WEICON

Anaerobic Adhesives and Sealants

WEICONLOCK®

WEICONLOCK®

WEICONLOCK products are high quality anaerobic adhesives and sealants on the basis of special methacrylate resins, especially made for economical threadlocking, retaining and sealing of threaded, cylindrical and pipe assemblies.

The characteristic feature of WEICONLOCK is the curing in contact with metal while deprived of air. It provides a shock- and vibration-resistant joint with excellent resistance to chemicals and solvents.

Due to its liquid consistency WEICONLOCK completely fills the gaps, thus giving protection against leakage and fretting corrosion.

Special features and benefits

WEICONLOCK® is simple, easy to use and very economical. Handling strength is reached within a few minutes and final strength within a few hours at roomtemperature. Metering and mixing is not necessary, thereis no pot life to be respected and product wastage is minimised.

In many respects, WEICONLOCK is superior to conventional methods of assembly.

The use of WEICONLOCK
- avoids expensive down-times
- reduces production costs
- improves operational reliability
- reduces assembly times

Applications

Offering different grades of strength and viscosity, WEICONLOCK is suitable for a wide range of applications:

- for locking, fastening and sealing of screw connections from M5 to M80, for pipe joints as well as coarse threaded connections up to 3“.
- for reliable retaining of bearings, bushings, bolts and other press or slip fitted connections.
- for sealing and locking hydraulic and pneumatic pipe connections.

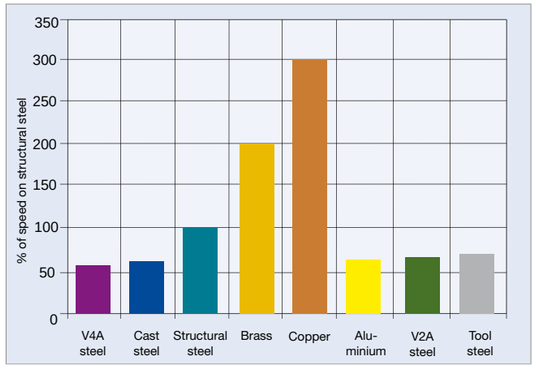
In addition, WEICONLOCK is highly recommended for use in flange sealing, replacing conventional gaskets in many cases. The benefits are:

- no expensive stock keeping
- no problems with complicated seals
- no setting of the seals (unlike solid gaskets)

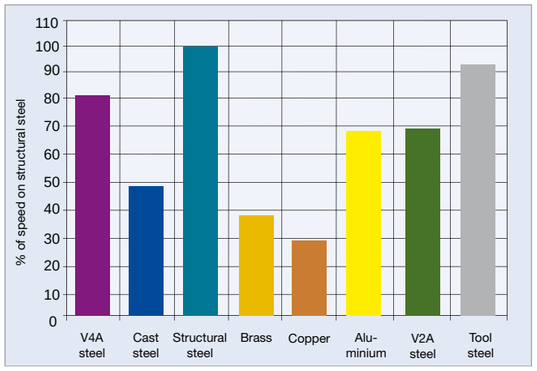
WEICONLOCK is suitable for all metals and certain plastics. It can be applied either manually or semi / fully automatic. As cost-effective problem solvers, WEICONLOCK products are indispensable in many sectors of industry:

- automotive industry
- engine and plant construction
- manufacture of pumps and pipes
- hydraulic and pneumatic equipment
- precision mechanics
- in electrical engineering and electro-technics and in nearly all fields of repair and maintenance

General curing speed of WEICONLOCK
dependent on the material



Compression shear strength of WEICONLOCK
dependent on the metal (DIN 544521)



General Information

Pretreatment of Surface

In general, WEICONLOCK does not require special pretreatment as slightly oily surfaces (e.g. on ‘as received’ parts) will be tolerated. However, best results will be achieved on cleaned, degreased parts (use WEICON Cleaner S). If required, the parts should be slightly roughened.

Application

WEICONLOCK is ready for use and should be applied evenly direct from the bottle/tube with the dispensing tip (avoid direct contact of dispensing tip with metal). On pressfitted parts and larger cylindrical assemblies a thin and uniform layer should be applied on both surfaces. In the case of threaded blind holes fill sufficient quantity in the bore hole. On screws and bolts, apply WEICONLOCK® around the thread.

Do not pour back into the bottle any WEICONLOCK fluid which had contact with metal; even smallest metal particles will cause the content of the bottle to cure. In series construction, the use of manual or automatic applicators is recommended.

Choice of product

WEICONLOCK is available in different categories of strength

low strength	=	easy dismantling
medium strength	=	dismantling possible with ordinary tools
high strength	=	cannot be dismantled mechanically other than by destruction

Different viscosity grades enable the locking of screws of smallest diameter up to M80/R3“.

Active and Passive materials

Active materials (fast curing)	Passive materials (slower curing)
• bronze	• high-alloyed steel
• iron	• aluminium, nickel, zinc, gold
• copper	• oxid layers
• brass	• chromate layers
• steel	• anodic coatings
	• plastics and ceramics

WEICONLOCK Activator F

The cure time can considerably be reduced by pretreatment with WEICONLOCK Activator F, which is recommended for all passive surfaces and which is indispensable at low ambient temperatures (+10°C and bellow) and for large gaps. On non-metallic surfaces, WEICONLOCK is made effective by use of the activator.

200 ml	1 l
30700200	30700501
Spray	Liquid

For applications where passive surfaces are involved, where the use of an Activator is not wanted yet where a rapid cure is required, a solution could be the use of types AN 302-60, AN 302-80, AN 306-10 and AN 306-30. These special types allow to reach handling strength much quicker than any standard type (without Activator).

Cure

WEICONLOCK remains liquid as long as in contact with air. The cure starts when WEICONLOCK, between the interfaces, comes into contact with metal under the absence of air. The cure time is dependent on the selected type, the ambient temperature and the material.

Dismantling

Connections of low and medium strength can easily be loosened with ordinary tools; high-strength bonded parts can be disassembled by being heated to min. 300°C. Cured residues of WEICONLOCK can be removed mechanically or with „WEICON Sealant and Adhesive Remover“.

Storage

WEICONLOCK can be stored in the unopened original container for at least one year at room temperature. Keep away from heat sources and direct sunlight. The air in the bottle/tube keeps WEICONLOCK liquid.

Safety precautions

WEICONLOCK adhesives and sealants generally do not cause allergic reactions of the skin. However, in isolated cases where skin is continously bruised or micro-lacerated sensitisation may occur. Therefore, extensive and direct contact with the skin should be avoided, e.g. by use of WEICON Hand Protective Foam. See further details in the Material Safety Data Sheets which are available upon request.

WEICONLOCK®

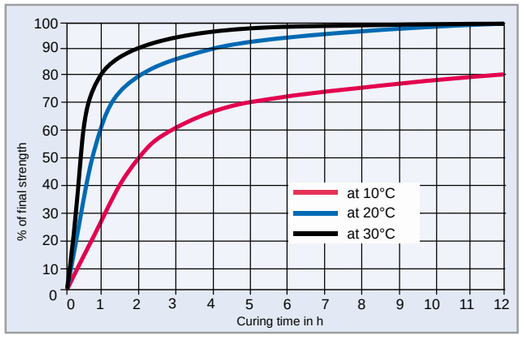
Resistance to chemicals from WEICONLOCK after the cure

