpose of any product mentioned herein. Loxeal disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Loxeal products. Loxeal specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.