WEICON®

DANLUBE A/S

"Så ved du det holder"

GB

1-Comp. Adhesives and Sealants

www.weicon.com

WEICONLOCK®

Threadlocking

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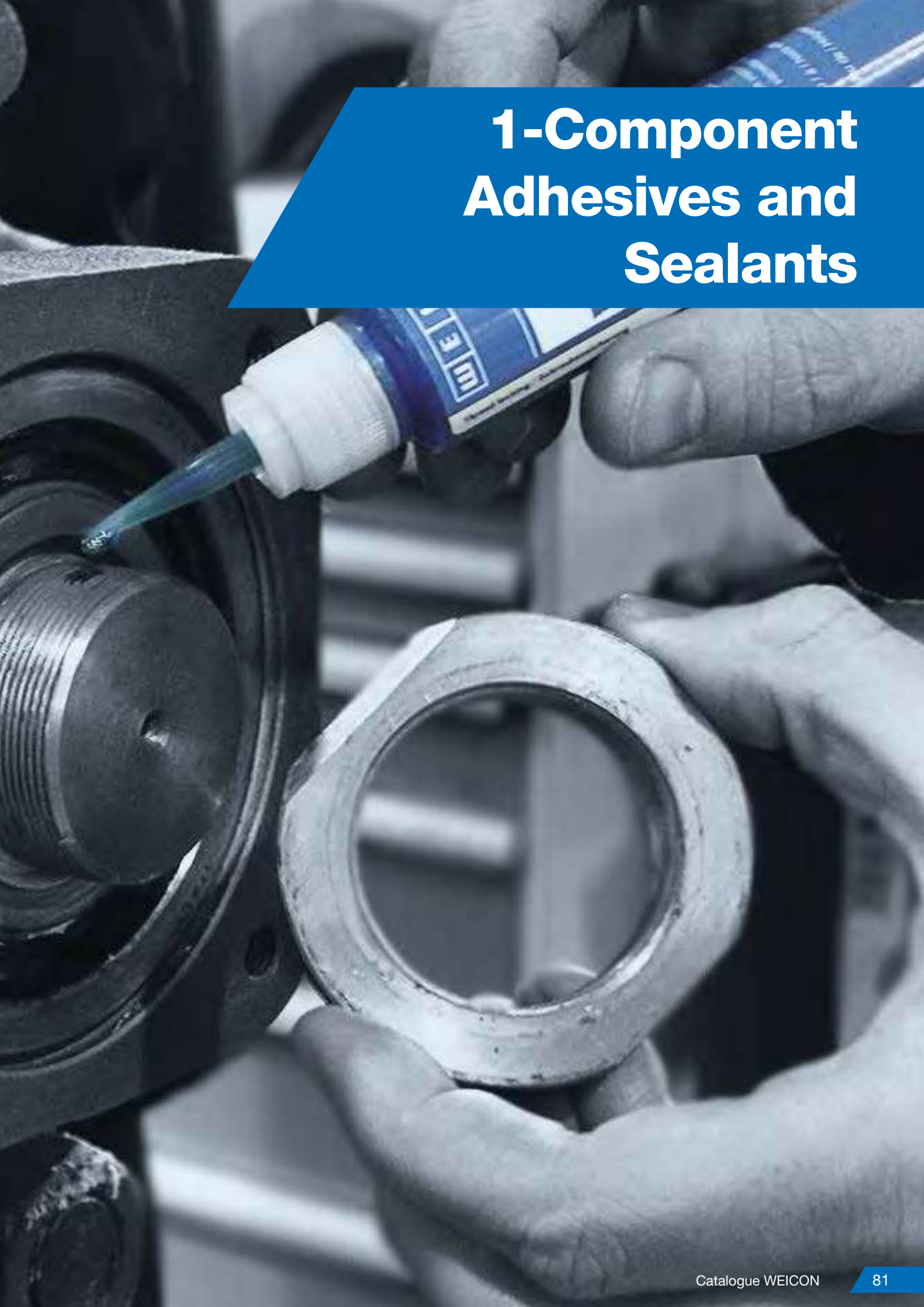


1-Component Adhesives and Sealants

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.

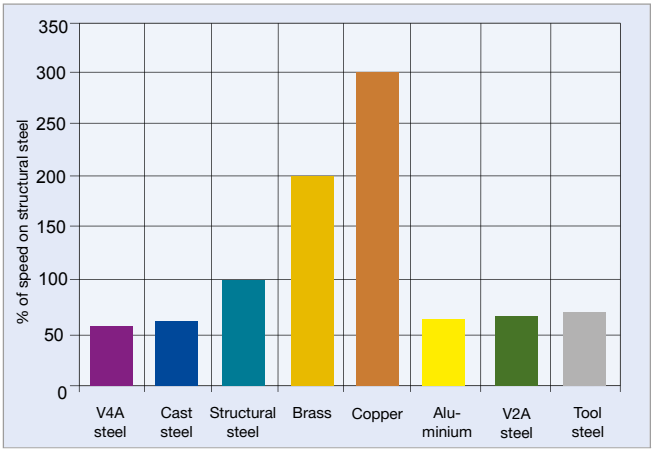
In addition, WEICONLOCK is highly recommended for use in flange sealing, replacing conventional gaskets in many cases. The benefits are:

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

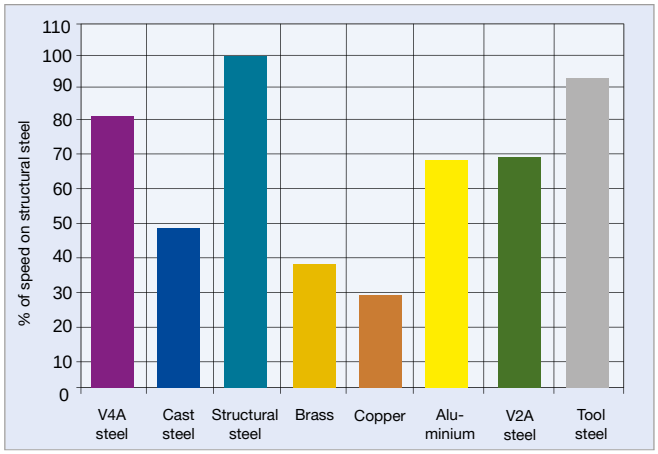
WEICONLOCK is suitable for all metals and certain plastics. It can be applied either manually or semi / fully automatic. As cost-effective problem solvers, WEICONLOCK products are indispensable in many sectors of industry:

- 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)



Anaerobic Adhesives and Sealants

WEICONLOCK®

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/+*50°F* and bellow) and for large gaps. On non-metallic surfaces, WEICONLOCK is made effective by using 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 and 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 curing 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 *(+572°F)*. 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.

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	+		

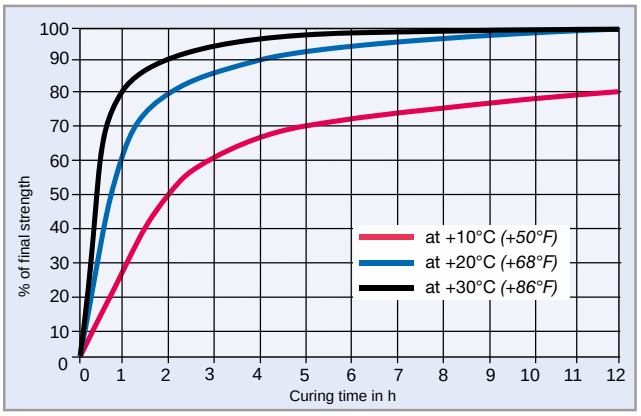
+ = good resistance
O = preliminary tests resp. resistance tests are recommended
% = WEICONLOCK products are resistant only up to the indicated concentration
— = WEICONLOCK products are not suitable, or may be used only after thorough preliminary tests

Anaerobic Adhesives and Sealants

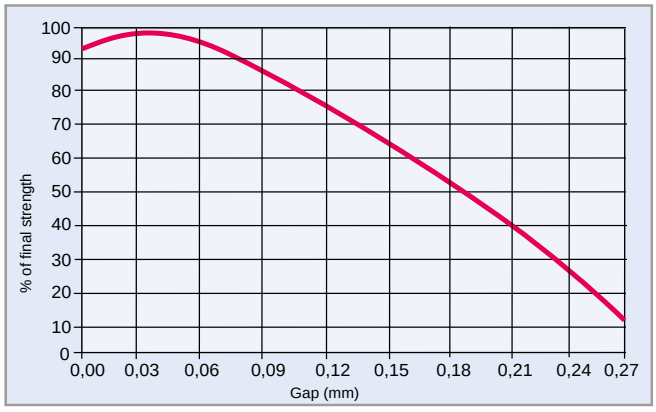
WEICONLOCK®

Strength of WEICONLOCK®
Dependent on the roughness

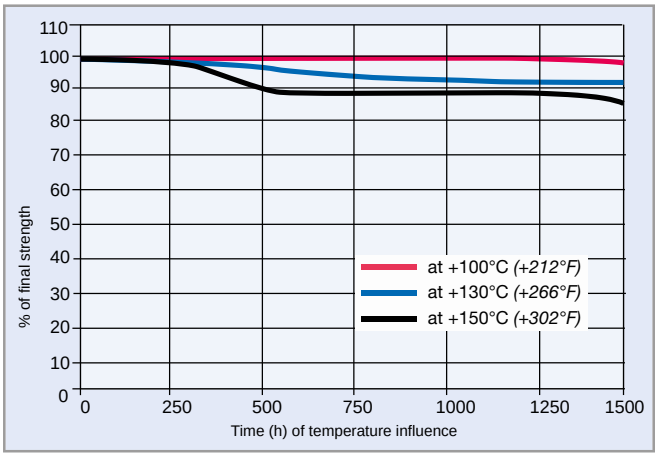
Curing speed of WEICONLOCK®
dependent on the ambient temperature



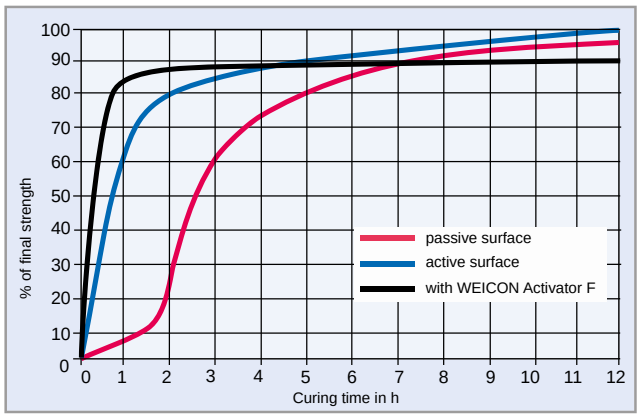
Strength of WEICONLOCK®
dependent on the joint gap



Temperature long-term resistance WEICONLOCK®
at increased temperatures



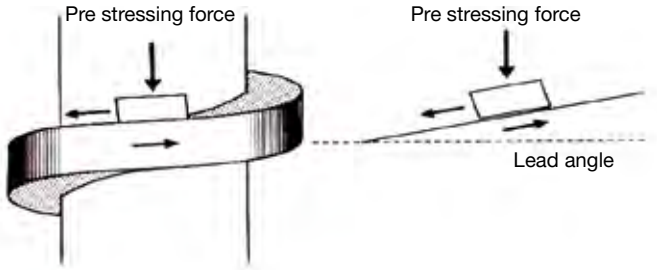
Curing speed with WEICON Activator F

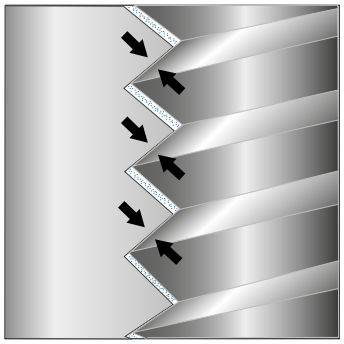


Threadlocking

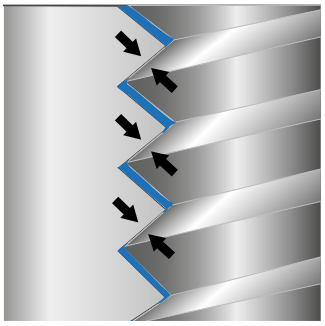
In screw fixings, the flanks of the threads of bolt and nut are firmly pressed together under a specific pre stressing force. The achieved clamping force depends on i. a. the applied pre stressing force , the screw`s geometry and the quality of material.