acetaldehyde	+	copper sulphate	+	maleic	+	potassium hydroxide	-
acetate solvent	+	cold salt water	+	melamine resin	+	pyridine	+
acetic acid 10%	%+	developer liquid	+	mercaptan, thioalcohol	+	river water	+
acetic acid 80%	%O	dichloroethylether	+	methane	+	sewage, feaces	+
acetone	+	diethyl ether	+	methylamine	+	seawater	+
alcohols	+	diethyl ether	+	methyl ethyl ketone	+	silicone oils	+
alkaline solution (alk. salt water)	+	diglycollic	+	methyl acetate	+	sorbitol	+
ammoniac anhydride	-	dioxane - dry	+	mineral oil, white	+	steam sterilization	+
ammonium hydroxide	O	drinking water	+	mine water	+	styrene	+
amyl acetate	+	emulsified oils	+	naphtha, petroleum, shale oil	+	sulfones	+
aniline	+	ethyl acetate	+	naphthalene	+	sulfonic acids (10 %)	%+
aromat. gasoline	+	ethylenediamine	+	natronhydroxyd 20% hot	%O	sulfuric acid (75 - 100 %)	%-
aromat. solvent	+	ethylene dichloride	+	natronhydroxyd 20% cold	%+	sulfur mud solution in carbon disulphide	+
ash slurry	+	ethylene glycol	+	natronhydroxyd 50% hot	%-	sulphurous acid	O
barium sulfate	+	fatty acids	+	natronhydroxyd 50% cold	%O	sulfuric acid 75%	%O
battery acid (10%)	%+	ferrous sulphate	+	natronhydroxyd 70% hot	%-	turpentine	+
benzene	+	formaldehyde - cold	+	natronhydroxyd 70% cold	%O	thiourea	+
benzoic acid	+	formic acid (cold)	+	nitric acid (20 %)	%+	toluene, methylbenzene	+
boric acid	+	freon	+	oils	+	trichloroethane	+
brake fluid	+	fuel oil	+	oxalic acid	+	trichloromethane	+
butadiene	+	fuming nitric acid	-	paraffin oil, kerosene	+	trioxane	+
butyric 10%	%+	fuming sulfuric acid	-	perchlorethylene (dry)	+	vapor pressure - low	+
butylaldehyde	+	gasoline	+	perchloric acid, perchloric acid 10%	%+	vaseline	+
butylamine	+	glycolic acid	+	permanganic	-	vinyl acetate	+
butyl acetate	+	glycerine	+	peroxide bleaching	+	wax	+
butyl chloride	+	grease lubrication	+	peroxy	-	xylene, dimethylbenzene	+
cadmium sulfate	+	hydrogen bromide (10%)	%+	persulphuric (10 %)	%+		
castor oil	+	Hydrocyanic acid (10 %)	%+	phenol	+		
cellulose acetate	+	hydrogen	+	phenolic resins	+		
chinon	+	hydrogen peroxide conc.	O	phosphoric acid 10% hot	O		
chlorine - dry	-	hydrofluoric acid	-	phosphoric acid 10% cold	+		
chlorine alcohol	+	heptane	+	phosphoric acid 50% hot	O		
chloramine	+	hydrazine	+	phosphoric acid 50% cold	O		
chlorine dioxide	O	hydrochloric acid	O	phosphoric acid 85% hot	-		
chlorinated hydrocarbon	+	isocyanate resin	+	phosphoric acid 85% cold	O		
chloroform - dry	+	isooctane	+	phthalic	+		
coal tar	+	ketones	+	potash alum	+		
copper chloride	+	lithium chloride	+	potassium acetate	+		

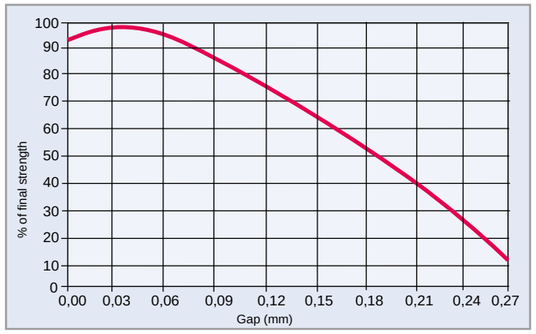
+ = good resistance
O = preliminary tests resp. resistance tests are recommended
% = WEICONLOCK products are resistant only up to the indicated concentration
– = WEICONLOCK products are not suitable, or may be used only after thorough preliminary tests

Strength of WEICONLOCK®
Dependent on the roughness

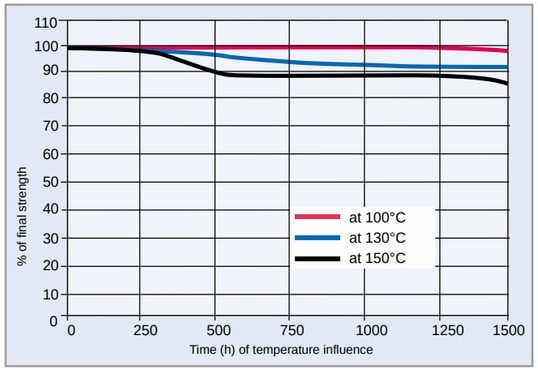
Curing speed of WEICONLOCK®
dependent on the ambient temperature



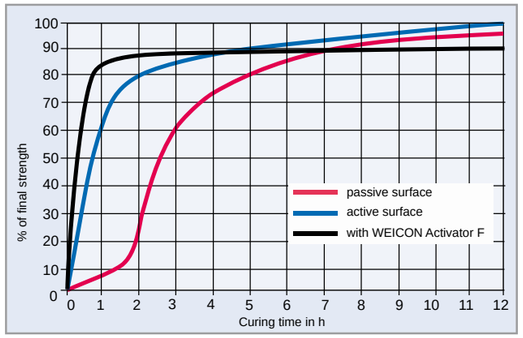
Strength of WEICONLOCK®
dependent on the joint gap

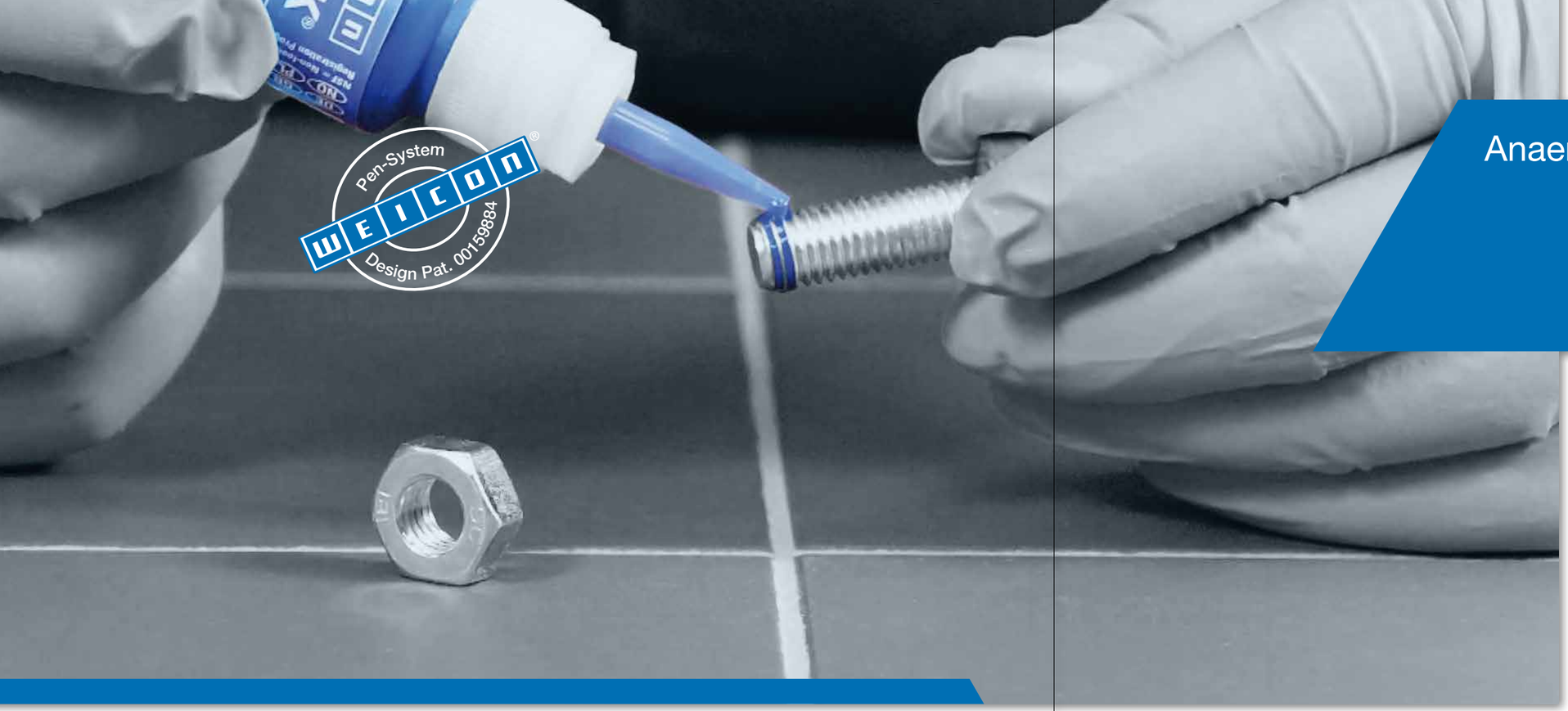


Temperature long-term resistance WEICONLOCK®
at increased temperatures



Curing speed with WEICON Activator F

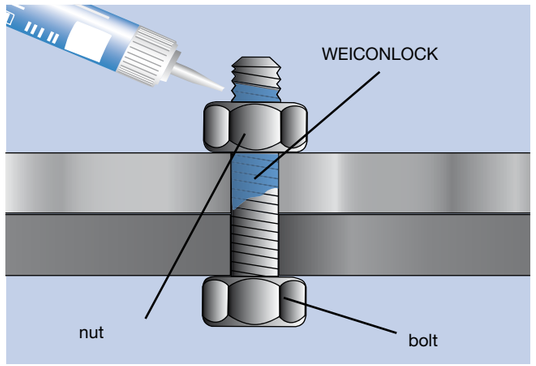




Threadlocking

WEICONLOCK meets the complex demands required in threadlocking today.

With conventional methods (e.g. spring ring, counter-nuts), breakaway forces are absorbed on only 40% of the contact surfaces. Threaded connections locked with WEICONLOCK instead have a higher breakaway torque. As a liquid, WEICONLOCK completely fills the voids and convolutions of threads to ensure 100% contact between the interfaces, thus preventing fretting corrosion at the same time.



