

# Threadsealing

Loxeal anaerobic Thread sealants guarantee hydraulic tightness of the threaded connections against gas, air, water, oils, hydrocarbons, LPG, CFC gas and many chemicals in hydraulic and pneumatic systems. These adhesives cure inside the threaded joints when in contact with metals, in absence of oxygen. Approved products according to international standards, such as DVGW, AGA, WRAS, BAM, NSF.

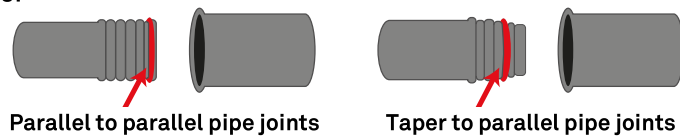
## BENEFITS:

- ▶ Replace hemp, green paste and PTFE tapes.
- ▶ In the liquid state they lubricate for easier assembly.
- ▶ Single-part, easy to use.
- ▶ Maintain the initial applied torque.
- ▶ Range of products with different curing time.
- ▶ Available in 3 grades of locking strength: low (easy to dismantle), medium (possible to dismantle), high (permanent locking).
- ▶ Resistant to the burst pressure, to thermal expansions, to impact and vibrations.
- ▶ Seal and lock threaded connections against gas, air, water, oils, hydrocarbons and many chemicals.



## DIRECTIONS FOR USE:

- ▶ It is recommended to apply the adhesive on clean and dried threads. Clean the threads with Loxeal Cleaner 10 or other suitable solvent.
- ▶ Apply a bead of product along the entire circumference of the male, as seen in the picture below, then tighten the parts with normal tools.



- ▶ It is suggested to lock the threaded joints at the required tightening torque by the typical handling time of each single product.
- ▶ The presence of an excess of adhesive outside the joint ensures that the right quantity of product is inside the joint. Remove the excess that in contact with air would remain liquid.
- ▶ Use a permanent thread sealant if it is not possible to tighten the joint.
- ▶ Only Loxeal 18-10 is suitable for PVC, PP and Nylon joints, applied in combination with Loxeal Initiator 11.
- ▶ It is recommended not to use Loxeal thread sealants on ABS and PC threads.

## USAGE ESTIMATOR ON FITTINGS

Fitting size		Volume of adhesive per fitting*	how many fittings per bottle?	
(mm)	(pollici)		50 ml	250 ml
3	1/8	0,008	6250	31000
6	1/4	0,02	2500	12500
9	3/8	0,07	700	3500
12	1/2	0,09	500	2800
19	3/4	0,5	100	500
25	1	0,99	50	250

\*Assuming a gap of 0.1 mm (1/8"-1/2") and of 0.2 mm (3/4"-1"), and a safety factor of 20%

For more information, please contact Loxeal technical support.

## SUBSTRATES:

- ▶ Metals



It is suggested to use Loxeal Initiator 11 or 18 in combination with Loxeal thread sealants for:

- Surface activation of inactive or passive materials/coatings.
- Filling large gaps.
- Speeding up the cure times (during winter, on passive materials, etc.).

## SURFACE CLASSIFICATION FOR ANAEROBIC ADHESIVES USE

Very active (Very quick cure)	Active (Quick cure)	Inactive (Slow cure)	Passive (Initiator required)
Brass Copper Magnesium	Steel Nickel Iron Aluminum Zinc	Anodized aluminum Cadmium finishing Chrome finishing Passivated metals Stainless steel Titanium	Ceramic Glass Plastic Varnished finishing Lacquered finishing

## FOCUS ON RESISTANCE

### LOW STRENGTH

Easy to dismantle. For joints that need to be dismantled for maintenance or control.

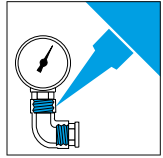
### MEDIUM STRENGTH

Possible to dismantle with common tools.

### HIGH STRENGTH

Permanent assembly.  
Possible to dismantle only by heating the parts.





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**LEGEND** \*\*\* VISCOSITY HT = HIGH THIXOTROPY - MT = MEDIUM THIXOTROPY - LT = LOW THIXOTROPY