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

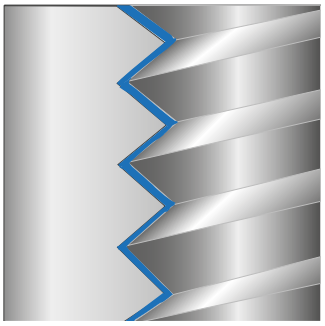




Assembly with pre stressing



Assembly with pre stressing

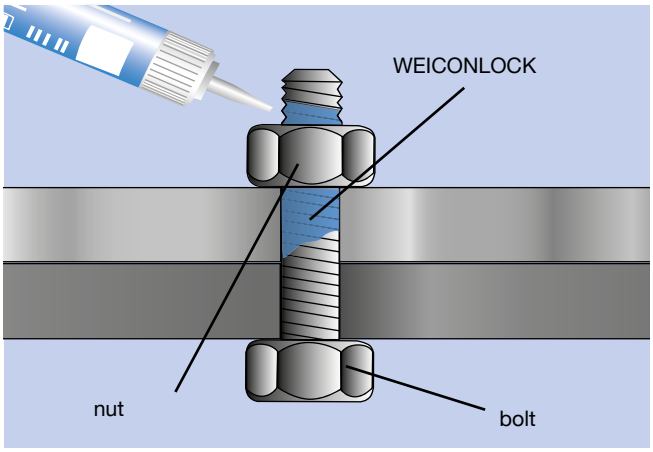


Floating assembly

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).

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!**

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 *(+77°F)* 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 *(1.450 - 1.885 psi)*
Handling strength at room temperature	5 - 15 min.
Final strength at room temperature	1 - 3 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

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 *(+77°F)* 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 *(2.030 - 2.900 psi)*
Handling strength at room temperature	5 - 15 min.
Final strength at room temperature	5 - 10 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

Threadlocking

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 *(+77°F)* 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 *(580 - 1.015 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

*

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. 1272/2008
- Increased safety at work and health protection
- Excellent resistance to chemicals after curing
- Temperature-resistant up to +200°C *(+392°F)*[2]

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

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 *(+77°F)* 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 *(435 - 725 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

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

Technical Data

Colour	transparent
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C *(+77°F)* 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 *(1.160 - 1.740 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

Threadlocking

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 *(+77°F)* 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 *(1.160 - 1.740 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	approx. 3 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 302-42

Threadlocking

medium viscosity
medium strength
disassembly with normal tools

20 ml	50 ml	200 ml
30242020	30242150	30242200

Technical Data

Colour	blue
For threaded joints up to	M 36
Viscosity at +25°C *(+77°F)* Brookfield	1.000 mPa·s
Gap filling capacity max.	0,20 mm
Breakaway strength (Thread)	14 - 18 Nm
Prevailing strength (Thread)	5 - 8 Nm
Shear strength (DIN 54452)	8 - 12 N/mm² *(1.160 - 1.740 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 302-43

Threadlocking DVGW and KTW approval for drinking water sector

higher viscosity
medium strength
disassembly with normal tools

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

DVGW TZW Technologiezentrum Wasser Karlsruhe Prüfstelle Wasser

Technical Data

Colour	blue
For threaded joints up to	M 36
Viscosity at +25°C *(+77°F)* 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 *(1.305 - 1.885 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	1 - 3 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 302-50

Locking of threads and stud bolts

medium viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30250020	30250150	30250200

transparent WEICONLOCK transparent

Technical Data

Colour	transparent
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C *(+77°F)* 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 *(3.625 - 5.075 psi)*
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +175°C *(-76 up to +347°F)*

Anaerobic Adhesives and Sealants

Threadlocking

AN 302-60

Threadlocking for passive materials*

medium viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30260020	30260150	30260200

Technical Data

Colour	green
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C *(+77°F)* 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 *(3.625 - 5.075 psi)*
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +180°C *(-76 up to +356°F)*

*

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	50 ml	200 ml
30262020	30262150	30262200

Technical Data

Colour	red
For threaded joints up to	M 36
Viscosity at +25°C *(+77°F)* 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 *(1.450 - 2.175 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 302-70

Locking of threads and stud bolts
DVGW approval

medium viscosity
high strength
hard to disassemble

10 ml	20 ml	50 ml
30270110	30270020	30270150

200 ml
30270200

Technical Data

Colour	green
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C *(+77°F)* 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 *(2.175 - 2.900 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 302-71

Locking of threads and stud bolts

medium viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30271020	30271150	30271200

Technical Data

Colour	red
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C *(+77°F)* 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 *(2.175 - 2.900 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

Anaerobic Adhesives and Sealants

Threadlocking

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 *(+77°F)* 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 *(1.450 - 2.175 psi)*
Handling strength at room temperature	20 - 40 min.
Final strength at room temperature	5 - 10 h
Temperature resistance	-60 up to +230°C *(-76 up to +446°F)*

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 *(+77°F)* 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 *(1.160 - 1.740 psi)*
Handling strength at room temperature	5 - 20 min.
Final strength at room temperature	approx. 3 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

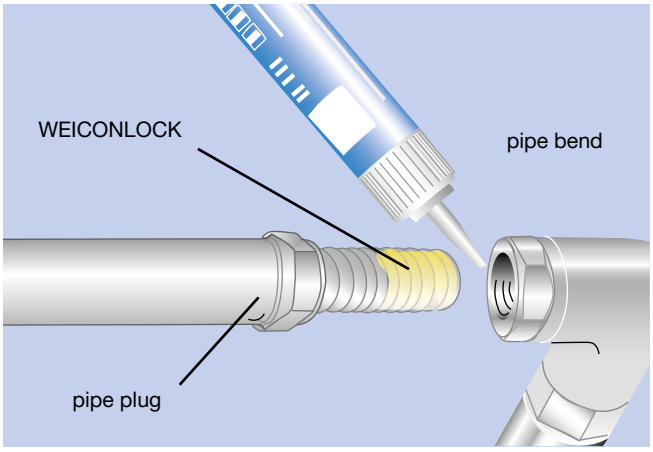

Pen-System
WEICON
Design Pat. 00159884

Anaerobic Adhesives and Sealants

Pipe and Thread Sealing

WEICONLOCK Pipe and Thread Sealing 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).

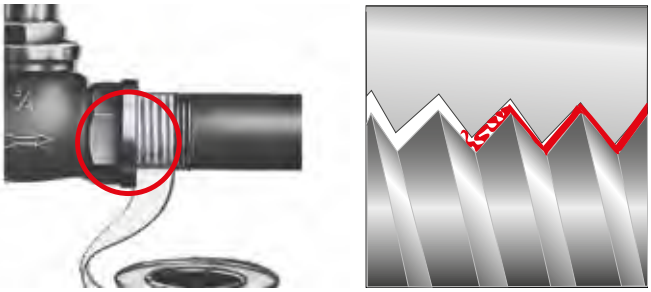
The use of WEICONLOCK prevents clogging and contamination of fittings as well as the blockage of hydraulic and pneumatic valves as may occur with conventional sealing methods (e.g. hemp or Teflon tape).



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

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



WEICONLOCK-Pipe sealing inside the thread

Prevents leakage risks through optimal gap filling!

AN 301-65* New

Pipe and flange sealing with PTFE, marking-free formulation, NSF[1] ANSI 61 approval for the drinking water sector, DVGW[2] certified

high viscosity
medium strength
disassembly with normal tools

50 ml	200 ml
30165150	30165200

* The product AN 301-65 belongs to the new WEICONLOCK »White Line«. More information on page 89.

Technical Data

Colour	white
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* Brookfield	180.000 - 300.000 mPa·s
Gap filling capacity max.	0,50 mm
Breakaway strength (Thread)	4 - 8 Nm
Prevailing strength (Thread)	1 - 3 Nm
Shear strength (DIN 54452)	2 - 6 N/mm² *(290 - 870 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	24 h
Temperature resistance	-60 to +150°C *(-76 to +302°F)*

AN 302-25

Pipe and Thread Sealing vibration-proof for coarse threads

high viscosity
low strength
easy disassembly

50 ml	200 ml
30225150	30225200

Technical Data

Colour	brown
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* 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 *(435 - 725 psi)*
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

Anaerobic Adhesives and Sealants

Pipe and Thread Sealing

AN 302-45

Pipe and Thread Sealing for coarse threads
DVGW-tested

high viscosity
medium strength
disassembly with normal tools

50 ml	200 ml
30245150	30245200

Technical Data

Colour	blue
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* 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 *(1.160 - 1.740 psi)*
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 302-75

Pipe and Thread Sealing
BAM certified

high viscosity
high strength
hard to disassemble

50 ml	200 ml
30275150	30275200

Technical Data

Colour	green
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* 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 *(2.175 - 3.625 psi)*
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 302-77

Pipe and Thread Sealing for large thread parts and flanges

higher viscosity
high strength
hard to disassemble

50 ml	200 ml
30277150	30277200

Technical Data

Colour	red
For threaded joints up to	M 36
Viscosity at +25°C *(+77°F)* 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 *(5.075 - 6.525 psi)*
Handling strength at room temperature	40 - 60 min.
Final strength at room temperature	6 - 12 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 302-80

Pipe and Thread Sealing for passive materials*

higher viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30280020	30280150	30280200

Technical Data

Colour	green
For threaded joints up to	M 36
Viscosity at +25°C *(+77°F)* 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 *(2.900 - 4.350 psi)*
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +180°C *(-76 up to +356°F)*

*

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

Pipe and Thread Sealing

AN 305-11

Pipe and Thread Sealing
DVGW approval

higher viscosity
medium strength
disassembly with normal tools

50 ml	200 ml
30511150	30511200

Technical Data

Colour	white
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* 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 *(580 - 870 psi)*
Handling strength at room temperature	20 - 40 min.
Final strength at room temperature	5 - 10 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 305-42

Hydraulic and Pneumatic Sealing
DVGW certificated

medium viscosity
medium strength
disassembly with normal tools

20 ml	50 ml	200 ml
30542020	30542150	30542200

Technical Data

Colour	brown
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C *(+77°F)* 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 *(1.160 - 1.740 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 305-67

New

Pipe and flange sealing with PTFE, gap filling capacity max. 0,60 mm

high viscosity
low strength
easy disassembly

50 ml ✓ 30567150
200 ml ✓ 30567200

Technical Data

Colour	white
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* Brookfield	170.000 - 410.000 mPa·s
Gap filling capacity max.	0,60 mm
Breakaway strength (Thread)	3 - 5 Nm
Prevailing strength (Thread)	2 - 4 Nm
Shear strength (DIN 54452)	6 - 8 N/mm² *(870 - 1.160 psi)*
Handling strength at room temperature	120 - 240 min.
Final strength at room temperature	24 - 72 h
Temperature resistance	-50 to +175°C *(-58 to +347°F)*

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

Technical Data

Colour	white
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* 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 *(580 - 870 psi)*
Handling strength at room temperature	20 - 40 min.
Final strength at room temperature	5 - 10 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

Anaerobic Adhesives and Sealants

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	200 ml
30577150	30577200

Technical Data

Colour	yellow
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* 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 *(870 - 1.885 psi)*
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	1 - 3 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 305-86

Pipe Sealing, extra strong

higher viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30586020	30586150	30586200

Technical Data

Colour	red
For threaded joints up to	M 56 R 2“
Viscosity at +25°C *(+77°F)* 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 *(1.450 - 2.900 psi)*
Handling strength at room temperature	60 - 90 min.
Final strength at room temperature	12 - 24 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

Thread Sealing Cord DF 175

For metal and plastic threads

WEICON DF 175 is a patented thread sealing cord made of 100% PTFE that seals almost all metal and plastic threads permanently and safely. WEICON DF 175 reliably compensates the intermediate space on the threads and creates a PTFE film in the required thickness during the screwing procedure. This film is extremely resistant to almost all chemicals, even the most aggressive solvents, caustic agents, and acids.