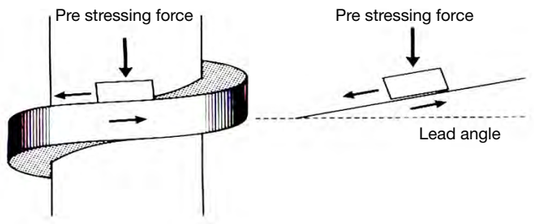
Due to its sealing properties, WEICONLOCK allows to use through-holes instead of blind tapped holes and helps to ensure specific clamp loadings.

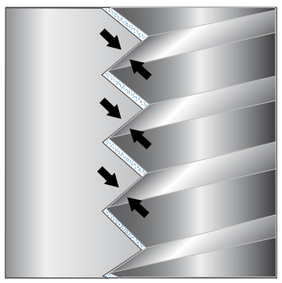
Even slightly oily fasteners may be excellently locked. However, optimum strength will be reached on parts cleaned and degreased (as with WEICON Surface Cleaner).

Threadlocking

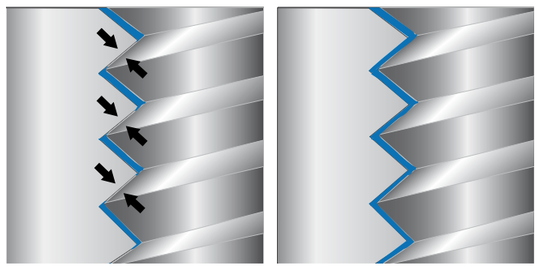
In screw fixings the flanks of the threads of bolt and nut are firmly pressed together under a specific pre stressing force. The achieved clamping force depends on i. a. the applied pre stressing force , the screw`s geometry and the quality of material.

Target:
The self-loosing and unscrewing of the bolt is to be prevented (self-locking effect).





Assembly with pre stressing



Assembly with pre stressing

Floating assembly

Failure of a screw by loosening

Possible causes:

Setting: Rough surfaces of the screw are flattened by the pressure of the pre stressing force.

Creeping: The compressive strength of screw material cannot resist the applied pre stressing.

Temperature variations. Expansion of the material at high temperatures, contraction at low temperatures.

WEICONLOCK® = Additional safety!

Liquid adhesives fill up the microscopic gaps between the threads completely and provide a material connection

No tolerances, no movement, no setting!

Thus: **- No loosening or unscrewing!**

Further advantages: **- Sealing and corrosion protection!**

Threadlocking

AN 301-43*

Threadlocking, marking-free, NSF-/DVGW-tested

higher viscosity
medium strength
disassembly with normal tools

20 ml	50 ml	200 ml
30143020	30143150	30143200

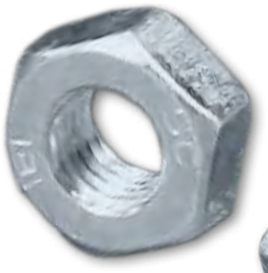
Technical Data	
Colour	blue
For threaded joints up to	M 36
Viscosity at +25°C Brookfield	2.000 - 8.000 mPa·s
Gap filling capacity max.	0,25 mm
Breakaway strength (Thread)	18 - 22 Nm
Prevailing strength (Thread)	9 - 11 Nm
Shear strength (DIN 54452)	10 - 13 N/mm²
Handling strength at room temperature	5 - 15 min.
Final strength at room temperature	1 - 3 h
Temperature resistance	-60 up to +150°C

AN 301-70*

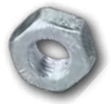
Threadlocking, marking-free NSF-tested

medium viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30170020	30170150	30170200



Technical Data	
Colour	green
For threaded joints up to	M 25
Viscosity at +25°C Brookfield	500 - 900 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	25 - 35 Nm
Prevailing strength (Thread)	40 - 50 Nm
Shear strength (DIN 54452)	14 - 20 N/mm²
Handling strength at room temperature	5 - 15 min.
Final strength at room temperature	5 - 10 h
Temperature resistance	-60 up to +150°C



AN 302-21

Threadlocking, vibration-proof

low viscosity
low strength
easy disassembly

20 ml	50 ml	200 ml
30221020	30221150	30221200

Technical Data	
Colour	violet
For threaded joints up to	M 12
Viscosity at +25°C Brookfield	125 mPa·s
Gap filling capacity max.	0,10 mm
Breakaway strength (Thread)	7 - 10 Nm
Prevailing strength (Thread)	3 - 6 Nm
Shear strength (DIN 54452)	4 - 7 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C

*

WEICONLOCK® »White Line«

The products AN 301-43 and 301-70 belong to the new WEICONLOCK »White Line«.

In order to take the increased requirements in the field of health protection and safety at work into account, WEICON now introduces the WEICONLOCK »White Line«.

The new formulas also enable use in sensitive production areas. Three types of the »White Line« have a »white« EC safety data sheet and are therefore marking-free and meet strict requirements of plant physicians.

The new »White Line« has been tested in accordance with the demanding requirements of the NSF/ANSI 61 (American National Standards Institute) for use in the drinking water area. It is therefore in particular suitable for applications in the food, cosmetics and pharmaceuticals sectors. The new WEICONLOCK »White Line« can also be used in all other areas of industry.

This results in the following advantages when using the new WEICONLOCK types:

- NSF drinking water approval in accordance with ANSI 61
- No marking[1] with danger symbols and risk or safety statements of the safety data sheet in accordance with the EC Regulations No. 1907/2006 – ISO 11014-1
- Increased safety at work and health protection
- Excellent resistance to chemicals after curing
- Temperature-resistant up to +200°C[2]

[1] Applies to the types AN 301-43, 301-70 and 301-72
[2] Applies to the type AN 301-72

WEICON

Anaerobic Adhesives and Sealants

Threadlocking

AN 302-22

Threadlocking, vibration-proof

medium viscosity
low strength
easy disassembly

20 ml	50 ml	200 ml
30222020	30222150	30222200

Technical Data	
Colour	purple
For threaded joints up to	M 36
Viscosity at +25°C Brookfield	1.000 mPa·s
Gap filling capacity max.	0,20 mm
Breakaway strength (Thread)	4 - 8 Nm
Prevailing strength (Thread)	2 - 4 Nm
Shear strength (DIN 54452)	3 - 5 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C

AN 302-40

Threadlocking, vibration-proof
DVGW-tested

medium viscosity
medium strength
disassembly with normal tools

20 ml	50 ml	200 ml
30240020	30240150	30240200

DIN DVGW product

transparent WEICONLOCK transparent

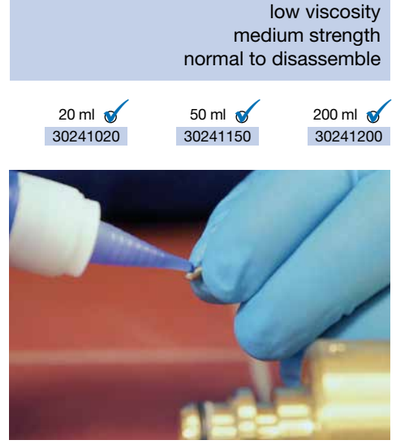
Technical Data	
Colour	transparent
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C Brookfield	600 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	12 - 16 Nm
Prevailing strength (Thread)	18 - 24 Nm
Shear strength (DIN 54452)	8 - 12 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C

AN 302-41

Threadlocking, vibration-proof

low viscosity
medium strength
normal to disassemble

20 ml	50 ml	200 ml
30241020	30241150	30241200



Technical Data	
Colour	blue
For threaded joints up to	M 12
Viscosity at +25°C Brookfield	125 mPa·s
Gap filling capacity max.	0,10 mm
Breakaway strength (Thread)	10 - 15 Nm
Prevailing strength (Thread)	12 - 16 Nm
Shear strength (DIN 54452)	8 - 12 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	approx. 3 h
Temperature resistance	-60 up to +150°C

AN 302-42

Threadlocking

medium viscosity
medium strength
disassembly with normal tools

20 ml	50 ml	200 ml
30242020	30242150	30242200

Anaerobic Adhesives and Sealants

Threadlocking

AN 302-43

Threadlocking DVGW and KTW approval for drinking water sector

low viscosity
medium strength
easy disassembly

10 ml 30243110 | 20 ml 30243020 | 50 ml 30243150 | 200 ml 30243200

Technical Data

Colour	blue
For threaded joints up to	M 36
Viscosity at +25°C Brookfield	2.000 - 7.000 mPa·s
Gap filling capacity max.	0,25 mm
Breakaway strength (Thread)	17 - 22 Nm
Prevailing strength (Thread)	8 - 12 Nm
Shear strength (DIN 54452)	9 - 13 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	1 - 3 h
Temperature resistance	-60 up to +150°C

AN 302-50

Locking of threads and stud bolts

medium viscosity
high strength
hard to disassemble

20 ml 30250020 | 50 ml 30250150 | 200 ml 30250200

transparent WEICONLOCK transparent

Technical Data

Colour	transparent
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C Brookfield	500 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	30 - 35 Nm
Prevailing strength (Thread)	55 - 70 Nm
Shear strength (DIN 54452)	25 - 35 N/mm²
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +175°C

last cure WEICONLOCK also without Activator

Technical Data

Colour	green
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C Brookfield	700 - 1.000 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	30 - 35 Nm
Prevailing strength (Thread)	55 - 70 Nm
Shear strength (DIN 54452)	25 - 35 N/mm²
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +180°C