F = FLUORESCENT

**APPROVALS LEGEND:**



GAS




















POTABLE WATER



OXYGEN



FOOD

	GRADE	MAX DIAMETER OF THREAD MAX GAP FILLING		*** VISCOSITY (+25°C mPa.s) (LT-MT-HT)	COLOR	CURING TIME	SHEAR STRENGTH (ISO 10123) (N/mm <sup>2</sup> )	LOCKING TORQUE (Nm) (ISO 10964)		TEMPERATURE RANGE (°C)	APPROVALS	DESCRIPTION
								BREAKAWAY	PREVAILING			
LOW STRENGTH	15-36	2"	0,30 mm	3000-6000 LT	BLUE/F	Handling 15-30 min. Functional 1-3 h	4 - 6	8 - 14	4 - 8	-55 +180	 DVGW	Low viscosity, resistant to temperature up to +180° C. Perfect sealing against compressed air, gas, water, hydrocarbons, LPG, oils and chemicals. It replaces hemp and PTFE tapes. Possible to dismantle with normal tools.
	18-10	2"	0,30 mm	17000-70000 HT	WHITE	Handling 20-40 min. Functional 1-3 h	4 - 6	6 - 11	2 - 5	-55 +150	 DVGW, AGA	PTFE paste, slow, elastic film. Easy do dismantle even after years. Perfect sealing against compressed air, gas, oxygen, water, hydrocarbons, fuels, LPG, CFC, oils and industrial fluids.
	23-18	3/4"	0,15 mm	600-800 LT	BLUE/F	Handling 15-30 min. Functional 1-3 h	3 - 5	5 - 8	2 - 5	-55 +150		Low viscosity, for small fittings that need to be often dismantled or adjusted. Perfect sealing against oils and fuels, refrigerant fluids and chemicals.
MEDIUM STRENGTH	53-14	3/4"	0,15 mm	430-630 LT	BROWN/F	Handling 10-20 min. Functional 1-3 h	8 - 12	12 - 18	10 - 20	-55 +150	 DVGW	Low viscosity, general purpose, for hydraulic and pneumatic fittings. Perfect sealing against gas, water, hydrocarbons, LPG, oils and chemicals. Possible to dismantle with normal tools.
	55-14	2"	0,30 mm	2500-12000 MT	RED/F	Handling 10-20 min. Functional 1-3 h	8 - 12	12 - 18	20 - 30	-55 +150		Medium viscosity, general purpose, for hydraulic and pneumatic fittings. Perfect sealing against gas, water, hydrocarbons, LPG, oils and chemicals. Possible to dismantle with normal tools.
	55-37	1 1/2"	0,25 mm	2500-4500 LT	RED/F	Handling 15-30 min. Functional 1-3 h	10 - 14	15 - 32	25 - 45	-55 +150	 DVGW	Flexible, excellent resistance to vibrations and thermal cycles. Perfect sealing against gas, water, hydrocarbons, LPG, oils and chemicals.
	56-03	2"	0,30 mm	5000-30000 MT	BLUE	Handling 15-30 min. Functional 1-3 h	8 - 12	10 - 16	12 - 20	-55 +150		Fill large gaps. Thanks to thixotropy, it doesn't sag while curing. Replace PTFE tapes for sealing against gas, water, hydrocarbons, LPG, oils and chemicals.
	58-10	2"	0,30 mm	25000-90000 HT	WHITE/F	Handling 5-10 min. Functional 0,5-1 h	6 - 13	18 - 25	10 - 20	-55 +150	 Gaz de France	PTFE paste, fast. Instant sealing without smudging at low pressure, or by one hour at high pressure. For systems working with water, compressed air, gas, LPG, oils, refrigerant fluids and gases and others.
	58-11	2"	0,30 mm	20000-80000 HT	YELLOW/F	Handling 15-30 min. Functional 1-2 h	6 - 13	18 - 24	7 - 14	-55 +150	 DVGW, AGA  WRAS,  Global Mark Australia  BAM  NSF P1	Sealing paste, perfect on metals. Excellent sealing against potable water, gas, oils, compressed air, fuels, LPG, oxygen, industrial fluids, CFC and others. User-friendly formulation.
	58-12	2"	0,30 mm	20000-80000 HT	YELLOW	Handling 15-45 min. Functional 6-12 h	4 - 10	18 - 24	7 - 14	-55 +150		Sealing paste with user-friendly formulation. It replaces hemp and PTFE tapes sealing against compressed air, water, gas, fuels, LPG, CFC, industrial oils and fluids.
HIGH STRENGTH	82-01	3/4"	0,15 mm	220-300 LT	GREEN	Handling 2-5 min. Functional 1-3 h	20 - 30	20 - 35	50 - 70	-55 +175		Low viscosity sealant, fast, resistant to high temperature and chemicals. Also suitable as retainer on cylindrical joints. Excellent on stainless steel, passivated metals and aluminum.
	83-05	3/4"	0,20 mm	500-1000 LT	GREEN	Handling 2-5 min. Functional 1-3 h	25 - 35	25 - 35	50 - 70	-55 +200		Low viscosity sealant, fast, for stainless steel and passivated metals. Also suitable as retainer on cylindrical joints. Resistant to chemicals.
	83-50	3/4"	0,20 mm	400-1000 LT	GREEN/F	Handling 2-5 min. Functional 1-3 h	25 - 35	25 - 35	40 - 50	-55 +200	 DVGW  WRAS  BAM	Low viscosity sealant, for fittings working with gas, cold potable water, hot water up to +85 °C and chemicals. Also suitable as retainer on cylindrical joints. High temperature resistant, up to +200 °C. Excellent on yellow, chromed and nickel-plated brass fittings.
	84-90	1 1/2"	0,20 mm	1000-1500 LT	GREEN	Handling 15-30 min. Functional 3-6 h	10 - 20	20 - 30	30 - 40	-55 +250		Sealant specific for yellow brass fittings. Resistant to high temperature up to +250 °C and chemicals. Also suitable as retainer on cylindrical joints.
	85-21	1 1/2"	0,20 mm	2600-3400 LT	GREEN/F	Handling 2-5 min. Functional 1-3 h	25 - 35	30 - 40	55 - 70	-55 +150	 Gaz de France	Fast sealant, also suitable as retainer on cylindrical joints. It allows higher working tolerance, excellent for aluminum and passivated metals fittings. Resistant to chemicals.
	85-86	2"	0,30 mm	2200-4000 LT	GREEN/F	Handling 10-40 min. Functional 6-12 h	15 - 25	25 - 35	40 - 55	-55 +200	 DVGW  BAM  WRAS, UBA	Sealant specific for working with gas, potable water, oxygen, oils and chemicals. Perfect on metals, resistant to high temperature up to +200°C.
	86-55	2"	0,30 mm	5000-8000 LT	RED/F	Handling 60-90 min. Functional 12-24 h	10 - 20	15 - 35	15 - 45	-55 +150		Slow curing sealant for fittings, also suitable as retainer on cylindrical joints. Its viscosity allows higher working tolerance. Resistant to gas, water, hydrocarbons, industrial oils and fluids.
	86-58	2"	0,30 mm	5000-7000 LT	RED/F	Handling 30-60 min. Functional 6-12 h	15 - 25	35 - 40	40 - 50	-55 +150		High strength sealant specific for brass fittings, working with water, gas, oils, hydrocarbons and chemicals.