WEICON DF 175 is non-flammable and operates reliably in a temperature range from -200°C *(-328°F)* to +240°C *(+464°F)*.

In contrast to other sealing materials, for which the fabric solely acts as a base for the actual sealant, WEICON DF 175 itself is the sealing material. A separation of the base material and the sealing material over the service life of the screw connection is thus excluded.

WEICON DF 175 is very economical: 1 roll replaces up to 20 rolls of PTFE tape (12 mm x 0,1 mm x 12 m).

WEICON DF 175 is durable for an unlimited period of time and stays permanently soft and elastic.

175 m plastic can
30010175

DIN DVGW

BAM
Federal Institute for Materials Research and Testing

TZW
Technologiezentrum Wasser
Karlsruhe
Prüfstelle Wasser

WRAS

WEICON DF 175 is used

- for almost all sealing of plastic and metal threads
- for ducts and pipes in which extremely aggressive media are transported
- in connection with gaseous or liquid media, such as oxygen, propane, butane and many more
- in the area of drinking water
- in extreme temperature ranges between -200°C *(-328°F)* and +240°C *(+464°F)*
- in the area of solar applications
- wherever an unscrewing of the connection (tested up to 45°) without weakening of the sealing effect is required

Anaerobic Adhesives and Sealants

Pipe and Thread Sealing

Properties and advantages:

- Monofilament (one cord) made of 100% PTFE
- Resistant to mould, bacteria, and fungus
- Resistant to microbiological stress and non-oxidizing
- Resistant to organic and inorganic chemicals, such as mineral acids, peroxides, hydrocarbons,chlorinated solvents, etc.
- Suitable for almost all thread connections
- Tested and approved by the most well-known international testing institutes or standards, such as KTW, WRAS, BAM, DVGW, UL
- Cost- and time-saving application
- Easy and fast installation from a practical dispenser with an integrated 360° cutter

Instructions for use:

Wind up the sealing cord from the beginning of the pipe in direction of the thread, overlapping randomly. Make sure that enough material has been applied at the beginning of the pipe. Apply 2-3 drops of the lubricant (in the removable bottom) on the sealing thread and spread it with the fingers on the sealed area. The lubricant is harmless and biodegradable (do not use lubricant in combination with liquid oxygen).

Observe the following guideline:

½“ - 12 (fine thread) to 18 (coarse thread) windings
1½“- 16 (fine thread) to 24 (coarse thread) windings
The number of windings must be accordingly adapted to the diameter of the pipe.

Approvals:

- DVGW for gas according to DIN EN 751-3 FRp and GRp and DIN 30660
- Unscrewing up to 45° tested and certified by DVGW
- Drinking water test according to the KTW recommendation of the Bundesgesundheitsamt (German Health Authority)
- DVGW test up to 100 bar according to DIN EN 751-3 FRp and GRp at room temperature
- BAM-tested for oxygen, gaseous: up to 30 bar/+100°C *(+212°F)* (application with lubricant)
- BAM-tested for oxygen, liquid: up to 30 bar/+100°C *(+212°F)* (application without lubricant)
- WRC approval for Great Britain
- UL-listed: sealing material 19BN File MH26734, up to max. 1½“, for pipelines in combination with petrol, petroleum, propane, butane, naphtha, gas (<300 psig)
- ASTM F423 tested for steam and cold water
- KIWA GASTEC Qa (NL): norm. 31, Class “20”

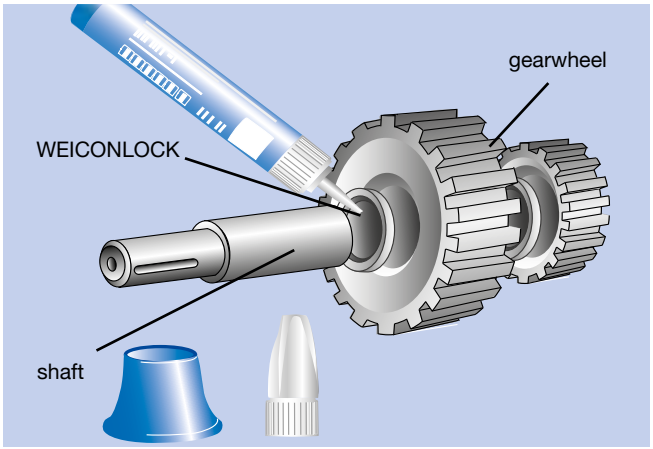

Pen-System
WEICON
Design Pat. 00159884

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.

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 *(+77°F)* 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 *(2.900 - 3.625 psi)*
Handling strength at room temperature	approx. 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

Anaerobic Adhesives and Sealants

Retaining Cylindrical Assemblies

AN 301-48*

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

Technical Data

Colour	green
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C *(+77°F)* 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 *(3.625 - 4.350 psi)*
Handling strength at room temperature	2 - 6 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +175°C *(-76 up to +347°F)*

medium viscosity
high strength
hard to disassemble

20 ml	50 ml	200 ml
30148020	30148150	30148200

*

WEICONLOCK® »White Line«

The products AN 301-38, 301-48, 301-65 and 301-72 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. 1272/2008
- Increased safety at work and health protection
- Excellent resistance to chemicals after curing
- Temperature-resistant up to +200°C *(+392°F)*[2]

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

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

Technical Data

Colour	transparent
For threaded joints up to	M 20 R 3/4“
Viscosity at +25°C *(+77°F)* 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 *(3.625 - 5.075 psi)*
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +175°C *(-76 up to +347°F)*

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 *(+77°F)* 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)	18 - 23 N/mm² *(2.610 - 3.335 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

Anaerobic Adhesives and Sealants

Retaining Cylindrical Assemblies

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

Technical Data

Colour	green
For threaded joints up to	M 12
Viscosity at +25°C *(+77°F)* 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 *(2.175 - 2.610 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

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 *(+77°F)* 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 *(3.625 - 5.075 psi)*
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +180°C *(-76 up to +356°F)*

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 *(+77°F)* 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 *(2.175 - 3.625 psi)*
Handling strength at room temperature	20 - 40 min.
Final strength at room temperature	approx. 24 h
Temperature resistance	-60 up to +200°C *(-76 up to +392°F)*

Retaining Cylindrical Assemblies

AN 306-30

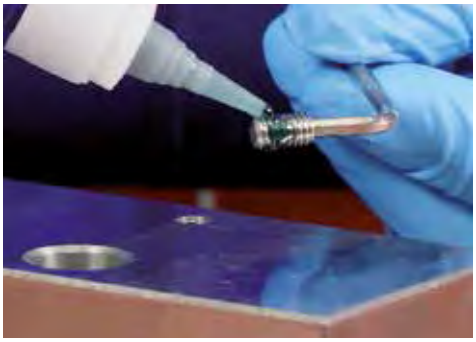
Retaining cylindrical assemblies for passive materials*, BAM approval for oxygen

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 *(+77°F)* 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 *(2.900 - 4.350 psi)*
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +180°C *(-76 up to +356°F)*



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 *(+77°F)* 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 *(3.625 - 4.350 psi)*
Handling strength at room temperature	approx. 5 min.
Final strength at room temperature	1 - 3 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

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 *(+77°F)* 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 *(2.175 - 4.350 psi)*
Handling strength at room temperature	approx. 240 min.
Final strength at room temperature	approx. 24 h
Temperature resistance	-60 up to +200°C *(-76 up to +392°F)*

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 *(+77°F)* 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 *(1.160 - 1.740 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

Anaerobic Adhesives and Sealants

Retaining Cylindrical Assemblies

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 *(+77°F)* 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 *(3.625 - 5.075 psi)*
Handling strength at room temperature	approx. 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +175°C *(-76 up to +347°F)*


Pen-System
WEICON
Design Pat. 00159884

Anaerobic Adhesives and Sealants

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 *(+77°F)* 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 *(3.625 - 5.075 psi)*
Handling strength at room temperature	2 - 5 min.
Final strength at room temperature	2 - 4 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 306-60

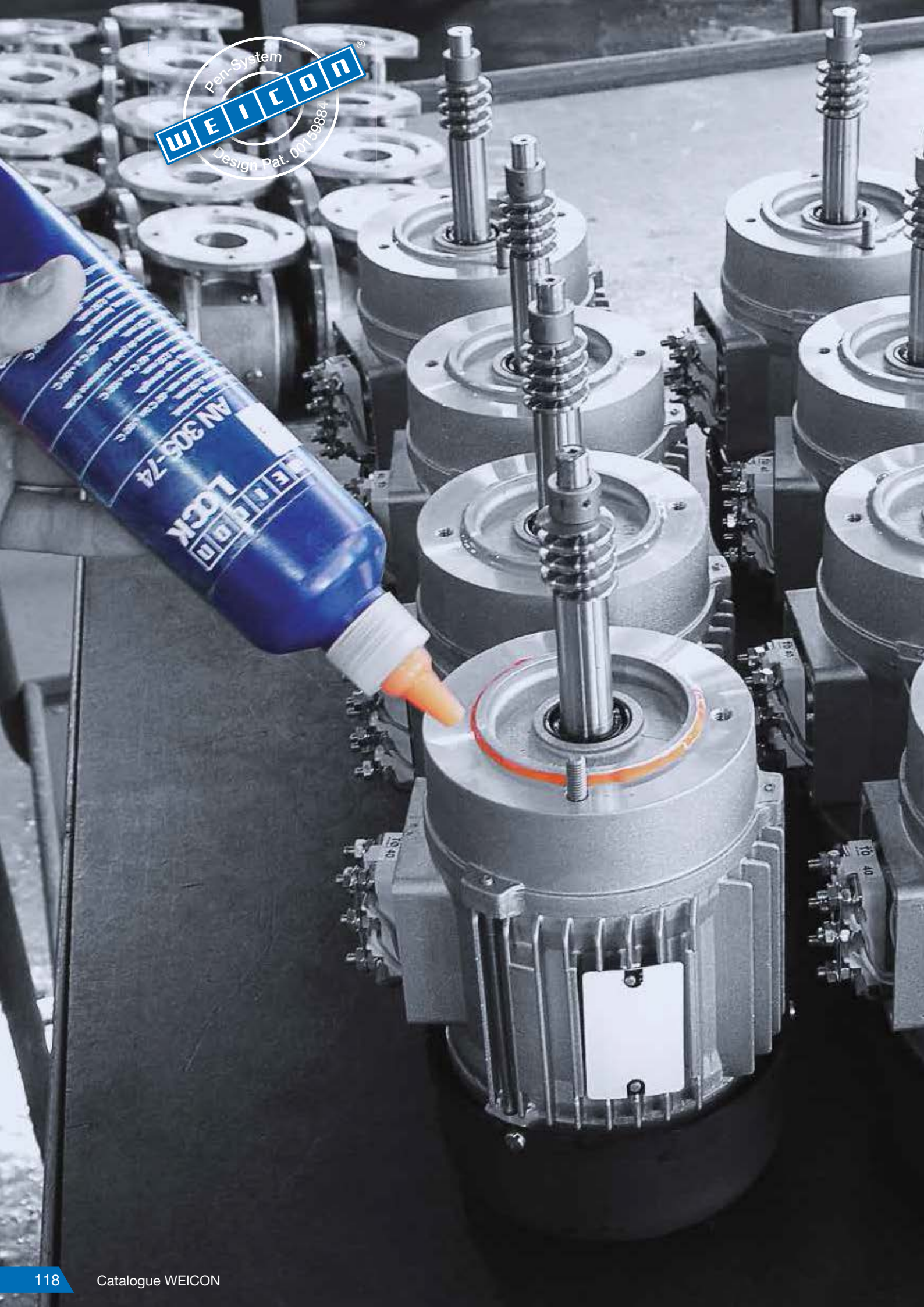
Assembly of cylindrical parts for worn out bearing rings and bushings

