

LOXEAL 4807

Description

Loxéal 4807 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 cure the adhesive is soft and flexible. It provides high-temperature resistance up to +120° with peaks to +150°C. It is suitable for bonding and sealing glass fiber reinforced composites and metal frames in white appliance production (dishwashers, washing machine), and in the automotive field (lighting).

Typical physical properties

	Part A	Part B
Composition:	epoxy resin-based	hardener
Colour:	white	polyamine black
Viscosity, Brookfield, +25°C (mPa s):		
-20rpm	20000 (Spindle 7)	1500 (Spindle 5)
-2rpm	42000 (Spindle 7)	4000 (Spindle 5)
Specific weight (g/ml):	1.28	1.08
Mixing ratio (by vol.):	10 : 1	
Gap to fill:	0.1 - 2.0 mm	
Shelf life:	6 months in unopened packaging	

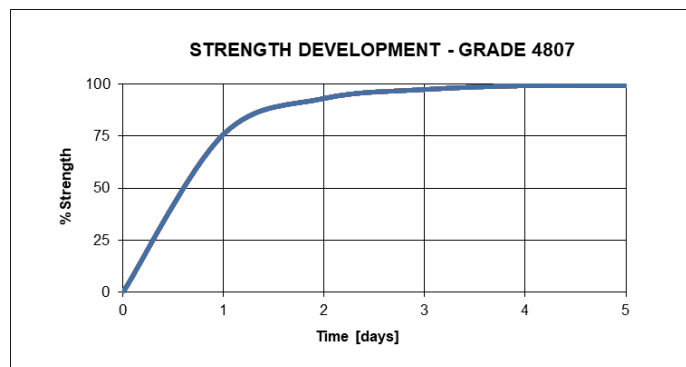
Typical curing properties at +25°C and 50%RH

Colour after mixing:	grey
Pot life:	10 minutes**
Fixture time:	25 minutes

**Time detected on a 10g total mass mixture A+B

Cure speed

The graph hereunder shows the strength development of the product (with time) on stainless steel specimens.
 Tested in accordance with ISO 4587 at + 25°C, 50%RH



Typical properties at +25°C of the cured adhesive after 5 days at +25°C and 50%RH

Shear strength (ISO 4587), N/mm²:	
- stainless steel	7 CF
- PC	6 CF
Peel strength (ISO 4578), N/25mm:	
-aluminium	70 CF
Hardness (ISO 868):	
Shore A	70
Shore D	25
Tensile at break (ASTM D638):	3 N/mm²
Elongation at break (ASTM D638):	120%
Temperature resistance:	-40°C +120°C

CF= Cohesive failure

AF= Adhesive failure

MF= Mixed failure

Directions for use

1. Surfaces preparation

For best results, we recommend scratching the surfaces with a tool and then degreasing and cleaning with Loxéal Pulitore 10 or Acetone and letting it 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 the technical specifications until a homogeneous colour is reached. The 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 +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 the 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. The cured product can be removed only mechanically.

Storage

Keep the 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, handling and disposal

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.

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