

Description

Loxeal 4821 is a two-components adhesive based on modified epoxy resin for flexible bonding and sealing applications. It fully adheres to plastics like PA, ABS, PC, PET, PMMA, PI, metals ceramics and composites.

After full curing the adhesive looks tough and flexible and provides high peel resistance.

Temperature resistance up to +120° with peaks to +150°C .

Physical properties

Related to product extruded by the proper mixer nozzle.

The predetermined ratio between the two components is 2:1

	Part A	Part B
Composition :	epoxy resin based	hardener polyamine
Colour :	white black	black black
Viscosity (+25°C – mPa s) :		thixo paste
Gap to fill :		0.1 - 5.0 mm
Shelf life :	12 months in original unopened packaging.	

Curing properties at +25°C

Mixing ratio (vol.) :	2 : 1
Mixing time (max) :	7 - 10 minutes
Handling time :	10 - 13 minutes**
Initial fixture time :	20 - 25 minutes
Functional curing time :	72 hours
Overlap shear strength : (at +25°C on steel) (ISO 4578)	4 - 7 N/mm ²
Peeling strength (ISO 4578) :	60 - 80 N/25 mm
Hardness: Shore A	60 - 85
Shore D	20 - 30
Tensile at break (DIN 53504) :	2 - 4 N/mm ²
Elongation at break (DIN 53504) :	100 - 150%
Temperature resistance :	-40°C +120°C

**Time detected on a 3g total mass mixture A+B

Directions for use

1. Surfaces preparation

For best results we recommend to light abrade 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 an homogeneous colour is reached. Products are available in dual cartridges with static mixers (separately provided) 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 +20°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.

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.