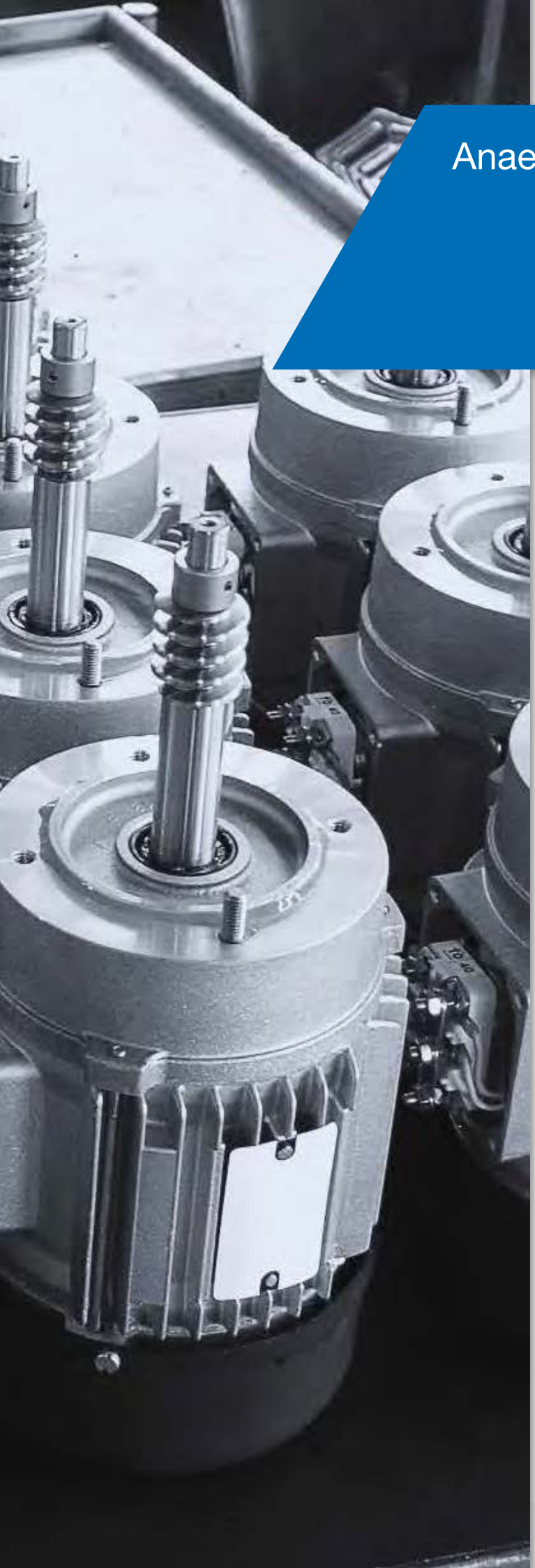
high viscosity
high strength
hard to disassemble

50 ml	200 ml
30660150	30660200

Technical Data

Colour	silver
For threaded joints up to	R 2“
Viscosity at +25°C *(+77°F)* 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 - 30 N/mm² *(3.625 - 4.350 psi)*
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*


Pen-System
WEICON
Design Pat. 00159884
AN 305-7A
LOCK

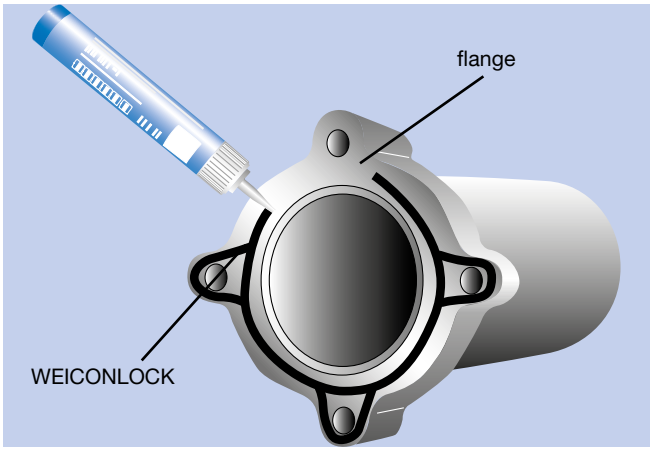


Anaerobic Adhesives and Sealants

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.

AN 301-65* New

Pipe and flange sealing with PTFE, marking-free formulation, NSF[1] ANSI 61 approval for the drinking water sector, DVGW[2] certified

high viscosity
medium strength
disassembly with normal tools

50 ml	200 ml
30165150	30165200

Technical Data

Colour	white
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* Brookfield	180.000 - 300.000 mPa·s
Gap filling capacity max.	0,50 mm
Breakaway strength (Thread)	4 - 8 Nm
Prevailing strength (Thread)	1 - 3 Nm
Shear strength (DIN 54452)	2 - 6 N/mm² *(290 - 870 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	24 h
Temperature resistance	-60 to +150°C *(-76 to +302°F)*

* The products AN 301-65 and AN 301-72 belong to the new WEICONLOCK »White Line«. More information on page 109.

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	200 ml
30172150	30172200

Technical Data

Colour	white
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* 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 *(725 - 1.015 psi)*
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	6 - 12 h
Temperature resistance	-60 up to +200°C *(-76 up to +392°F)*

Anaerobic Adhesives and Sealants

Flange Sealing and Gasketing

AN 305-10

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

high viscosity
high strength
hard to disassemble

50 ml	200 ml
30510150	30510200

Technical Data

Colour	orange
For threaded joints up to	---
Viscosity at +25°C *(+77°F)* 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 *(725 - 1.450 psi)*
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	6 - 12 h
Temperature resistance	-60 up to +200°C *(-76 up to +392°F)*

AN 305-18

Flange sealing for filling large gaps immediate sealing effect, high temperature resistant

high viscosity
high strength
hard to disassemble

50 ml	200 ml
30518150	30518200

Technical Data

Colour	red
For threaded joints up to	---
Viscosity at +25°C *(+77°F)* 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 *(1.160 - 1.885 psi)*
Handling strength at room temperature	10 - 20 min.
Final strength at room temperature	3 - 6 h
Temperature resistance	-60 up to +200°C *(-76 up to +392°F)*

AN 305-67

New

Pipe and flange sealing with PTFE, gap filling capacity max. 0,60 mm

high viscosity
low strength
easy disassembly

50 ml	200 ml
30567150	30567200

Technical Data

Colour	white
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* Brookfield	170.000 - 410.000 mPa·s
Gap filling capacity max.	0,60 mm
Breakaway strength (Thread)	3 - 5 Nm
Prevailing strength (Thread)	2 - 4 Nm
Shear strength (DIN 54452)	6 - 8 N/mm² *(870 - 1.160 psi)*
Handling strength at room temperature	120 - 240 min.
Final strength at room temperature	24 - 72 h
Temperature resistance	-50 to +175°C *(-58 to +347°F)*

AN 305-72

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

high viscosity
medium strength
disassembly with normal tools

50 ml	200 ml
30572150	30572200

Technical Data

Colour	white
For threaded joints up to	M 80 R 3“
Viscosity at +25°C *(+77°F)* 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 *(580 - 870 psi)*
Handling strength at room temperature	20 - 40 min.
Final strength at room temperature	5 - 10 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

Anaerobic Adhesives and Sealants

Flange Sealing and Gasketing

AN 305-73

Gasketing of flanges, gearboxes and other motor housings

high viscosity
low strength
easy disassembly

50 ml	200 ml
30573150	30573200

Technical Data

Colour	light green
For threaded joints up to	---
Viscosity at +25°C *(+77°F)* 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 *(580 - 870 psi)*
Handling strength at room temperature	20 - 40 min.
Final strength at room temperature	approx. 12 h
Temperature resistance	-60 up to +150°C *(-76 up to +302°F)*

AN 305-74

Gasketing of flanges, gearboxes and other motor housings

high viscosity
high strength
hard to disassemble

50 ml	200 ml
30574150	30574200

Technical Data

Colour	orange
For threaded joints up to	---
Viscosity at +25°C *(+77°F)* 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 *(725 - 1.450 psi)*
Handling strength at room temperature	15 - 30 min.
Final strength at room temperature	approx. 12 h
Temperature resistance	-60 up to +180°C *(-76 up to +356°F)*

Type-No.	Application	Features	Colour	For threaded joints up to	Viscosity in mPa·s at +25°C *(+77°F)* Brookfield	Gap filling capacity in mm max.
AN 301-43	Threadlocking, DVGW² /NSF approval	medium strength, higher viscosity	blue	M 36	2.000 - 8.000 mt	0,25
New AN 301-65	Pipe and flange sealing (with PTFE), DVGW² /NSF approval	medium strength, high viscosity	white	M 80 R 3“	180.000 - 300.000	0,50
AN 301-70	Threadlocking, NSF approval	high strength, medium viscosity	green	M 25	500 - 900 nt	0,15
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
AN 301-38	Retaining cylindrical assemblies, NSF approval	high strength, medium viscosity	green	M 36	2.000 - 3.000 mt	0,20
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 /KTW¹ 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 strengh, medium viscosity	red	M 20 R ¾“	500 nt	0,15
AN 302-72	Locking of threads and stud bolts, DVGW²-approval	high strengh, 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 strengh, high viscosity	green	M 80 R 3“	14.000 - 24.000 mt	0,30
AN 302-77	Sealing of threaded pipes and fittings	high strengh, higher viscosity	red	M 36	6.000	0,25
AN 302-80	Sealing of threaded pipes and fittings for passive materials	high strengh, 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
New AN 305-67	Pipe and flange sealing (with PTFE)	low strength, high viscosity	white	M 80 R 3“	170.000 - 410.000	0,60
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 strengh, 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 strengh, 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/KTW¹ approval	high strengh, 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 strengh, higher viscosity	green	M 36	3.000 - 6.000 mt	0,20
AN 306-38	Retaining cylindrical assemblies	high strengh, medium viscosity	green	M 36	2.500 mt	0,20
AN 306-40	Retaining cylindrical assemblies	high strengh, 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 strengh, 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 strengh, high viscosity	silver	R 2“	150.000 - 900.000 ht	0,50
AN 305-10	Flange sealing, AGA*⁴ approval	high strengh, high viscosity	orange	---	70.000 - 300.000 ht	0,50
AN 305-18	Flange sealing	high strengh, high viscosity	red	---	80.000 - 500.000 ht	0,50
New AN 305-67	Pipe and flange sealing (with PTFE)	low strength, high viscosity	white	M 80 R 3“	170.000 - 410.000	0,60
AN 305-72	Pipe and flange sealing (with PTFE) DVGW² 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 strengh, high viscosity	orange	---	30.000 - 100.000 ht	0,50