AN 302-60

Threadlocking for passive materials*

medium viscosity
high strength
hard to disassemble

20 ml 30260020 | 50 ml 30260150 | 200 ml 30260200

*

Passive materials: (slow curing)
- high-alloyed steel
- aluminium, nickel, zinc, gold
- oxid layers
- chromate layers
- anodic coatings
- plastics and ceramics

AN 302-62

Threadlocking

higher viscosity
high strength
hard to disassemble

20 ml 30262020 | 50 ml 30262150 | 200 ml 30262200

Technical Data

Colour	red
For threaded joints up to	M 36
Viscosity at +25°C Brookfield	1.500 - 6.500 mPa·s
Gap filling capacity max.	0,25 mm
Breakaway strength (Thread)	20 - 25 Nm
Prevailing strength (Thread)	40 - 55 Nm
Shear strength (DIN 54452)	10 - 15 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C

WEICON

Anaerobic Adhesives and Sealants

Threadlocking

AN 302-70

Locking of threads and stud bolts
DVGW approval

medium viscosity
high strength
hard to disassemble

10 ml	20 ml	50 ml	200 ml
30270110	30270020	30270150	30270200

Technical Data	
Colour	green
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C Brookfield	500 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	28 - 35 Nm
Prevailing strength (Thread)	50 - 65 Nm
Shear strength (DIN 54452)	15 - 20 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C

AN 302-71

Locking of threads and stud bolts

medium viscosity
high strength
hard to disassemble

10 ml	20 ml	50 ml
30271020	30271150	30271200

Technical Data	
Colour	red
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C Brookfield	500 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	28 - 35 Nm
Prevailing strength (Thread)	50 - 65 Nm
Shear strength (DIN 54452)	15 - 20 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C

AN 302-72

Locking of threads and stud bolts
high temperature resistant, DVGW approval

higher viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30272020	30272150	30272200

Technical Data	
Colour	red
For threaded joints up to	M 56 R 1/2“
Viscosity at +25°C Brookfield	6.000 - 15.000 mPa·s
Gap filling capacity max.	0,30 mm
Breakaway strength (Thread)	20 - 30 Nm
Prevailing strength (Thread)	40 - 75 Nm
Shear strength (DIN 54452)	10 - 15 N/mm²
Handling strength at room temperature	20 - 40 min.
Final strength at room temperature	5 - 10 h
Temperature resistance	-60 up to +230°C

AN 302-90

Threadlocking, for locking after mounting and sealing of hair cracks

low viscosity
high strength
hard to disassemble

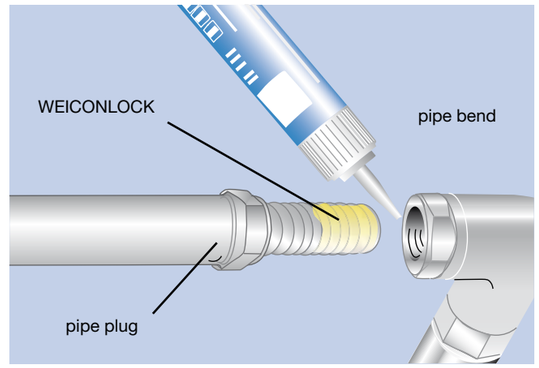
20 ml	50 ml	200 ml
30290020	30290150	30290200

Technical Data	
Colour	green
For threaded joints up to	M 5 kapillar
Viscosity at +25°C Brookfield	10 - 20 mPa·s
Gap filling capacity max.	0,07 mm
Breakaway strength (Thread)	15 - 25 Nm
Prevailing strength (Thread)	30 - 40 Nm
Shear strength (DIN 54452)	8 - 12 N/mm²
Handling strength at room temperature	5 - 20 min.
Final strength at room temperature	approx. 3 h
Temperature resistance	-60 up to +150°C

Pipe and Thread Sealing

sealant types have especially been formulated to prevent the escape of gaseous and liquid substances. They seal up to burst point and resist almost all substances used in industry (list of chemical resistance is available on request).

The use of WEICONLOCK prevents clogging and contamination of fittings as well as the blockage of hydraulic and pneumatic valves as may occur with conventional sealing methods (e.g. hemp or Teflon tape).



Connections sealed with WEICONLOCK are protected against seizing and fretting corrosion. The available different strength grades allow dismantling even after years.

Leakage risks in the application of hemp or sealing tapes:

- difficult dosing and handling
- the tapes are often cut by the thread
- the roughness of threads and gaps are not fully filled
- rotation often possible only in one direction, no correction possible

WEICONLOCK-Pipe sealing inside the thread

Prevents leakage risks through optimal gap filling!

WEICON

Anaerobic Adhesives and Sealants

Pipe and Thread Sealing

AN 302-25

Pipe and Thread Sealing vibration-proof for coarse threads

high viscosity
low strength
easy disassembly

50 ml ✓ 30225150
200 ml ✓ 30225200

Technical Data	
Colour	brown
For threaded joints up to	M 80 R 3“
Viscosity at +25°C Brookfield	6.000 - 30.000 mPa·s
Gap filling capacity max.	0,30 mm
Breakaway strength (Thread)	5 - 8 Nm
Prevailing strength (Thread)	2 - 4 Nm
Shear strength (DIN 54452)	3 - 5 N/mm²
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C

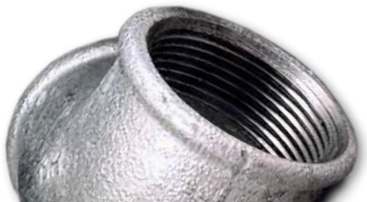
AN 302-45

Pipe and Thread Sealing for coarse threads DVGW-tested

high viscosity
medium strength
disassembly with normal tools

50 ml ✓ 30245150
200 ml ✓ 30245200

Technical Data	
Colour	blue
For threaded joints up to	M 80 R 3“
Viscosity at +25°C Brookfield	6.000 - 30.000 mPa·s
Gap filling capacity max.	0,30 mm
Breakaway strength (Thread)	10 - 15 Nm
Prevailing strength (Thread)	12 - 18 Nm
Shear strength (DIN 54452)	8 - 12 N/mm²
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C



BAM Federal Institute for Materials Research and Testing

AN 302-75

Pipe and Thread Sealing BAM certifiated

high viscosity
high strength
hard to disassemble

50 ml ✓ 30275150
200 ml ✓ 30275200

Technical Data	
Colour	green
For threaded joints up to	M 80 R 3“
Viscosity at +25°C Brookfield	14.000 - 24.000 mPa·s
Gap filling capacity max.	0,30 mm
Breakaway strength (Thread)	40 - 50 Nm
Prevailing strength (Thread)	40 - 50 Nm
Shear strength (DIN 54452)	15 - 25 N/mm²
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C

AN 302-77

Pipe and Thread Sealing for large thread parts and flanges

high viscosity
high strength
hard to disassemble

50 ml ✓ 30277150
200 ml ✓ 30277200

Technical Data	
Colour	red
For threaded joints up to	M 36
Viscosity at +25°C Brookfield	6.000 mPa·s
Gap filling capacity max.	0,25 mm
Breakaway strength (Thread)	30 - 40 Nm
Prevailing strength (Thread)	10 - 15 Nm
Shear strength (DIN 54452)	35 - 45 N/mm²
Handling strength at room temperature	40 - 60 min.
Final strength at room temperature	6 - 12 h
Temperature resistance	-60 up to +150°C

WEICON

Anaerobic Adhesives and Sealants

Pipe and Thread Sealing

AN 302-80

Pipe and Thread Sealing for passive materials*

higher viscosity
high strength
hard to disassemble

20 ml ✓ 30280020 | 50 ml ✓ 30280150 | 200 ml ✓ 30280200

Technical Data	
Colour	green
For threaded joints up to	M 36
Viscosity at +25°C Brookfield	3.000 - 6.000 mPa·s
Gap filling capacity max.	0,20 mm
Breakaway strength (Thread)	35 - 45 Nm
Prevailing strength (Thread)	50 - 70 Nm
Shear strength (DIN 54452)	20 - 30 N/mm²
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +180°C

*

Passive materials: (slow curing)
- high-alloyed steel
- aluminium, nickel, zinc, gold
- oxide layers
- chromate layers
- anodic coatings
- plastics and ceramics

AN 305-11

Pipe and Thread Sealing
DVGW approval

higher viscosity
medium strength
disassembly with normal tools

50 ml ✓ 30511150 | 200 ml ✓ 30511200

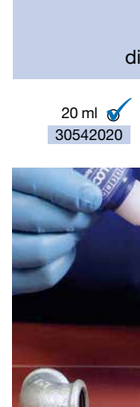
Technical Data	
Colour	white
For threaded joints up to	M 80 R 3“
Viscosity at +25°C Brookfield	17.000 - 50.000 mPa·s
Gap filling capacity max.	0,40 mm
Breakaway strength (Thread)	7 - 10 Nm
Prevailing strength (Thread)	2 - 4 Nm
Shear strength (DIN 54452)	4 - 6 N/mm²
Handling strength at room temperature	20 - 40 min.
Final strength at room temperature	5 - 10 h
Temperature resistance	-60 up to +150°C

