

## LOXEAL 59-10

### Description

Loxéal 59-10 is a single component, medium strength anaerobic sealant with good heat resistance. The product cures at ambient temperature when confined in the absence of air between close fitting metal surfaces.

For sealing of flat mating rigid flange joints of pumps, gearboxes, camshafts blocks, motor flanges. To replace pre-formed gaskets, allows greater machining tolerances, assures metal to metal contacting and dismantling with normal tools. Highly resistant to vibrations, heat, water, gases, LPG, oils, hydrocarbons and many chemicals.

### Physical properties

* Composition:	anaerobic methacrylate
* Colour:	red
* Fluorescence:	under blue light
* Viscosity (25°C – mPa s):	50.000 – 300.000
* Specific weight (25°C - g/ml):	1,05
* gap filling:	0,50 mm
* Flash point:	> 100°C
* Shelf life 25°C:	1 year

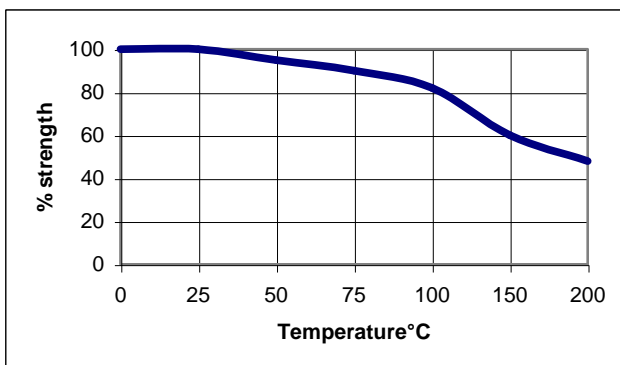
### Curing performance

The rate of cure depends on the substrate used, on the gap and on the temperature. The functional strength is reached usually after 1-3 hours. The full cure takes 24 – 36 hours. In case of passivated surfaces and/or low temperature we recommend the usage of Loxéal Activator 11.

### Environmental resistance

The graph below shows the mechanical strength vs. temperature.

Steel specimen – ASTM 1002/DIN 53283



### Curing properties

Bolt M 10 x 20 - quality 8.8 - Nut h = 0,8.d at 25°C:

* Handling cure time:	15 - 30 minutes
* Functional cure time:	3 - 6 hours
* Full cure time:	6 - 12 hours
* Shear strength (ASTM D-1002):	5 - 10 N/mm <sup>2</sup>
* Tensile strength (ASTM D-2095):	6 - 8 N/mm <sup>2</sup>
* Impact strength (ASTM D-950):	5 - 10 N mm/ mm <sup>2</sup>
* Temperature range:	-55 +200°C

### Chemical resistance

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

Substance	°C	Resistance after 100 h	Resistance after 500 h	Resistance after 1000 h
Motor oil	125	excellent	excellent	excellent
Gearbox oil	125	excellent	excellent	Excellent
Gasoline	25	excellent	Slight	Slight
Water/glycol 50%	87	Excellent	Excellent	excellent

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

**Directions for use**

The product is recommended for use on metal surfaces.  
Clean and degrease parts to bond with Loxeal Cleaner 10.  
Apply product in enough quantity to fill the gap.  
Put together parts and wait till product is cured. The product in liquid form may damage coated parts and elastomers and the contact with some thermoplastics may induce stress-crackings non immediately evidenced. For application on non metal parts, contact Loxeal Technical Service.  
For disassembly, use normal tools and eventually heat pieces at 150/250°C, remove any residue of cured product mechanically and clean pieces with Acetone.

**Storage**

Keep product in a cool and dry room at +25°C. To avoid contaminations do not refill containers with used product. For more information on applications, storage and handling contact Loxeal Technical Service

**Safety and handling**

Consult Material Safety Data Sheet before use.

**Note**

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