*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 mm, l/d = 0,88

Anaerobic Adhesives and Sealants

WEICONLOCK®

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 *(1.450 - 1.885 psi)*	5 -15	1 - 3	-60°C to +150°C *(-76°F to +302°F)*
4 - 8	1 - 3	2 - 6 *(290 - 870 psi)*	10 - 20	24	-60°C to +150°C *(-76°F to +302°F)*
25 - 35	40 - 50	14 - 20 *(2.030 - 2.900 psi)*	5 - 15	5 - 10	-60°C to +150°C *(-76°F to +302°F)*
5 - 10	4 - 6	5 - 7 *(725 - 1.015 psi)*	15 - 30	6 - 12	-60°C to +200°C *(-76°F to +392°F)*
30 - 40	45 - 60	20 - 25 *(2.900 - 3.625 psi)*	approx. 5	2 - 4	-60°C to +150°C *(-76°F to +302°F)*
25 - 30	40 - 55	25- 30 *(3.625 - 4.350 psi)*	2 - 6	2 - 4	-60°C to +175°C *(-76°F to +347°F)*
7 - 10	3 - 6	4 - 7 *(580 - 1.015 psi)*	10 - 20	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
4 - 8	2 - 4	3 - 5 *(435 - 725 psi)*	10 - 20	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
12 - 16	18 - 24	8 - 12 *(1.160 - 1.740 psi)*	10 - 20	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
10 - 15	12 - 16	8 - 12 *(1.160 - 1.740 psi)*	10 - 20	approx. 3	-60°C to +150°C *(-76°F to +302°F)*
14 - 18	5 - 8	8 - 12 *(1.160 - 1.740 psi)*	10 - 20	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
17 - 22	8 - 12	9 - 13 *(1.305 - 1.885 psi)*	10 - 20	1 - 3	-60°C to +150°C *(-76°F to +302°F)*
30 - 35	55 - 70	25 - 35 *(3.625 - 5.075 psi)*	2 - 5	2 - 4	-60°C to +175°C *(-76°F to +347°F)*
30 - 35	55 - 70	25 - 35 *(3.625 - 5.075 psi)*	2 - 5	2 - 4	-60°C to +180°C *(-76°F to +356°F)*
20 - 25	40 - 55	10 - 15 *(1.450 - 2.175 psi)*	10 - 20	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
28 - 35	50 - 65	15 - 20 *(2.175 - 2.900 psi)*	10 - 20	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
28 - 35	50 - 65	15 - 20 *(2.175 - 2.900 psi)*	10 - 20	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
20 - 30	40 - 75	10 - 15 *(1.450 - 2.175 psi)*	20 - 40	5 - 10	-60°C to +230°C *(-76°F to +446°F)*
15 - 25	30 - 40	8 - 12 *(1.160 - 1.740 psi)*	5 - 20	approx. 3	-60°C to +150°C *(-76°F to +302°F)*
5 - 8	2 - 4	3 - 5 *(435 - 725 psi)*	15 - 30	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
10 - 15	12 - 18	8 - 12 *(1.160 - 1.740 psi)*	15 - 30	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
40 - 50	40 - 50	15 - 25 *(2.175 - 3.625 psi)*	15 - 30	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
30 - 40	10 - 15	35 - 45 *(5.075 - 6.525 psi)*	40 - 60	6 - 12	-60°C to +150°C *(-76°F to +302°F)*
35 - 45	50 - 70	20 - 30 *(2.900 - 4.350 psi)*	2 - 5	2 - 4	-60°C to +180°C *(-76°F to +356°F)*
7 - 10	2 - 4	4 - 6 *(580 - 870 psi)*	20 - 40	5 - 10	-60°C to +150°C *(-76°F to +302°F)*
12 - 15	18 - 22	8 - 12 *(1.160 - 1.740 psi)*	10 - 20	2 - 4	-60°C to +150°C *(-76°F to +302°F)*
3 - 5	2 - 4	6 - 8 *(1.160 - 1.740 psi)*	120 - 240	24 - 72	-50°C to +175°C *(-58°F to +347°F)*
7 - 10	2 - 4	4 - 6 *(580 - 870 psi)*	20 - 40	5 - 10	-60°C to +150°C *(-76°F to +302°F)*
18 - 22	10 - 14	6 - 13 *(870 - 1.885 psi)*	15 - 30	1 - 3	-60°C to +150°C *(-76°F to +302°F)*
15 - 30	25 - 45	10 - 20 *(1.450 - 2.900 psi)*	60 - 90	12 - 24	-60°C to +150°C *(-76°F to +302°F)*
30 - 35	55 - 70	25 - 35 *(3.625 - 5.075 psi)*	2 - 5	2 - 4	-60°C to +175°C *(-76°F to +347°F)*
25 - 30	50 - 60	18 - 23 *(2.610 - 3.335 psi)*	10 - 20	2 - 4	-60°C to +150°C *(-76°F to +302°F)*
25 - 30	50 - 60	15 - 18 *(2.175 - 2.610 psi)*	10 - 20	2 - 4	-60°C to +150°C *(-76°F to +302°F)*
30 - 35	55 - 70	25 - 35 *(3.625 - 5.075 psi)*	2 - 5	2 - 4	-60°C to +180°C *(-76°F to +356°F)*
28 - 36	40 - 55	15 - 25 *(2.175 - 3.625 psi)*	20 - 40	approx. 24	-60°C to +200°C *(-76°F to +392°F)*
35 - 45	50 - 70	20 - 30 *(2.900 - 4.350 psi)*	2 - 5	2 - 4	-60°C to +180°C *(-76°F to +356°F)*
35 - 45	50 - 70	25 - 30 *(3.625 - 4.350 psi)*	approx. 5	1 - 3	-60°C to +150°C *(-76°F to +302°F)*
20 - 30	30 - 40	15 - 30 *(2.175 - 4.350 psi)*	approx. 240	approx. 24	-60°C to +200°C *(-76°F to +392°F)*
12 - 15	17 - 22	8 - 12 *(1.160 - 1.740 psi)*	10 - 20	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
30 - 35	55 - 70	25 - 35 *(3.625 - 5.075 psi)*	approx. 5	2 - 4	-60°C to +175°C *(-76°F to +347°F)*
35 - 45	55 - 70	25 - 35 *(3.625 - 5.075 psi)*	2 - 5	2 - 4	-60°C to +150°C *(-76°F to +302°F)*
35 - 45	10 - 20	25 - 30 *(3.625 - 4.350 psi)*	15 - 30	3 - 6	-60°C to +150°C *(-76°F to +302°F)*
18 - 25	15 - 25	5 - 10 *(725 - 1.450 psi)*	15 - 30	6 - 12	-60°C to +200°C *(-76°F to +392°F)*
12 - 18	18 - 24	8 - 13 *(1.160 - 1.885 psi)*	10 - 20	3 - 6	-60°C to +200°C *(-76°F to +392°F)*
3 - 5	2 - 4	6 - 8 *(1.160 - 1.740 psi)*	120 - 240	24 - 72	-50°C to +175°C *(-58°F to +347°F)*
7 - 10	2 - 4	4 - 6 *(580 - 870 psi)*	20 - 40	5 - 10	-60°C to +150°C *(-76°F to +302°F)*
6 - 10	2 - 5	4 - 6 *(580 - 870 psi)*	20 - 40	approx. 12	-60°C to +150°C *(-76°F to +302°F)*
16 - 24	5 - 10	5 - 10 *(725 - 1.450 psi)*	15 - 30	approx. 12	-60°C to +180°C *(-76°F to +356°F)*

Technical Data

WEICONLOCK (Cured)

- Addmissible 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^{15} Ohm • cm
- Dielectric coefficient (50 Hz - 1 MHz) — approx. 4
- Dielectric strength — approx. 10 kV/mm
- Temperature of decomposition — from approx. +250°C *(+482°F)*
- Chemically resistant against — water, oil, fuel, organic solvents, refrigerants, gases

General physical data

WEICONLOCK (Liquid)

- Density — ca 1,1 g/cm³
- pH-value — < 7
- Flashpoint (ISO 2592) — > +100°C *(+212°F)*
- Vapour pressure at +25°C *(+77°F)* — < 0,1 Torr
- Solubility — in acetone and similar products
- Storage life at +20°C *(+68°F)* — approx. 12 month in original package

[1] KTW test (Technologiezentrum Wasser TZW Karlsruhe) for use in drinking water systems (plastics and rubber)
[2] DVGW Certificate for use in gas supply and hot water systems
[3] BAM Approval (Bundesanstalt für Materialforschung und -prüfung BAM Tgb.-No. 4045/96 - II 2.402 for gaseous oxygen up to max. +60°C *(+140°F)* operating temperature and 10 bar oxygen pressure).
[4] AustralianGasAssociation - 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 *(+104°F)*.

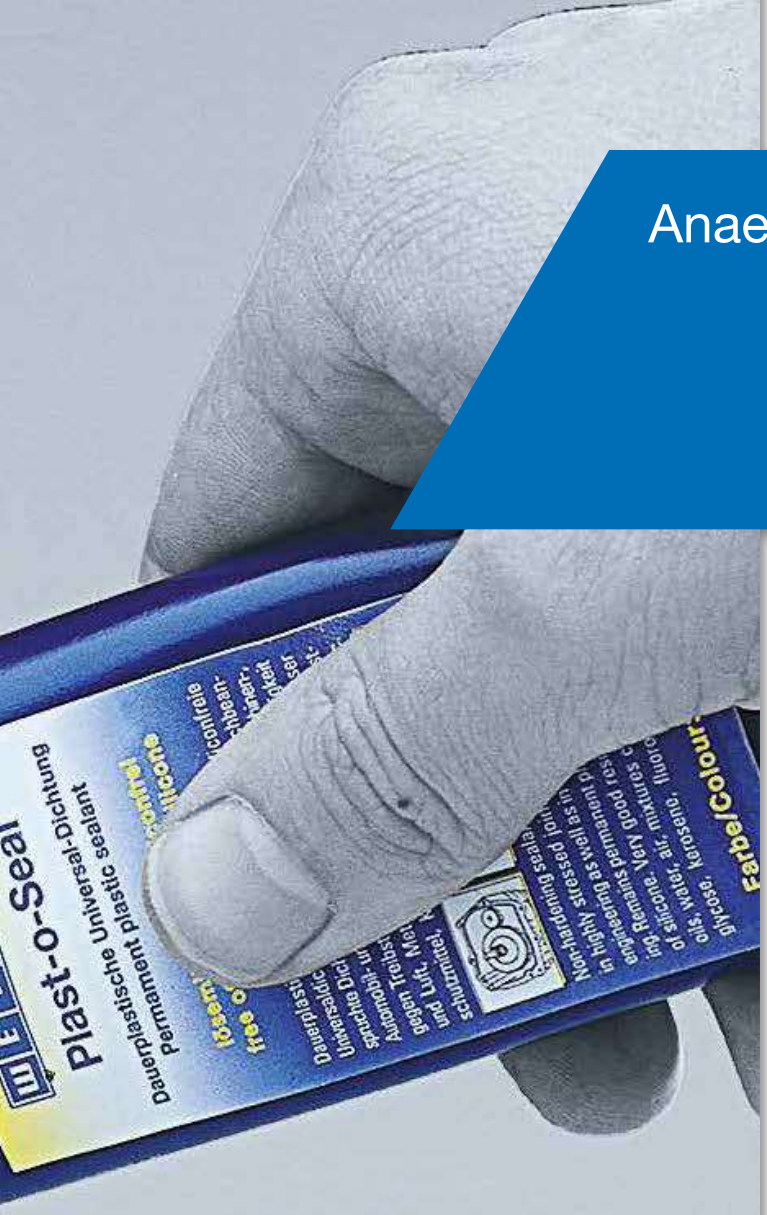
All recommendations and technical data are based on laboratory tests and extensive experiences by users. They have been compiled with greatest care but we take no warranty of any kind and accept no liability for the results obtained.

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

Features and advantages:

- for sealing the smoothly treated flanges of machine, gearbox and motor casing flanges
- to improve the performance of both old and new gaskets made from paper, cork, felt etc.
- solvent free – odourless

- remains permanently plastic, before and after assembly
- easy joint dismantling
- economical in use
- very good resistance to most fuels, mineral oils, water, air, coolant mixtures based on methanol and glycol, antifreezes, kerosene, fluorocarbon refrigerants etc.



Anaerobic Adhesives and Sealants

Flange Sealing and Gasketing

Plast-o-Seal®

Permanently plastic universal sealant, solvent free with no unpleasant odour enables immediate assembly

90 g	120 g	300 g
30000090	30000120	30000300
tube	brush-top can	cartridge

- max. gap filling capability up to 0,10 mm (without a gasket)
- non-sag can be applied to vertical surfaces
- temperature resistant from -50°C to +200°C *(-58 to +392°F)* briefly up to +250°C *(+482°F)*

- compensates for manufacturing defects such as scoring and scratches enabling accurate assembly
- allows accurate assembly and construction with low tolerances
- no need to overtighten fixings during assembly
- non corrosive
- neither contains any substances that disturb lacquer wettings (e.g. silicone)
- fluorescent blue colour

Technical Data

Colour	blue (fluorescent)
For threaded joints up to	---
Viscosity at +25°C *(+77°F)* Brookfield	950.000 - 1.650.000 mPa·s
Gap filling capacity max.	max 0,10 mm without gasket
Working temperature	+5°C up to +35°C *(+41 up to +95°F)*
Basis	polyester resin
Shelf life	24 months at room temperature (approx. +20°C/*+68°F*)
Temperature resistance	-50 up to +200°C *(-58 up to +392°F)* briefly up to +250°C *(+482°F)*

Cyanoacrylate Adhesives

WEICON Cyanoacrylate Adhesives are coldcuring one-component adhesives, free of solvents. They quickly polymerise by reacting with moisture both on the surfaces to be bonded and from the air, and cure under light pressure.

They will bond within seconds almost all materials to and among each other, such as:

- metals
- glass
- wood
- natural and synthetic rubber
- plastics
- ceramics
- leather

When using WEICON Cyanoacrylate Adhesives, unlike in the case of welding and soldering, surfaces remain unaltered. No material stress occurs. Thus, more simple and rapid assembly is often possible, and auxiliary fixing devices are not necessary.