AN 305-42

Hydraulic and Pneumatic Sealing
DVGW certificated

medium viscosity
medium strength
disassembly with normal tools

20 ml ✓ 30542020 | 50 ml ✓ 30542150 | 200 ml ✓ 30542200



Technical Data	
Colour	brown
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C Brookfield	500 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	12 - 15 Nm
Prevailing strength (Thread)	18 - 22 Nm
Shear strength (DIN 54452)	8 - 12 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +150°C

AN 305-72

Pipe and Flange Sealing (with PTFE)
immediate sealing effect, DVGW certificated

high viscosity
medium strength
disassembly with normal tools

50 ml ✓ 30572150 | 200 ml ✓ 30572200

Pipe and Thread Sealing

AN 305-77

Thread Sealing
DVGW and BAM approval for oxygen

high viscosity
medium strength
disassembly with normal tools

50 ml ✓ 30577150 | 200 ml ✓ 30577200

Technical Data

Colour	yellow
For threaded joints up to	M 80 R 3“
Viscosity at +25°C Brookfield	24.000 - 70.000 mPa·s
Gap filling capacity max.	0,50 mm
Breakaway strength (Thread)	18 - 22 Nm
Prevailing strength (Thread)	10 - 14 Nm
Shear strength (DIN 54452)	6 - 13 N/mm²
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	1 - 3 h
Temperature resistance	-60 up to +150°C

AN 305-86

Pipe Sealing, extra strong

higher viscosity
high strength
hard to disassemble

20 ml ✓ 30586020 | 50 ml ✓ 30586150 | 200 ml ✓ 30586200

Technical Data

Colour	red
For threaded joints up to	M 56 R 2“
Viscosity at +25°C Brookfield	6.000 - 7.000 mPa·s
Gap filling capacity max.	0,30 mm
Breakaway strength (Thread)	15 - 30 Nm
Prevailing strength (Thread)	25 - 45 Nm
Shear strength (DIN 54452)	10 - 20 N/mm²
Handling strength at room temperature	60 - 90 min.
Final strength at room temperature	12 - 24 h
Temperature resistance	-60 up to +150°C

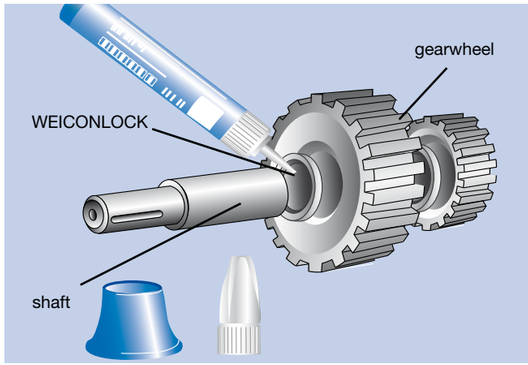
Pen-System
Design Pat. 00159884

Anaerobic Adhesives and Sealants

Retaining Cylindrical Assemblies

WEICONLOCK retaining adhesives fill the voids on smooth mating surfaces and thus provide total contact of the parts. Additional securing (e.g. by keys) will not be necessary and fretting corrosion will be avoided.

Further applications:
Retention of ball-, roller- and slide bearings, bushes, bolts, liners, keys, splines and other close fitting parts



Combined methods of retaining (e.g bonding with WEICONLOCK in connection with shrunkfitting or press-fitting) allow to obtain a power transmission and torque strength higher than that for each of the two methods seperately.

The combination of bonding and securing by feather keys will prevent punctual load and fretting corrosion. No axial securing will be necessary in this case.

Retaining Cylindrical Assemblies

AN 301-38*

Retaining cylindrical assemblies for bearings, shafts and bushings, NSF approval

medium viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30138020	30138150	30138200

Technical Data	
Colour	green
For threaded joints up to	M 36
Viscosity at +25°C Brookfield	2.000 - 3.000 mPa·s
Gap filling capacity max.	0,20 mm
Breakaway strength (Thread)	30 - 40 Nm
Prevailing strength (Thread)	45 - 60 Nm
Shear strength (DIN 54452)	20 - 25 N/mm²
Handling strength at room temperature	approx. 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +150°C

AN 301-48*

Retaining cylindrical assemblies for bearings, shafts and bushings high temperature resistant, DVGW + NSF approval

medium viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30148020	30148150	30148200

Technical Data	
Colour	green
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C Brookfield	450 - 650 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	25 - 30 Nm
Prevailing strength (Thread)	40 - 55 Nm
Shear strength (DIN 54452)	25 - 30 N/mm²
Handling strength at room temperature	2 - 6 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +175°C

*

WEICONLOCK® »White Line«

The products AN 301-38 and 301-48 belong to the new WEICONLOCK »White Line«.

In order to take the increased requirements in the field of health protection and safety at work into account, WEICON now introduces the WEICONLOCK »White Line«.

The new formulas also enable use in sensitive production areas. Three types of the »White Line« have a »white« EC safety data sheet and are therefore marking-free and meet strict requirements of plant physicians.

The new »White Line« has been tested in accordance with the demanding requirements of the NSF/ANSI 61 (American National Standards Institute) for use in the drinking water area. It is therefore in particular suitable for applications in the food, cosmetics and pharmaceuticals sectors. The new WEICONLOCK »White Line« can also be used in all other areas of industry.

This results in the following advantages when using the new WEICONLOCK types:

- NSF drinking water approval in accordance with ANSI 61
- No marking[1] with danger symbols and risk or safety statements of the safety data sheet in accordance with the EC Regulations No. 1907/2006 – ISO 11014-1
- Increased safety at work and health protection
- Excellent resistance to chemicals after curing
- Temperature-resistant up to +200°C[2]

[1] Applies to the types AN 301-43, 301-70 and 301-72
[2] Applies to the type AN 301-72

Retaining Cylindrical Assemblies

AN 306-00

Retaining cylindrical assemblies for bearings, shafts and bushings

medium viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30600020	30600150	30600200

transparent WEICONLOCK transparent

Technical Data

Colour	transparent
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C Brookfield	500 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	30 - 35 Nm
Prevailing strength (Thread)	55 - 70 Nm
Shear strength (DIN 54452)	25 - 35 N/mm²
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +175°C

AN 306-01

Retaining cylindrical assemblies for bearings, shafts and bushings

low viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30601020	30601150	30601200

Technical Data

Colour	green
For threaded joints up to	M 12
Viscosity at +25°C Brookfield	125 mPa·s
Gap filling capacity max.	0,10 mm
Breakaway strength (Thread)	25 - 30 Nm
Prevailing strength (Thread)	50 - 60 Nm
Shear strength (DIN 54452)	15 - 18 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +150°C

AN 306-03

Retaining cylindrical assemblies for bearings, shafts and bushings

low viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30603020	30603150	30603200

Retaining Cylindrical Assemblies

AN 306-10

Retaining cylindrical assemblies for passive materials*

fast cure WEICONLOCK also without Activator

medium viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30610020	30610150	30610200

*

Passive materials: (slower curing)	•high-alloyed steel •aluminium, nickel, zinc, gold •oxid layers •chromate layers •anodic coatings •plastics and ceramics

Technical Data

Colour	green
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C Brookfield	700 - 1.000 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	30 - 35 Nm
Prevailing strength (Thread)	55 - 70 Nm
Shear strength (DIN 54452)	25 - 35 N/mm²
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +180°C

AN 306-20

Retaining cylindrical assemblies high temperature resistant, DVGW-/KTW-approved

DIN DVGW · TZW Technologiezentrum Wasser Karlsruhe Prüfstelle Wasser · BAM Federal Institute for Materials Research and Testing

higher viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30620020	30620150	30620200

Technical Data

Colour	green
For threaded joints up to	M 56 R 2“
Viscosity at +25°C Brookfield	3.000 - 6.000 mPa·s
Gap filling capacity max.	0,20 mm
Breakaway strength (Thread)	28 - 36 Nm
Prevailing strength (Thread)	40 - 55 Nm
Shear strength (DIN 54452)	15 - 25 N/mm²
Handling strength at room temperature	20 - 40 min.
Final strength at room temperature	approx. 24 h
Temperature resistance	-60 up to +200°C

fast cure WEICONLOCK also without Activator

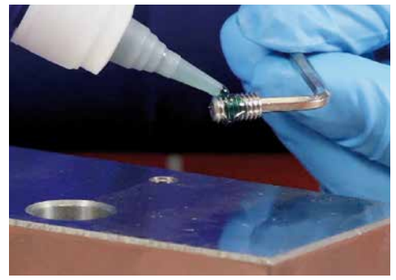
BAM Federal Institute for Materials Research and Testing

AN 306-30

Retaining cylindrical assemblies for passive materials*, BAM approval for oxygen

higher viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30630020	30630150	30630200



