

# THREADLOCKER COMPARISON TABLE

## TABELLA COMPARATIVA FRENAFILETTI

CATEGORY	Function / Application	Chemical Type	Solvent Base	Apperance	Local Distribution	Curing Time
Threadlocking	Adhesive and Sealing powerful Resistance threadlocking	acrylic resin	H2O	RED- customizable on demand	360°	20°C+25°C Reaching 100% within 24h
	Adhesive threadlocking	Epoxy chemistry	Toluene	ORANGE	360°	min 72h room temperature
	Adhesive threadlocking	Methacrylate ester	unexpressed	RED	360°	24h room temperature
	Adhesive and Sealing threadlocking	acrylate	unexpressed	RED	360°	24h room temperature
	Adhesive and Sealing threadlocking	Acrylic	unexpressed	blue	360°	24h room temperature
	Adhesive and Sealing threadlocking	Acrylic	unexpressed	PINK	360°	72h room temperature
	Adhesive and Sealing strong Resistance for controlled-friction - threadlocking	acrylic resin	H2O	GREEN- customizable on demand	360°	20°C+25°C Reaching 100% within 24h
	Adhesive threadlocking	Epoxy chemistry	Toluene	BLU	360°	24h room temperature
	Adhesive threadlocking medium	Methacrylate ester	unexpressed	GREEN	360°	24h room temperature
	Adhesive and Sealing threadlocking	acrylate	nd	TURQUOISE	360°	24h room temperature
	Adhesive threadlocking medium	Epoxy chemistry	Toluene	Blue, Yellow, Pink, Green, and Red.	360°	72h room temperature
	Adhesive and Sealing threadlocking	Epoxy chemistry	Toluene	Orange and Neutral	360°	72h room temperature
	Adhesive threadlocking medium	Epoxy chemistry	Toluene	Blue, Yellow, Pink, Green, and Red.	360°	72h room temperature
Self-locking	Self-locking	polyamide	NA	yellow, blue, green-customizable on demand	(Partial angular distribution (90°/120°) Total angular distribution (360°))	instantaneous
	Self-locking	polyamide	NA	yellow, blue, green, grey	(Partial angular distribution (120°+180°) Total angular distribution (360°))	instantaneous
	Self-locking	polyamide	NA	blue-customizable on demand	180° (standard) or 360° (optional) radial coverage	instantaneous
	Self-locking	polyamide	NA	blue-customizable on demand	180° (standard) or 360° (optional) radial coverage	instantaneous
Self-locking + Sealant	The Pre-applied Hybrid Self-locking + Sealant	acrylic resin	H2O	White- customizable on demand	360°	instantaneous
Sealant	Long-lasting Sealing Strength	acrylic resin	H2O	Ligth-Blue- customizable on demand	360°	instantaneous
	Sealing	acrylic resin	H2O	WHITE	360°	instantaneous
	Sealing	acrylate	nd	WHITE	360°	instantaneous
Prevent the adhesion Coating for protection	The Pre-applied to prevent the adhesion of weld splashes and electrodeposited	acrylic resin	H2O	Ligth-Green- customizable on demand	360°	instantaneous
	will prevent the adhesion of weld spatter and electrodeposited water-based liquid primers.	Teflon PFA	nd	WHITE	Coating is only on the threads	instantaneous

CATEGORY	Coefficient of Friction (CoF)	prevailing torque Nm	loosening torque Nm	breakaway torque Nm	Prevailing torque at 1st unscrewing operation	Prevailing torque at 3rd unscrewing operation
Threadlocking	0,12÷0,18	< 1Nm	> 55Nm	<20Nm	<i>not applicable</i>	<i>not applicable</i>
	<i>unexpressed</i>	<2,7Nm	>47,6Nm	<16,3 Nm	<i>not applicable</i>	<i>not applicable</i>
	0,13÷0,18	≥5Nm	> 50Nm	≥10Nm	<i>not applicable</i>	<i>not applicable</i>
	> 25	<3Nm	> 50Nm	<20Nm	<i>not applicable</i>	<i>not applicable</i>
	<i>unexpressed</i>	<i>not applicable</i>	> 37,2Nm	< 29,4Nm	<i>not applicable</i>	<i>not applicable</i>
	<i>unexpressed</i>	<0,24Nm	> 24Nm	<i>unexpressed</i>	<i>not applicable</i>	<i>not applicable</i>
	0,10÷0,15	< 1Nm	> 30Nm	<15Nm	<i>not applicable</i>	<i>not applicable</i>
	<i>unexpressed</i>	<1.4Nm	> 55Nm	<19 Nm	<i>not applicable</i>	<i>not applicable</i>
	<i>unexpressed</i>	≥4Nm	> 44Nm	≥6,5Nm	<i>not applicable</i>	<i>not applicable</i>
	0,10÷0,15	<3Nm	> 55Nm	<20Nm	<i>not applicable</i>	<i>not applicable</i>
	<i>unexpressed</i>	<0,55m	> 30Nm	<i>unexpressed</i>	<i>not applicable</i>	<i>not applicable</i>
	<i>unexpressed</i>	<0,55Nm	> 30Nm	<i>unexpressed</i>	<i>not applicable</i>	<i>not applicable</i>
	Medium	<0,55m	> 30Nm	<i>unexpressed</i>	<i>not applicable</i>	<i>not applicable</i>
Self-locking	0,10÷0,16	< 10,5Nm	<i>not applicable</i>	<i>not applicable</i>	> 1,5Nm	> 0,75Nm
		< 10,5Nm	<i>not applicable</i>	<i>not applicable</i>	> 1,5Nm	> 0,75Nm
		< 10,5Nm	<i>not applicable</i>	<i>not applicable</i>	> 1,5Nm	> 0,75Nm
		< 10,5Nm	<i>not applicable</i>	<i>not applicable</i>	> 1,5Nm	> 0,75Nm
Self-locking + Sealant	0,10÷0,13	< 5Nm	<i>not applicable</i>	<i>not applicable</i>	> 2,5Nm	> 1,25Nm
Sealant	0,10÷0,13	< 2 Nm	<i>not applicable</i>	<i>not applicable</i>	<i>not applicable</i>	<i>not applicable</i>
	<i>unexpressed</i>	<i>unexpressed</i>	<i>not applicable</i>	<i>not applicable</i>	<i>not applicable</i>	<i>not applicable</i>
	0,10÷0,15	3-7Nm	<i>not applicable</i>	<i>not applicable</i>	<i>not applicable</i>	<i>not applicable</i>
Prevent the adhesion Coating for protection	0,10÷0,16	< 2 Nm	<i>not applicable</i>	<i>not applicable</i>	<i>not applicable</i>	<i>not applicable</i>
	Improves lubricity and reduces installation drive friction	0.1 – 1.5 Nm	<i>not applicable</i>	<i>not applicable</i>	<i>not applicable</i>	<i>not applicable</i>