The resulting advantages are numerous:

- enormous time and, therefore, cost savings
- immediate on-processing of fixed parts possible
- high bond strength up to material fracture
- clean and optically appealing bondings

WEICON Cyanoacrylate Adhesives provide high structural strength, with a temperature resistance from -50°C *(-58°F)* to up to +140°C *(+284°F)* and good levels of resistance to a lot of chemicals. In many instances, the cured bond joint proves to be harder than the material of the bonded parts (material fracture).

A wide range of product types is available for a variety of applications. The types differ chemically and by their viscosity.

Ethyl ester based types

Due to the size of the molecules and the resulting anchoring points positioned far from each other, a higher elasticity of the bond joint is achieved. These types are recommended for bonding plastics and rubber.

Alkoxy ethyl based types

Also with adhesives on this basis there is flexibility concerning the curing due to the similar molecule structure. However, its particular characteristic is its low odour and, therefore, user-friendly processability especially with assembly line manufacturing.

When cured, they are less sensitive to humidity and should be applied in those instances where the white “blooming” of the bond line is not tolerated for optical reasons.

Methyl ester based types

Due to their small molecule structure and closely positioned anchoring points, these types are less flexible after curing. Therefore, they offer particularly good application possibilities for bonding metals.

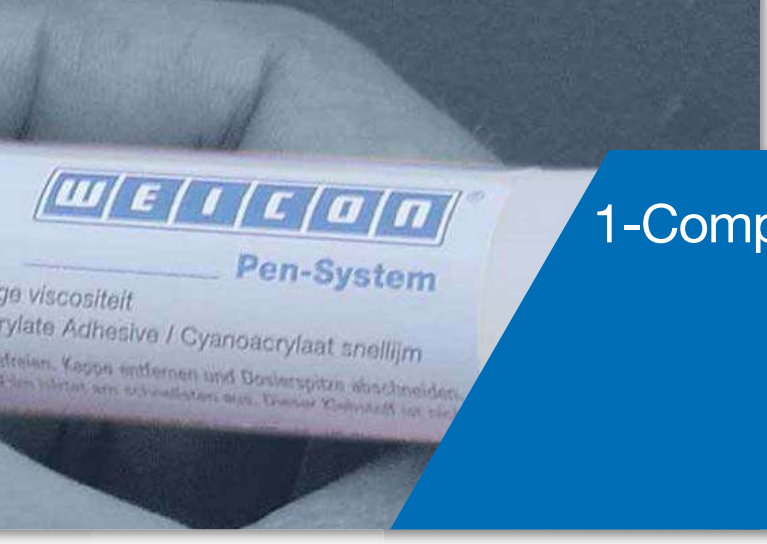
Technical product information, a table showing the various different types and basic information on cyanoacrylate adhesives are available on the following pages.

Continuous development and adaptation to the latest demands based on practical experience and the environment guarantee, furthermore, constantly high quality standards.

Bonding of Plastics with WEICON Cyanoacrylate Adhesives

Thermoplastics, like for example polystyrene, styrene butadiene, styrene acryl nitrile, polymethylmethacrylate, polycarbonate and polyvinylchloride as well as polyamide, which are most frequently used in industry, can be bonded well with the right WEICON Cyanacrylate Adhesive. With plastics like polyethylene, polypropylene, polyacetal, polytetrafluor ethylene and other fluorite hydrocarbons with their natural adhesive aversive surfaces, an insufficient wetting of the surface takes place, and the adhesive cannot anchor itself to the surface structure. Only if these materials are pretreated with WEICON Contact Primer, their surfaces are activated and therefore able to bond.

Duroplastics like melamine formaldehyde resin, urea formaldehyde resin, epoxy and polyester resins can be bonded well with WEICON Contact; phenal formaldehyde resins, however, can only be bonded under certain conditions. For each type of plastic a specific strength results; that is why test bonding should always be carried out.



Cyanoacrylate Adhesives

Contact Primer for Polyolefines (see Ancillary Products and Accessories)

Without pre-treatment, many plastics are unable to bond or bond only under certain conditions. When these plastics are pre-treated with WEICON Contact Primer, their surface structure changes. Thereby the joining of plastics, like polyethylene (PE) and polypropylene (PP) belonging to the polyolefine group, which are usually difficult to bond, is made possible.

Even modern thermoplastic elastomers (TPE), PTFE and related plastics as well as silicones, can be bonded when pre-treated with WEICON Contact Primer.

10 ml ✓ 12450010

100 ml ✓ 12450100

Contact Activator

The Activator speeds up the curing process of WEICON Cyanoacrylate Adhesives.

When applied to absorbing surfaces, like for example wood or foam etc., and all chemically-treated surfaces, like for example zinc galvanized metals etc., the Activator's effectiveness lasts approx. one minute.

With non-absorbent surfaces the Activator's effectiveness lasts up to approx. twelve hours.

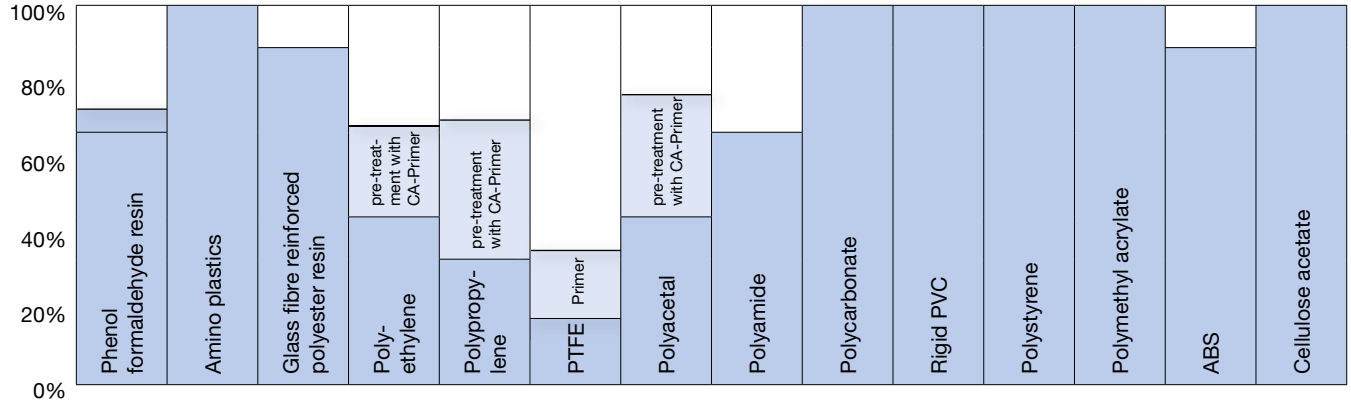
Use is recommendable with:

- highly viscous WEICON Contact types
- large thickness of the adhesive layer
- absorbing and porous surfaces
- passive materials (alkaline surfaces, like for example zinc coated metal parts).
- disadvantageous environmental conditions (low temperatures, too low air humidity < 30%)

150 ml ✓ 12500150
CA- Aktivator Spray

150 ml ✓ 12505150
CA- Aktivator Spray AC (based on acetone)

Combined tension and shear resistance



Test spec. DIN 53281:	100 x 25 x 1,5 mm
Adhesive:	WEICON Contact VA 8406
Overlapping:	12 mm
Pre-treatment:	cleaned with WEICON Surface Cleaner and surface made coarse
Bonding:	Normal climate DIN 50014, +23°C *(+73°F)* and 50% rel. air humidity
Test speed:	10 mm/min.

General Information

Directions for use

- To ensure a perfect bonding, the surfaces to be joined must be clean and dry (to clean and degrease use e.g. WEICON Surface Cleaner).
- Smooth surfaces should be mechanically roughened.
- Apply WEICON Contact Cyanoacrylate Adhesive only on one of the surfaces to be bonded.
- The bond line should be between 0.05 mm and max. 0.2 mm in thickness. Otherwise complete curing cannot be guaranteed.
- For bonding large surfaces WEICON Contact Cyanoacrylate Adhesive should be applied drop by drop to avoid inner tensions.
- WEICON Contact Cyanoacrylate Adhesives are very economical. One drop is sufficient to cover approx. 3 - 5 cm² of bonded surface.
- The parts to be joined should be bonded in an atmosphere of 40 - 80 % relative humidity. In conditions of below 40%, the cure will be considerably slowed or even inhibited. With a relative air humidity of more than 80% or with basic substrates (e.g. glass), shock-curing can occur. In such cases, some materials show a drop in bond strength of 10 – 15 %, due to inner tensions in the bond line.
- Basic-reacting surfaces (pH-value >7) will speed up the cure whereas acidic-reacting surfaces will retard and, under extreme conditions, completely inhibit the polymerization.

Physiological Properties

Health and safety at work

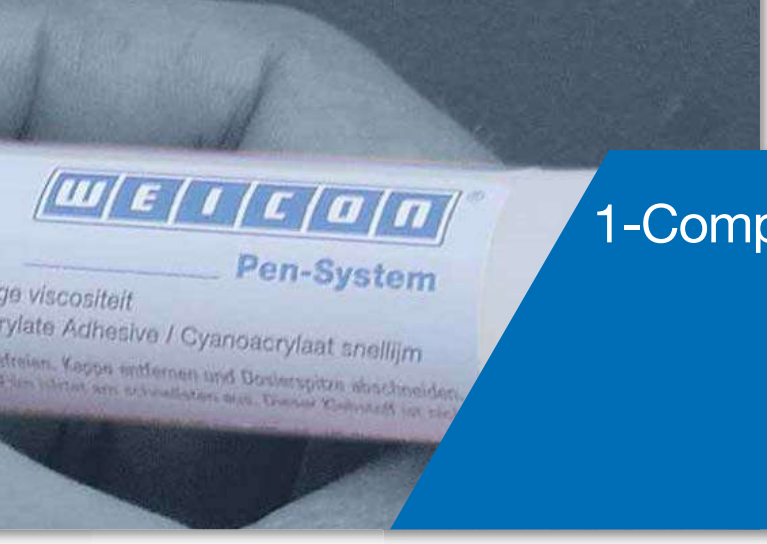
Physiologically, WEICON Cyanoacrylate Adhesives may be considered as essentially harmless. However, ensure sufficient ventilation of workplaces to cope with the adhesive's typical vapours. Vapours of WEICON Contact may cause irritation of the mucous membranes and the eyes. Avoid contact with skin and eyes (wear gloves and protective goggles). The use of WEICON Hand Protective Foam prevents skin irritation and hand cleaning problems

Storage

WEICON Cyanoacrylate Adhesives should always be stored in a cool, dry and dark place. The shelf life is at least 9 months if stored at room temperature (+18/*+64°F* to +25°C/*+77°F*). If stored at +5°C (*+41°F)* (e.g. in a refrigerator), the shelf life can be extended to 12 months.

Conversions

(°C x 1.8) +32 = °F	MPa x 145 = psi
kV/mm x 25.4 = V/mil	MPa x 0.145 = KSI
mm / 25.4 = inches	mPa·s = cP
µm / 25.4 = mil	N·m x 8.851 = lb·in
N x 0.225 = lb	N·m x 0.738 = lb·ft
N/mm x 5.71 = lb/in	N·mm x 0.142 = oz·in
N/mm x 5.71 = pli	kg x 2.2046 = lb
N/mm² x 145 = psi	



1-Component Adhesives and Sealants

Cyanoacrylate Adhesives

Type Selection Table

	VA 20	VA 8312	VA 8406	VA 100	VA 110	VA 1401	VA 300	VA 1500	GEL	VA 5000 THIX	VA 2500 HT	VA 30 Black	VA 250 Black	VA 1408	VA 1460	VA 1403	VM 20	VM 120	VM 2000
Metal	+	+	+	++	+	++	+	+	+	+	+	+	+	+	+	+	++	++	++
Plastic*	++	++	++	++	++	++	++	++	+	+	++	++	++	++	++	++	+	+	+
Rubber	++	++	++	++	++	++	+	++	+	+	++	++	++	++	++	+	+	+	+
EPDM Elastomers	+	+	++	+	+	++	+	+		+	+	+	+	+	+	+			
Wood	+			+	+	+	++	+	+	+	+	+	+	+		++			
Balsa-wood		+	+	+	+	+	+	+	++	+	+	+	+	+		++			
Glass / Ceramic	+		+	++	+	++	++	+	++	+	+	+	+	++	+	+			
Leather		+		++	+	++	++	++	++	+	+	+	+	+	+	++			

suitable (+) highly suitable (++)
In line with the type recommendations above, the bonding of two different materials, like for example metal/rubber and metal/plastic, is also possible.
* see table page 6 (combined tension and shear resistance DIN 52283)

VA 20

Cyanoacrylate Adhesive for rubber and plastics low viscosity • very fast curing

ISEGA
Certificate of Conformity as an adhesive in food technology.