Technical Data

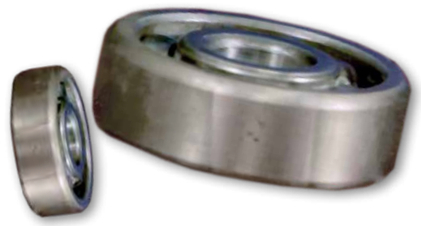
Colour	green
For threaded joints up to	M 36
Viscosity at +25°C Brookfield	3.000 - 6.000 mPa·s
Gap filling capacity max.	0,20 mm
Breakaway strength (Thread)	35 - 45 Nm
Prevailing strength (Thread)	50 - 70 Nm
Shear strength (DIN 54452)	20 - 30 N/mm²
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +180°C

AN 306-38

Retaining cylindrical assemblies for bearings, gear wheels and bolts, fast cure

medium viscosity
high strength
hard to disassemble

10 ml	20 ml	50 ml	200 ml
30638110	30638020	30638150	30638200



Technical Data

Colour	green
For threaded joints up to	M 36
Viscosity at +25°C Brookfield	2.500 mPa·s
Gap filling capacity max.	0,20 mm
Breakaway strength (Thread)	35 - 45 Nm
Prevailing strength (Thread)	50 - 70 Nm
Shear strength (DIN 54452)	25 - 30 N/mm²
Handling strength at room temperature	approx. 5 min.
Final strength at room temperature	1 - 3 h
Temperature resistance	-60 up to +150°C

Retaining Cylindrical Assemblies

AN 306-40

Retaining cylindrical assemblies high temperature resistant, slow cure

medium viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30640020	30640150	30640200

Technical Data	
Colour	green
For threaded joints up to	M 20
Viscosity at +25°C Brookfield	600 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	20 - 30 Nm
Prevailing strength (Thread)	30 - 40 Nm
Shear strength (DIN 54452)	15 - 30 N/mm²
Handling strength at room temperature	approx. 240 min.
Final strength at room temperature	approx. 24 h
Temperature resistance	-60 up to +200°C

AN 306-41

Retaining cylindrical assemblies for bearings, shafts and bushings

medium viscosity
medium strength
disassembly with normal tools

20 ml	50 ml	200 ml
30641020	30641150	30641200

Technical Data	
Colour	yellow
For threaded joints up to	M 20
Viscosity at +25°C Brookfield	550 mPa·s
Gap filling capacity max.	0,12 mm
Breakaway strength (Thread)	12 - 15 Nm
Prevailing strength (Thread)	17 - 22 Nm
Shear strength (DIN 54452)	8 - 12 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C

BAM
Federal Institute for Materials Research and Testing

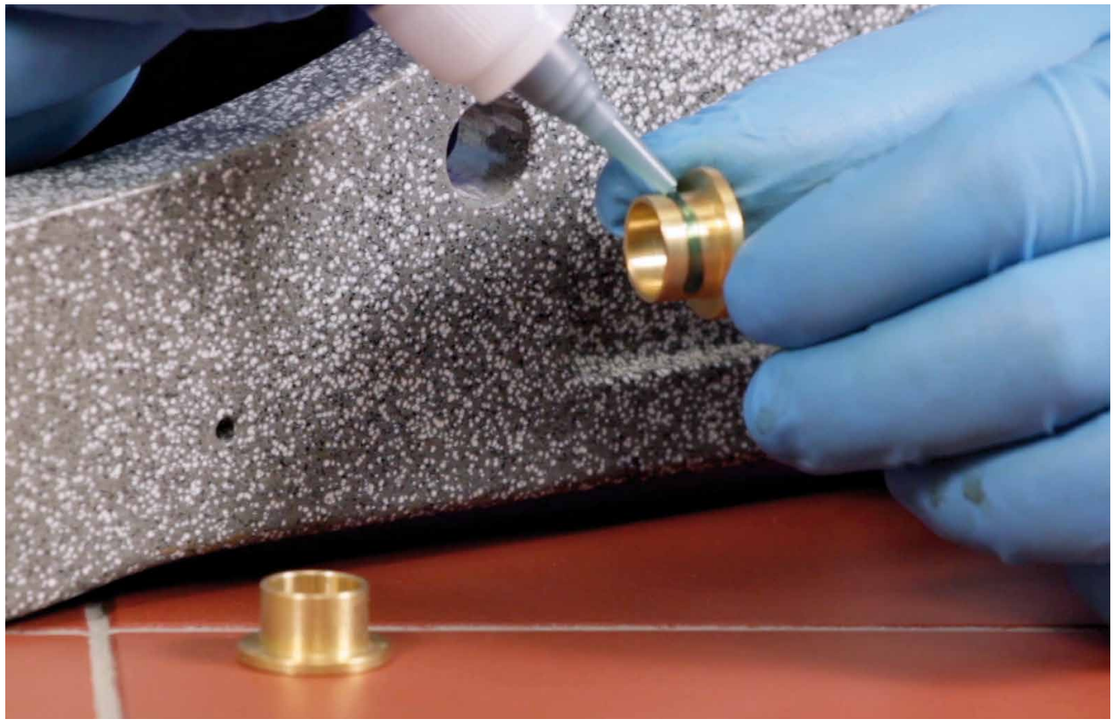
AN 306-48

Retaining cylindrical assemblies high temperature resistant, BAM approval

medium viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30648020	30648150	30648200

Technical Data	
Colour	green
For threaded joints up to	M 20
Viscosity at +25°C Brookfield	550 mPa·s
Gap filling capacity max.	0,15 mm
Breakaway strength (Thread)	30 - 35 Nm
Prevailing strength (Thread)	55 - 70 Nm
Shear strength (DIN 54452)	25 - 35 N/mm²
Handling strength at room temperature	approx. 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +175°C



Retaining Cylindrical Assemblies

AN 306-50

Retaining cylindrical assemblies for bearings, shafts and bushings

higher viscosity
medium strength
hard to disassemble

20 ml	50 ml	200 ml
30650020	30650150	30650200

Technical Data

Colour	transparent
For threaded joints up to	M 36 R 1 1/2“
Viscosity at +25°C Brookfield	2.500 - 3.000 mPa·s
Gap filling capacity max.	0,20 mm
Breakaway strength (Thread)	35 - 45 Nm
Prevailing strength (Thread)	55 - 70 Nm
Shear strength (DIN 54452)	25 - 35 N/mm²
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +150°C

AN 306-60

Assembly of cylindrical parts for worn out bearing rings and bushings

high viscosity
high strength
hard to disassemble

50 ml	200 ml
30660150	30660200

Technical Data

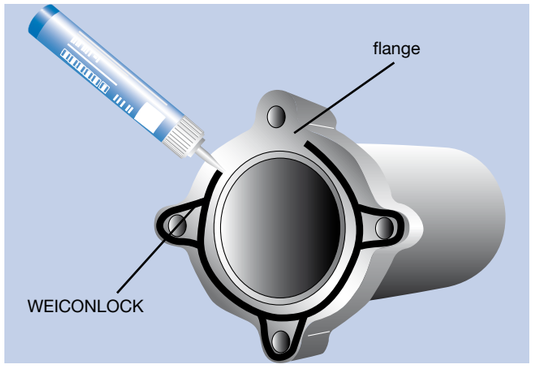
Colour	silver
For threaded joints up to	R 2“
Viscosity at +25°C Brookfield	150.000 - 900.000 mPa·s
Gap filling capacity max.	0,50 mm
Breakaway strength (Thread)	35 - 45 Nm
Prevailing strength (Thread)	10 - 20 Nm
Shear strength (DIN 54452)	25 - 35 N/mm²
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C

Anaerobic Adhesives and Sealants

Flange Sealing and Gasketing

Sealing with solvent-free, liquid WEICONLOCK is an excellent technological solution. Unlike ordinary gaskets (paper, fibre or cork), WEICONLOCK sealant products will always fit the required size. They completely fill the voids of surfaces and guarantees total face-to-face contact.

At low pressures (up to 6 bar), WEICONLOCK provides an instant seal.



Contrary to conventional gaskets, there is no setting of a WEICONLOCK-formed gasket.

Due to high elasticity, WEICONLOCK flange sealants can be used under extreme conditions. Cured WEICONLOCK products are resistant against most chemical media (such as liquids and gases) used in industry.

Anaerobic Adhesives and Sealants

Flange Sealing and Gasketing

AN 301-72*

Pipe and flange sealing with PTFE marking-free, high temperature resistant NSF-/DVGW-approved

higher viscosity
medium strength
disassembly with normal tools

50 ml ✓ 30172150
200 ml ✓ 30172200

Technical Data	
Colour	white
For threaded joints up to	M 80 R 3“
Viscosity at +25°C Brookfield	15.000 - 60.000 mPa·s
Gap filling capacity max.	0,30 mm
Breakaway strength (Thread)	5 - 10 Nm
Prevailing strength (Thread)	4 - 6 Nm
Shear strength (DIN 54452)	5 - 7 N/mm²
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	6 - 12 h
Temperature resistance	-60 up to +200°C

*

WEICONLOCK® »White Line«

The product AN 301-72 belongs to the new WEICONLOCK »White Line«.