CATEGORY	Resistance to Chemicals	Storage
Threadlocking	Generic lubricants, fuels, hydraulic fluids, oils and most solvent	Max 4 years T+5°C T+28°C kept in a dry place
	Generic lubricant,water,gasoline,motor oil,transmission fluid,	Shelf life can be as long as four years, depending on the storage conditions. Store coated fasteners at 4°-38°C (40°- 100°F) at or below 60% relative humidity (RH).
	Motor oil,Unleaded gasoline,Brake fluid,Water/glycol 50/50,Transmission fluid,Gear oil	Max 4 years T+8°C T+21°C kept in a dry place
	Motor oil,Unleaded gasoline,Brake fluid,Water/glycol 50/50,Transmission fluid,Gear oil	Shelf-life of coated parts 4 years at max.30°C and max. 65% relative humidity
	Motor oil,Unleaded gasoline,Brake fluid,Water/glycol 50/50,Transmission fluid,Gear oil	Almost all kinds of pre-coated bolts can show sufficient strength even after they have been stored for some months if the storage conditions are appropriate. Observe the following instructions. Store the bolts in a well-ventilated dry place (in a place at 40 C or less away from direct sunlight, rain and dust).
	Motor oil,Unleaded gasoline,Brake fluid,Water/glycol 50/50,Transmission fluid,Gear oil	Raw material shelf life =1 year after delivery , On parts life can be as long as four years, depending on the storage conditions. Store coated fasteners at 4°-38°C (40°- 100°F) at or below 60% relative humidity (RH).
	Generic lubricants, fuels, hydraulic fluids, oils and most solvent	Max 4 years T+5°C T+28°C kept in a dry place
	Generic lubricant,water,gasoline,motor oil,transmission fluid	Shelf life can be as long as four years, depending on the storage conditions. Store coated fasteners at 4°-38°C (40°- 100°F) at or below 60% relative humidity (RH).
	Motor oil,Unleaded gasoline,Brake fluid,Water/glycol 50/50,Transmission fluid,Gear oil	Max 4 years T+8°C T+21°C kept in a dry place
	Motor oil,Unleaded gasoline,Brake fluid,Water/glycol 50/50,Transmission fluid,Gear oil	Shelf-life of coated parts 4 years at max.30°C and max. 65% relative humidity
	Generic lubricant,water,gasoline,motor oil,transmission fluid,	If the agent has solidified, various troubles may occur: the bolts cannot be tightened, or a sufficient bonding strength cannot be obtained after tightening.
	Generic lubricants, fuels, hydraulic fluids, oils and most solvent	Raw material shelf life =1 year after delivery , On parts life can be as long as four years, depending on the storage conditions. Store coated fasteners at 4°-38°C (40°- 100°F) at or below 60% relative humidity (RH).
	Motor oil,Unleaded gasoline,Brake fluid,Water/glycol 50/50,Transmission fluid,Gear oil	Raw material shelf life =1 year after delivery , On parts life can be as long as four years, depending on the storage conditions. Store coated fasteners at 4°-38°C (40°- 100°F) at or below 60% relative humidity (RH).
Self-locking	Generic lubricants, fuels, hydraulic fluids, oils and most solvent	Max 4 years T+5°C T+28°C kept in a dry place
	Resistant to most fluids*	Max 4 years T+5°C T+28°C kept in a dry place
	Resistant to lubricants, fuel, hydraulic fluids and most commercial solvents	Max 4 years T+5°C T+28°C kept in a dry place
	Resistant to lubricants, fuel, hydraulic fluids and most commercial solvents	Max 4 years T+5°C T+28°C kept in a dry place
Self-locking + Sealant	Generic lubricants, fuels, hydraulic fluids, oils and most solvent	Max 4 years T+5°C T+28°C kept in a dry place
Sealant	Generic lubricants, fuels, hydraulic fluids, oils and most solvent	Max 4 years T+5°C T+28°C kept in a dry place
	Motor oil,Unleaded gasoline, Brake fluid, Water/glycol 50/50,Transmission fluid,Gear oil	Max 4 years T+8°C T+21°C kept in a dry place
	Motor oil,Unleaded gasoline,Brake fluid,Water/glycol 50/50,Transmission fluid,Gear oil	Shelf-life of coated parts 4 years at max.30°C and max. 65% relative humidity
Prevent the adhesion Coating for protection	Generic lubricants, fuels, hydraulic fluids, oils and most solvent	Max 4 years T+5°C T+28°C kept in a dry place
	Generic lubricants	Shelf-life indefinite