WEICON Contact VA 20 has low viscosity (< 20 mPa•s) and hardens very quickly.

VA 20 is suited for the bonding of rubber and plastics and also for precisely fitted metal/ plastic joints.

12 g	30 g	60 g
12000012	12000030	12000060

500 g
12000500

Technical Data

Ester type	Ethyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	< 20 mPa·s
Max. gap covering	0,1 mm
Initial adhesion on aluminium	30 - 60 sec.
Initial adhesion on Nora test rubber	2 - 15 sec.
Initial adhesion on Rigid PVC	5 - 60 sec.
Final strength after	24 h
Temperature resistance	-50 to approx. +80°C *(-58 to approx. +176°F)* (briefly to +100°C/*+212°F*) squatting temp. +150°C *(+302°F)*

VA 100

Cyanoacrylate Adhesive for rubber and plastics medium viscosity • slightly longer curing

WEICON Contact VA 100 is a universal type for the bonding of metals, plastic and rubber, both to and among each other.

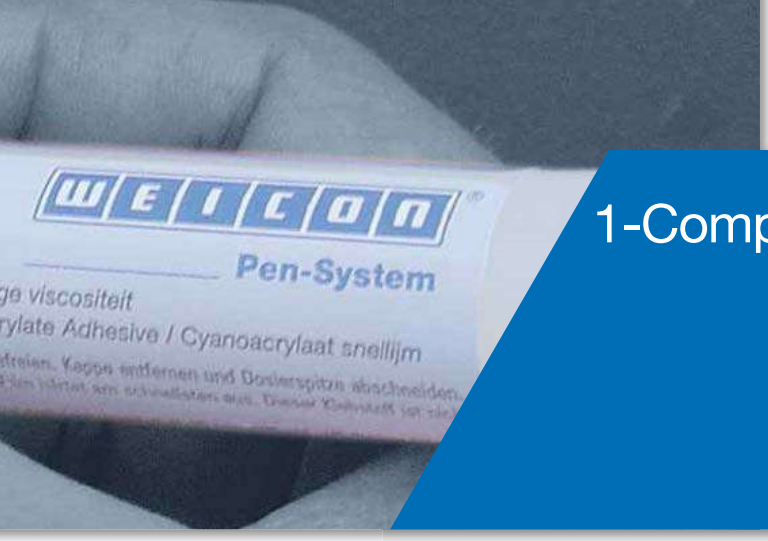
VA 100 is ideal for the „do-it-yourself“ area, but can also be used in many areas of industry.

3 g	12 g	30 g
12050001	12050012	12050030

60 g	500 g
12050060	12050500

Technical Data

Ester type	Ethyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	60 - 120 mPa·s
Max. gap covering	0,15 mm
Initial adhesion on aluminium	30 - 60 sec.
Initial adhesion on Nora test rubber	3 - 20 sec.
Initial adhesion on Rigid PVC	10 - 60 sec.
Final strength after	24 h
Temperature resistance	-50 to approx. +80°C *(-58 to approx. +176°F)* (briefly to +100°C/*+212°F*) squatting temp. +150°C *(+302°F)*



Cyanoacrylate Adhesives

ISEGA
Certificate of Conformity as an adhesive in food technology.

VA 8312

Cyanoacrylate Adhesive for rubber and plastics
low viscosity • very fast-curing • ISEGA-certified

WEICON Contact VA 8312 has low viscosity (20-40 mPa•s) and hardens very quickly. VA 8312 is suited for the bonding of various rubber materials such as solid rubber or cellular rubber, plastics and EDPM elastomers.

In combination with WEICON CA-Primer, VA 8312 can also be used for polyolefines (PE-polyethylene, PP-polypropylene). In combination with WEICON Contact Filler*, VA 8312 is suited for the instant bonding and filling of cracks, clefts, holes and uneven surfaces.

12 g	30 g	60 g
12200012	12200030	12200060

500 g
12200500

Technical Data

Ester type	Ethyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	20 - 40 mPa·s
Max. gap covering	0,1 mm
Initial adhesion on aluminium	30 - 60 sec.
Initial adhesion on Nora test rubber	2 - 10 sec.
Initial adhesion on Rigid PVC	5 - 30 sec.
Final strength after	24 h
Temperature resistance	-50 to approx. +80°C *(-58 to approx. +176°F)* (briefly to +100°C/*+212°F*) squatting temp. +150°C *(+302°F)*

VA 5000 THIX

New

Cyanoacrylate Adhesive for rubber and plastics
high viscosity (thixotrop) • longer cure

For porous and absorbing materials and larger tolerances. Suitable for metals, plastics, and rubber, even on vertical surfaces.

12 g	30 g	60 g
12551012	12551030	12551060

500 g
12551500

Technische Daten

Ester type	Ethyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	approx. 25.000 mPa·s
Max. gap covering	0,2 mm
Initial adhesion on aluminium	30 - 70 sec.
Initial adhesion on Nora test rubber	5 - 10 sec.
Initial adhesion on Rigid PVC	25 - 50 sec.
Final strength after	24 h
Temperature resistance	-50 to approx. +90°C *(-58 to approx. +194°F)*

*

WEICON Contact Filler

Fillers for instant bonding and filling-in of clefts and cracks, holes as well as unlevelled surfaces in conjunction with WEICON Contact Adhesive VA 8312.

Contact Filler should be applied in layers:

adhesive - filler - adhesive

After curing is completed, the material can be sanded and overpainted.

30 g
12650030

VA 8406

Cyanoacrylate Adhesive for rubber and plastics low viscosity • very fast-curing

WEICON Contact VA 8406 has low viscosity (20-50 mPa•s) and hardens very quickly. It is is suited for the fast fixing and bonding of various rubber materials such as solid rubber or cellular rubber, plastics and EPDM elastomers requiring quick fixing.

In combination with WEICON CA-Primer, VA 8406 can also be used for polyolefines (PE-polyethylene, PP-polypropylene) and for PTFE and silicones.

Technical Data

Ester type	Ethyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	20 - 50 mPa·s
Max. gap covering	0,1 mm
Initial adhesion on aluminium	2 - 10 sec.
Initial adhesion on Nora test rubber	< 5 sec.
Initial adhesion on Rigid PVC	2 - 10 sec.
Final strength after	24 h
Temperature resistance	-50 to approx. +80°C *(-58 to approx. +176°F)* (briefly to +100°C/*+212°F*) squatting temp. +150°C *(+302°F)*

12 g	30 g	60 g	500 g
12204012	12204030	12204060	12204500

VA 1401

Cyanoacrylate Adhesive for rubber and plastics medium viscosity • fast-curing

WEICON Contact VA 1401 has medium viscosity (100-150 mPa•s) and hardens quickly. It shows good results on fabric, paper, cardboard, cartons, foam rubber and large-pored elastomers.

VA 1401 is a universal type for the bonding of metals, plastics and rubber, both to themselves and among each other.

12 g	30 g	60 g
12054012	12054030	12054060

500 g
12054500

Technical Data

Ester type	Ethyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	100 - 150 mPa·s
Max. gap covering	0,15 mm
Initial adhesion on aluminium	2 - 10 sec.
Initial adhesion on Nora test rubber	< 5 sec.
Initial adhesion on Rigid PVC	2 - 10 sec.
Final strength after	24 h
Temperature resistance	-50 to approx. +120°C *(-58 to approx. +248°F)* (briefly to +150°C/*+302°F*) squatting temp. +170°C *(+338°F)*

Cyanoacrylate Adhesives

VA 300

Cyanoacrylate Adhesive for rubber and plastics
higher viscosity • longer curing

WEICON Contact VA 300 has a higher viscosity (200-300 mPa•s) and a longer curing time. It is particularly suited for absorbent and porous products such as wood, cork, leather and ceramics.

VA 300 is also suited for the bonding of metals, plastics and rubber, both to themselves and among each other.

12 g	30 g	60 g	500 g
12100012	12100030	12100060	12100500

Technical Data

Ester type	Ethyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	200 - 300 mPa·s
Max. gap covering	0,15 mm
Initial adhesion on aluminium	60 - 90 sec.
Initial adhesion on Nora test rubber	2 - 10 sec.
Initial adhesion on Rigid PVC	10 - 60 sec.
Final strength after	24 h
Temperature resistance	-50 to approx. +80°C *(-58 to approx. +176°F)* (briefly to +100°C/*+212°F*) squatting temp. +150°C *(+302°F)*

VA 1500

Cyanoacrylate Adhesive for rubber and plastics
high viscosity • slow-curing

WEICON Contact VA 1500 is highly viscous (1000-1500 mPa•s) and has a slower curing time. The product is suited for the bonding of rubber and plastics and can also be used on absorbent and porous materials such as wood, cork, leather and ceramics.

12 g	30 g	60 g	500 g
12150012	12150030	12150060	12150500

Technical Data

Ester type	Ethyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	1.000 - 1.500 mPa•s
Max. gap covering	0,2 mm
Initial adhesion on aluminium	90 - 120 sec.
Initial adhesion on Nora test rubber	5 - 30 sec.
Initial adhesion on Rigid PVC	10 - 120 sec.
Final strength after	24 h
Temperature resistance	-50 to approx. +80°C *(-58 to approx. +176°F)* (briefly to +100°C/*+212°F*) squatting temp. +150°C *(+302°F)*

VM 20

Cyanoacrylate Adhesive for metals
low viscosity • very fast-curing

WEICON Contact VM 20 has a low viscosity (20-40 mPa•s) and hardens very quickly. It is suited for all types of metal bonds, especially for the bonding of precisely fitted parts in serial production.

VM 20 can be used in the metalworking industry, in machine construction, in housing and apparatus engineering and in many other applications.

30 g	60 g	500 g
12300030	12300060	12300500

Technical Data

Ester type	Methyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	20 - 40 mPa·s
Max. gap covering	0,1 mm
Initial adhesion on aluminium	50 - 70 sec.
Initial adhesion on Nora test rubber	10 - 60 sec.
Initial adhesion on Rigid PVC	30 - 120 sec.
Final strength after	24 h
Temperature resistance	-50 to approx. +80°C *(-58 to approx. +176°F)* (briefly to +100°C/*+212°F*) squatting temp. +150°C *(+302°F)*

VM 120

Cyanoacrylate Adhesive for metals
medium viscosity • slower curing, a short-term realignment of parts is possible

WEICON Contact VM 120 has a medium viscosity (100-130 mPa•s) and a longer curing time allowing short-term position corrections of the parts to be bonded.

WEICON Contact VM 120 is suited for all types of metal bonds.

WEICON Contact VM 120 can be used in the metalworking industry, in machine construction, in housing and apparatus engineering and in many other applications.