In order to take the increased requirements in the field of health protection and safety at work into account, WEICON now introduces the WEICONLOCK »White Line«.

The new formulas also enable use in sensitive production areas. Three types of the »White Line« have a »white« EC safety data sheet and are therefore marking-free and meet strict requirements of plant physicians.

The new »White Line« has been tested in accordance with the demanding requirements of the NSF/ANSI 61 (American National Standards Institute) for use in the drinking water area. It is therefore in particular suitable for applications in the food, cosmetics and pharmaceuticals sectors. The new WEICONLOCK »White Line« can also be used in all other areas of industry.

This results in the following advantages when using the new WEICONLOCK types:

- NSF drinking water approval in accordance with ANSI 61
- No marking[1] with danger symbols and risk or safety statements of the safety data sheet in accordance with the EC Regulations No. 1907/2006 – ISO 11014-1
- Increased safety at work and health protection
- Excellent resistance to chemicals after curing
- Temperature-resistant up to +200°C[2]

[1] Applies to the types AN 301-43, 301-70 and 301-72
[2] Applies to the type AN 301-72

AN 305-10

Gasketing of flanges, gearboxes and other motor housings high temperature resistant

high viscosity
high strength
hard to disassemble

50 ml ✓ 30510150
200 ml ✓ 30510200

Technical Data	
Colour	orange
For threaded joints up to	---
Viscosity at +25°C Brookfield	70.000 - 300.000 mPa·s
Gap filling capacity max.	0,50 mm
Breakaway strength (Thread)	18 - 25 Nm
Prevailing strength (Thread)	15 - 25 Nm
Shear strength (DIN 54452)	5 - 10 N/mm²
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	6 - 12 h
Temperature resistance	-60 up to +200°C

AN 305-18

Flange sealing for filling large gaps immediate sealing effect

high viscosity
high strength
hard to disassembly

50 ml ✓ 30518150
200 ml ✓ 30518200

Technical Data	
Colour	red
For threaded joints up to	---
Viscosity at +25°C Brookfield	80.000 - 500.000 mPa·s
Gap filling capacity max.	0,50 mm
Breakaway strength (Thread)	12 - 18 Nm
Prevailing strength (Thread)	18 - 24 Nm
Shear strength (DIN 54452)	8 - 13 N/mm²
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +200°C

Flange Sealing and Gasketing

AN 305-72

Pipe and flange sealing with PTFE immediate sealing effect, DVGW-approval

high viscosity
medium strength
disassembly with normal tools

50 ml ✓ 30572150
200 ml ✓ 30572200

Technical Data	
Colour	white
For threaded joints up to	M 80 R 3“
Viscosity at +25°C Brookfield	17.000 - 50.000 mPa·s
Gap filling capacity max.	0,40 mm
Breakaway strength (Thread)	7 - 10 Nm
Prevailing strength (Thread)	2 - 4 Nm
Shear strength (DIN 54452)	4 - 6 N/mm²
Handling strength at room temperature	20 - 40 min.
Final strength at room temperature	5 - 10 h
Temperature resistance	-60 up to +150°C

AN 305-73

Gasketing of flanges, gearboxes and other motor housings

high viscosity
low strength
easy disassembly

50 ml ✓ 30573150
200 ml ✓ 30573200

Technical Data	
Colour	light green
For threaded joints up to	---
Viscosity at +25°C Brookfield	17.000 - 50.000 mPa·s
Gap filling capacity max.	0,30 mm
Breakaway strength (Thread)	6 - 10 Nm
Prevailing strength (Thread)	2 - 5 Nm
Shear strength (DIN 54452)	4 - 6 N/mm²
Handling strength at room temperature	20 - 40 min.
Final strength at room temperature	approx. 12 h
Temperature resistance	-60 up to +150°C

AN 305-74

Gasketing of flanges, gearboxes and other motor housings

high viscosity
high strength
hard to disassemble

50 ml ✓ 30574150
200 ml ✓ 30574200

Technical Data	
Colour	orange
For threaded joints up to	---
Viscosity at +25°C Brookfield	30.000 - 100.000 mPa·s
Gap filling capacity max.	0,50 mm
Breakaway strength (Thread)	16 - 24 Nm
Prevailing strength (Thread)	5 - 10 Nm
Shear strength (DIN 54452)	5 - 10 N/mm²
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	approx. 12 h
Temperature resistance	-60 up to +180°C

Anaerobic Adhesives and Sealants

WEICONLOCK®

Technical Data

Type-No.	Application	Features	Colour	For threaded joints up to	Viscosity in mPa·s at +25°C Brookfield	Gap filling capacity in mm max.
Neu! AN 301-43	Threadlocking, DVGW² /NSF approval	medium strength, higher viscosity	blue	M 36	2.000 - 8.000 mt	0,25
Neu! AN 301-70	Threadlocking, NSF approval	high strength, medium viscosity	green	M 25	500 - 900 nt	0,15
Neu! AN 301-72	Pipe and flange sealing (with PTFE), DVGW² /NSF approval	medium strength, high viscosity	white	M 80 R 3“	15.000 - 60.000 ht	0,30
Neu! AN 301-38	Retaining cylindrical assemblies, NSF approval	high strength, medium viscosity	green	M 36	2.000 - 3.000 mt	0,20
Neu! AN 301-48	Retaining cylindrical assemblies, DVGW² /NSF approval	high strength, medium viscosity	green	M 20 R ¾“	450 - 650 nt	0,15
AN 302-21	Threadlocking	low strength, low viscosity	violet	M 12	125	0,10
AN 302-22	Threadlocking	low strength, medium viscosity	purple	M 36	1.000 mt	0,20
AN 302-40	Threadlocking, DVGW²-approval	medium strength, medium viscosity	transparent	M 20 R ¾“	600 nt	0,15
AN 302-41	Threadlocking	medium strength, low viscosity	blue	M 12	125 nt	0,10
AN 302-42	Threadlocking	medium strength, medium viscosity	blue	M 36	1.000 mt	0,20
AN 302-43	Threadlocking, DVGW² /NSF approval	medium strength, higher viscosity	blue	M 36	2.000 - 7.000 mt	0,25
AN 302-50	Threadlocking	high strengh, medium viscosity	transparent	M 20 R ¾“	500 nt	0,15
AN 302-60	Threadlocking for passive materials	high strengh, medium viscosity	green	M 20 R ¾“	700 - 1.000 nt	0,15
AN 302-62	Threadlocking	solid, higher viscosity	red	M 36	1.500 - 6.500 mt	0,25
AN 302-70	Locking of threads and stud bolts, DVGW²-approval	high strengh, medium viscosity	green	M 20 R ¾“	500 nt	0,15
AN 302-71	Locking of threads and stud bolts	high strength, medium viscosity	red	M 20 R ¾“	500 nt	0,15
AN 302-72	Locking of threads and stud bolts, DVGW²-approval	high strength, higher viscosity	red	M 56 R ½“	6.000 - 15.000 mt	0,30
AN 302-90	Threadlocking for locking after assembly	high strengh, extrem low viscosity	green	M 5 kapillar	10 - 20	0,07
AN 302-25	Sealing of threaded pipes and fittings	low strength, high viscosity	brown	M 80 R 3“	6.000 - 30.000 mt	0,30
AN 302-45	Sealing of threaded pipes and fittings, DVGW²-approval	medium strength, high viscosity	blue	M 80 R 3“	6.000 - 30.000 mt	0,30
AN 302-75	Sealing of threaded pipes and fittings, BAM³ approval	high strength, high viscosity	green	M 80 R 3“	14.000 - 24.000 mt	0,30
AN 302-77	Sealing of threaded pipes and fittings	high strength, higher viscosity	red	M 36	6.000	0,25
AN 302-80	Sealing of threaded pipes and fittings for passive materials	high strength, higher viscosity	green	M 36	3.000 - 6.000 mt	0,20
AN 305-11	Sealing of threaded pipes and fittings, DVGW² -approval	medium strength, high viscosity	white	M 80 R 3“	17.000 - 50.000 ht	0,40
AN 305-42	Sealant for hydraulic and pneumatic systems, DVGW²-approval	medium strength, medium viscosity	brown	M 20 R ¾“	500 nt	0,15
AN 305-72	Pipe and flange sealing (with PTFE) DVGW²/AGA*⁴-approval	medium strength, high viscosity	white	M 80 R 3“	17.000 - 50.000 ht	0,40
AN 305-77	Sealing of threaded pipes and fittings, BAM³/ DVGW²/AGA*⁴-approval	medium strength, high viscosity	yellow	M 80 R 3“	24.000 - 70.000 ht	0,50
AN 305-86	Pipe sealing (extra strong)	high strength, higher viscosity	red	M 56 R 2“	6.000 - 7.000 nt	0,30
AN 306-00	Retaining cylindrical assemblies	high strengh, medium viscosity	transparent	M 20 R ¾“	500 nt	0,15
AN 306-01	Retaining cylindrical assemblies	high strength, low viscosity	green	M 12	125 nt	0,10
AN 306-03	Retaining cylindrical assemblies	high strengh, low viscosity	green	M 12	125 nt	0,10
AN 306-10	Retaining cylindrical assemblies for passive materials	high strengh, medium viscosity	green	M 20 R ¾“	700 - 1.000 nt	0,15
AN 306-20	Retaining cylindrical assemblies BAM³/DVGW²/KTW¹approval	high strength, higher viscosity	green	M 56 R 2“	3.000 - 6.000 nt	0,20
AN 306-30	Retaining cylindrical assemblies for passive materials, BAM³ approval	high strength, higher viscosity	green	M 36	3.000 - 6.000 mt	0,20
AN 306-38	Retaining cylindrical assemblies	high strength, medium viscosity	green	M 36	2.500 mt	0,20
AN 306-40	Retaining cylindrical assemblies	high strength, medium viscosity	green	M 20	600 nt	0,15
AN 306-41	Retaining cylindrical assemblies	medium strength, medium viscosity	yellow	M 20	550 nt	0,12
AN 306-48	Retaining cylindrical assemblies, BAM³ approval	high strength, medium viscosity	green	M 20	550 nt	0,15
AN 306-50	Retaining cylindrical assemblies	medium strength, higher viscosity	transparent	M 36 R 1½“	2.500 - 3.000 mt	0,20
AN 306-60	Assembly of cylindrical parts	high strength, high viscosity	silver	R 2“	150.000 - 900.000 ht	0,50
AN 305-10	Flange sealing, AGA*⁴ approval	high strength, high viscosity	orange	---	70.000 - 300.000 ht	0,50
AN 305-18	Flange sealing	high strength, high viscosity	red	---	80.000 - 500.000 ht	0,50
AN 305-72	Pipe and flange sealing (with PTFE) DVGW²/KTW¹ approval	medium strength, high viscosity	white	M 80 R 3“	17.000 - 50.000 ht	0,40
AN 305-73	Flange sealing	low strength, high viscosity	light green	---	17.000 - 50.000 ht	0,30
AN 305-74	Flange sealing	high strength, high viscosity	orange	---	30.000 - 100.000 ht	0,50

Breakaway strength N/m (Thread*)	Prevailing strength N/m (Thread*)	Shear-strength** N/mm² (DIN 54452)	Handling strength at room temp. (minute)	Final strength at room temperature (hours)	Temperature resistance
18 - 22	9 - 11	10 - 13	5 -15	1 - 3	-60°C to +150°C
25 - 35	40 - 50	14 - 20	5 - 15	5 - 10	-60°C to +150°C
5 - 10	4 - 6	5 - 7	15 - 30	6 - 12	-60°C to +200°C
30 - 40	45 - 60	20 - 25	approx. 5	2 - 4	-60°C to +150°C
25 - 30	40 - 55	25- 30	2 - 6	2 - 4	-60°C to +175°C
7 - 10	3 - 6	4 - 7	10 - 20	3 - 6	-60°C to +150°C
4 - 8	2 - 4	3 - 5	10 - 20	3 - 6	-60°C to +150°C
12 - 16	18 - 24	8 - 12	10 - 20	3 - 6	-60°C to +150°C
10 - 15	12 - 16	8 - 12	10 - 20	approx. 3	-60°C to +150°C
14 - 18	5 - 8	8 - 12	10 - 20	3 - 6	-60°C to +150°C
17 - 22	8 - 12	9 - 13	10 - 20	1 - 3	-60°C to +150°C
30 - 35	55 - 70	25 - 35	2 - 5	2 - 4	-60°C to +175°C
30 - 35	55 - 70	25 - 35	2 - 5	2 - 4	-60°C to +180°C
20 - 25	40 - 55	10 - 15	10 - 20	3 - 6	-60°C to +150°C
28 - 35	50 - 65	15 - 20	10 - 20	3 - 6	-60°C to +150°C
28 - 35	50 - 65	15 - 20	10 - 20	3 - 6	-60°C to +150°C
20 - 30	40 - 75	10 - 15	20 - 40	5 - 10	-60°C to +230°C
15 - 25	30 - 40	8 - 12	5 - 20	approx. 3	-60°C to +150°C
5 - 8	2 - 4	3 - 5	15 - 30	3 - 6	-60°C to +150°C
10 - 15	12 - 18	8 - 12	15 - 30	3 - 6	-60°C to +150°C
40 - 50	40 - 50	15 - 25	15 - 30	3 - 6	-60°C to +150°C
30 - 40	10 - 15	35 - 45	40 - 60	6 - 12	-60°C to +150°C
35 - 45	50 - 70	20 - 30	2 - 5	2 - 4	-60°C to +180°C
7 - 10	2 - 4	4 - 6	20 - 40	5 - 10	-60°C to +150°C
12 - 15	18 - 22	8 - 12	10 - 20	2 - 4	-60°C to +150°C
7 - 10	2 - 4	4 - 6	20 - 40	5 - 10	-60°C to +150°C
18 - 22	10 - 14	6 - 13	15 - 30	1 - 3	-60°C to +150°C
15 - 30	25 - 45	10 - 20	60 - 90	12 - 24	-60°C to +150°C
30 - 35	55 - 70	25 - 35	2 - 5	2 - 4	-60°C to +175°C
25 - 30	50 - 60	18 - 23	10 - 20	2 - 4	-60°C to +150°C
25 - 30	50 - 60	15 - 18	10 - 20	2 - 4	-60°C to +150°C
30 - 35	55 - 70	25 - 35	2 - 5	2 - 4	-60°C to +180°C
28 - 36	40 - 55	15 - 25	20 - 40	approx. 24	-60°C to +200°C
35 - 45	50 - 70	20 - 30	2 - 5	2 - 4	-60°C to +180°C
35 - 45	50 - 70	25 - 30	approx. 5	1 - 3	-60°C to +150°C
20 - 30	30 - 40	15 - 30	approx. 240	approx. 24	-60°C to +200°C
12 - 15	17 - 22	8 - 12	10 - 20	3 - 6	-60°C to +150°C
30 - 35	55 - 70	25 - 35	approx. 5	2 - 4	-60°C to +175°C
35 - 45	55 - 70	25 - 35	2 - 5	2 - 4	-60°C to +150°C
35 - 45	10 - 20	25 - 30	15 - 30	3 - 6	-60°C to +150°C
18 - 25	15 - 25	5 - 10	15 - 30	6 - 12	-60°C to +200°C
12 - 18	18 - 24	8 - 13	10 - 20	3 - 6	-60°C to +200°C
7 - 10	2 - 4	4 - 6	20 - 40	5 - 10	-60°C to +150°C
6 - 10	2 - 5	4 - 6	20 - 40	approx. 12	-60°C to +150°C
16 - 24	5 - 10	5 - 10	15 - 30	approx. 12	-60°C to +180°C

WEICONLOCK (Cured)	
• Admissible surface pressure for high-strength types	approx. 450 N/mm² (65.000 PSI) (thickness below 0,08 mm) approx. 180 N/mm² (26.000 PSI) (thickness below 0,25 mm)
• E-Modul 1) for high-strength types 2) for low-streght types	approx. 1.400 N/mm² (200.000 PSI) approx. 280 N/mm² (40.000 PSI)
• Coefficient of elongation	approx. $8 \cdot 10^{-5}$ $\frac{mm}{mm \cdot °C}$
• Coefficient of therm conductivity	approx. 0,2 $\frac{W}{m \cdot °C}$
• Specific forward resistance	approx. 10^{14} Ohm • cm
• Dielectric coefficient (50 Hz - 1 MHz)	approx. 4
• Dielectric strength	approx. 10 kV/mm
• Temperature of decomposition	from approx. +250°C
• Chemically resistant against	water, oil, fuel, organic solvents, refrigerants, gases
General physical data	
WEICONLOCK (Liquid)	
• Density	ca 1,1 g/cm³
• pH-value	< 7 100°C
• Flashpoint (ISO 2592)	> +1 Torr
• Vapour pressure at +25°C	Completely soluble in acetone and similar products
• Solubility	approx. 12 month in original package
• Storage life at +20°C	

*Strength values based on M 10 screws, 8.8 grade, thickness of nut 0,8.d

** Static shear strength based on cylindrical parts of abt. Ø 13 mm, tolerance (D-d) = 0,05 mmm, l/d = 0,88

¹ KTW test (Technologiezentrum Wasser TZW Karlsruhe) for use in drinking water supply systems
² DVGW approval for use in gas supply and hot water systems
³ BAM Approval (Bundesanstalt für Materialforschung und -prüfung BAM Tgb.-No. 4045/96 - II 2402 for gaseous oxygen up to max. +60°C operating temperature and 10 bar oxygen pressure
⁴ Australian Gas Association - Approval - Gas Class II 500 kPA

We do not recommend WEICONLOCK for long-term use on connections of copper and its alloys if exposed to water of more than +40°C.

All recommendations and technical data are based on laboratory tests and extensive experiences by users. They have been compiled with greatest care but we take no warranty of any kind and accept no liability for the results obtained.

* lt. = low thixotrope
mt = medium thixotrope
ht = high thixotrope