30 g	60 g	500 g
12350030	12350060	12350500

Technical Data

Ester type	Methyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	100 - 130 mPa·s
Max. gap covering	0,15 mm
Initial adhesion on aluminium	50 - 70 sec.
Initial adhesion on Nora test rubber	10 - 60 sec.
Initial adhesion on Rigid PVC	30 - 120 sec.
Final strength after	24 h
Temperature resistance	-50 to approx. +80°C *(-58 to approx. +176°F)* (briefly to +100°C/*+212°F*) squatting temp. +150°C *(+302°F)*

500 g bottle

Cyanoacrylate Adhesives

VM 2000

Cyanoacrylate Adhesive for metals
high viscosity • slow-curing, allows realignment of parts

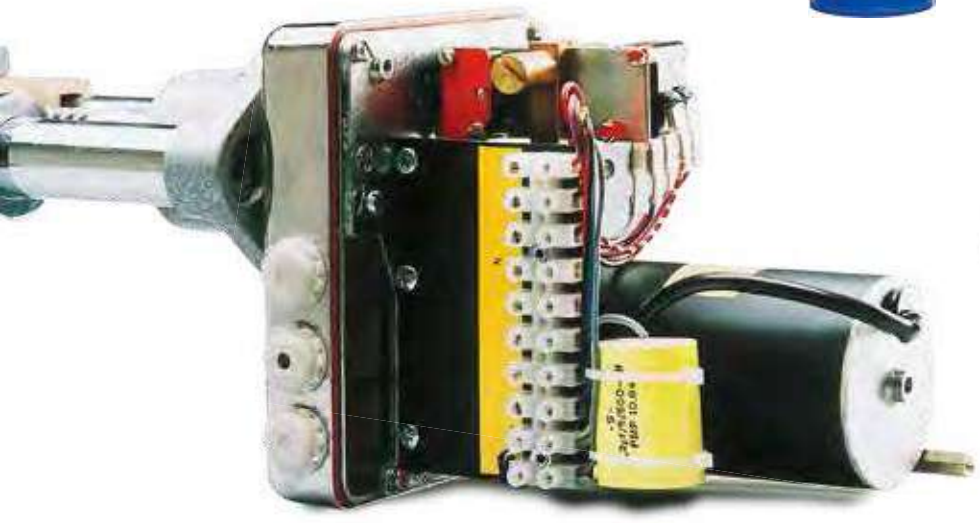
WEICON Contact VM 2000 is highly viscous (1700-2000 mPa•s) and hardens slowly, which enables position correction of the parts to be bonded.

VM 2000 is suited for all types of metal bonds and can also be used on absorbent and porous products.

30 g	60 g	500 g
12400030	12400060	12400500

Technical Data

Ester type	Methyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	1.700 - 2.000 mPa·s
Max. gap covering	0,2 mm
Initial adhesion on aluminium	70 - 90 sec.
Initial adhesion on Nora test rubber	10 - 90 sec.
Initial adhesion on Rigid PVC	30 - 150 sec.
Final strength after	24 h
Temperature resistance	-50 to approx. +80°C *(-58 to approx. +176°F)* (briefly to +100°C/*+212°F*) squatting temp. +150°C *(+302°F)*



VA 2500 HT

Cyanoacrylate Adhesive for special requirements • high temperature resistant
high viscosity • slow-curing • residual elasticity after curing • high peel and impact resistance

WEICON Contact VA 2500 HT is highly viscous (2000-3000 mPa•s) and temperature resistant between -50°C *(-58°F)* and +140°C *(+284°F)*. It hardens slowly with residual elasticity and has high peel and impact strength. Thanks to its curing with residual elasticity, WEICON Contact VA 2500 HT is particularly suitable under changing climatic conditions. It is insensitive even under a longer influence of humidity. VA 2500 HT is suited for the bonding of the most diverse rubber materials and plastics and also for metal/plastic joints.

Technical Data

Ester type	Ethyl
Condition / nature	opaque
Viscosity at +20°C *(+68°F)* Brookfield	2.000 - 3.000 mPa·s
Max. gap covering	0,2 mm
Initial adhesion on aluminium	40 - 80 sec.
Initial adhesion on Nora test rubber	25 - 60 sec.
Initial adhesion on Rigid PVC	25 - 100 sec.
Final strength after	24 h
Temperature resistance	-50 to +140°C *(-58 to + 284°F)* squatting temp. +160°C *(+320°F)*

12 g	30 g	60 g	500 g
12550012	12550030	12550060	12550500

VA 30 Black

Cyanoacrylate Adhesive for special requirements • rubber-filled • high temperature resistant
medium viscosity • longer curing • residual elasticity after curing • high peel and impact resistance

WEICON Contact VA 30 Black has medium viscosity (300 mPa•s) and is temperature resistant between -50°C *(-58°F)* and +140°C *(+284°F)*. It has a longer curing time, is rubber-filled and black, hardens with residual elasticity and has high peel and impact strength. Thanks to its curing with residual elasticity, WEICON Contact VA 30 Black is particularly suitable under changing climatic conditions. It is insensitive even under a longer influence of humidity.

VA 30 Black is ideally suited for the bonding of diverse rubber materials such as solid rubber or cellular rubber, plastics and metal/plastic joints.

Technical Data

Ester type	Ethylester
Condition / nature	black
Viscosity at +20°C *(+68°F)* Brookfield	300 mPa·s
Max. gap covering	0,2 mm
Initial adhesion on aluminium	40 - 50 sec.
Initial adhesion on Nora test rubber	5 - 10 sec.
Initial adhesion on Rigid PVC	5 - 10 sec.
Final strength after	24 h
Temperature resistance	-55 to +140°C *(-67 to + 284°F)* squatting temp. +160°C *(+320°F)*

12 g	30 g	60 g	500 g
12603012	12603030	12603060	12603500

Cyanoacrylate Adhesives

VA 250 Black

Cyanoacrylate Adhesive for special requirements • rubber-filled • high temperature resistant high viscosity • slow-curing • residual elasticity after curing • high peel and impact resistance

Technical Data

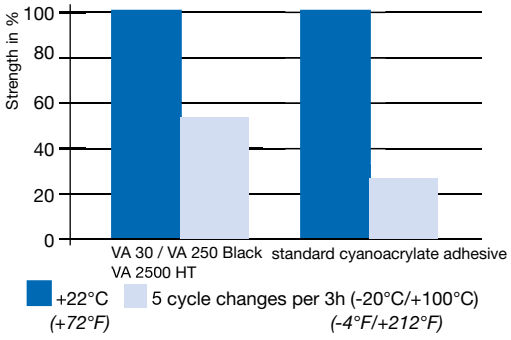
Ester type	Ethyl
Condition / nature	black
Viscosity at +20°C *(+68°F)* Brookfield	2.000 - 3.000 mPa·s
Max. gap covering	0,2 mm
Initial adhesion on aluminium	90 - 120 sec.
Initial adhesion on Nora test rubber	20 - 40 sec.
Initial adhesion on Rigid PVC	40 - 80 sec.
Final strength after	24 h
Temperature resistance	-50 to +140°C *(-58 to + 284°F)* squatting temp. +160°C *(+320°F)*

12 g	30 g	60 g	500 g
12600012	12600030	12600060	12600500

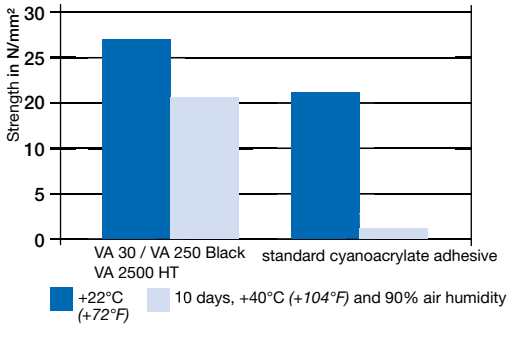
VA 250 Black is highly viscous (2000-3000 mPa•s) and temperature resistant between -50°C *(-58°F)* and +140°C *(+284°F)*. It hardens slowly and with residual elasticity, is rubber-filled and black, and has high peel and impact strength.

Thanks to its curing with residual elasticity, WEICON Contact VA 250 Black is particularly suitable under changing climatic conditions. It is insensitive even under a longer influence of humidity. It is best suited for the bonding of diverse rubber materials such as solid rubber or cellular rubber, plastics and metal/ plastic joints.

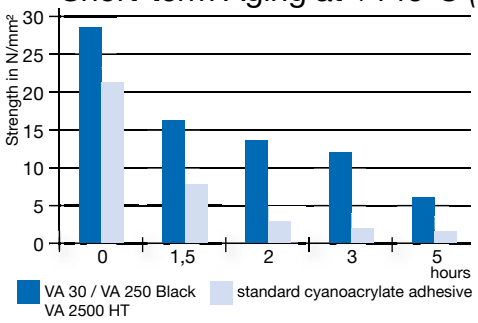
Temperature Change Load



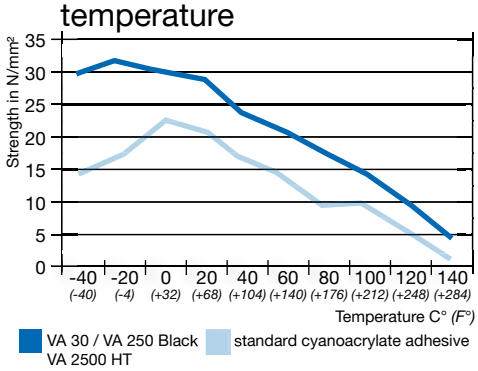
Humid Climate Resistance



Short-term Aging at +140°C *(+284°F)*



Strength dependent on temperature



VA 1408

Cyanoacrylate Adhesive for special requirements
low viscosity • very fast-curing • low odour and "blooming"

WEICON Contact VA 1408 has a low viscosity (20-40 mPa•s) and a reduced "blooming" effect. It hardens quickly, is low in odour when processing and less susceptible to moisture effects after curing. The product is suited for the clean and visually attractive bonding of the most diverse products.

Technical Data

Ester type	Alkoxy
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	20 - 40 mPa·s
Max. gap covering	0,1 mm
Initial adhesion on aluminium	30 - 60 sec.
Initial adhesion on Nora test rubber	3 - 20 sec.
Initial adhesion on Rigid PVC	10 - 30 sec.
Final strength after	24 h
Temperature resistance	-50 to +80°C *(-58 to + 176°F)* squatting temp. +150°C *(+302°F)*

30 g ✓	60 g ✓	500 g ✓
12253030	12253060	12253500

VA 1460

Cyanoacrylate Adhesive for special requirements
medium viscosity • longer curing • low odour and "blooming"

VA 1460 has a medium viscosity (120-200 mPa•s) and a reduced "blooming" effect. It hardens less quickly, is low in odour when processing and less susceptible to moisture effects after curing.

WEICON Contact VA 1460 is suited for the bonding of the most diverse products. The product can be used in numerous industrial applications.

30 g ✓	60 g ✓	500 g ✓
12250030	12250060	12250500

Technical Data

Ester type	Alkoxy
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	120 - 200 mPa·s
Max. gap covering	0,15 mm
Initial adhesion on aluminium	30 - 60 sec.
Initial adhesion on Nora test rubber	10 - 60 sec.
Initial adhesion on Rigid PVC	20 - 150 sec.
Final strength after	24 h
Temperature resistance	-50 to +80°C *(-58 to + 176°F)* squatting temp. +150°C *(+302°F)*

Cyanoacrylate Adhesives

Clearance certificate for the direct use in the food industry, according to the NSF/ANSI (Standard 61)

New

VA 110

Cyanoacrylate Adhesive for rubber and plastics
medium viscosity • slightly longer cure

Technical Data

Ester type	Ethyl
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	70 - 110 mPa·s
Max. gap covering	0,15 mm
Initial adhesion on aluminium	20 - 50 sec.
Initial adhesion on Nora test rubber	3 - 15 sec.
Initial adhesion on Rigid PVC	10 - 50 sec.
Final strength after	24 h
Temperature resistance	-30 *(-22°F)* to approx. +80°C *(+176°F)* squatting temp. +160°C *(+320°F)*

The special feature of the product is its NSF approval in accordance with ANSI Standard 61 - Drinking Water System Components. Thus, VA 110 also meets the highest standards and can be used in sensitive areas such as in the pharmaceutical industry, in the manufacturing of cosmetics, in the food industry, in the manufacturing of toys or jewelry industry.

12 g	30 g	60 g
12052012	12052030	12052060

500 g
12052500


Pen-System
WEICON
Design Pat. 00159884

Cyanoacrylate Adhesives

VA 1403

Cyanoacrylate Adhesive for special requirements
high viscosity • slow-curing • low odour and "blooming"

Technical Data

Ester type	Alkoxy
Condition / nature	colourless, clear liquid
Viscosity at +20°C *(+68°F)* Brookfield	1.100 - 1.800 mPa·s
Max. gap covering	0,2 mm
Initial adhesion on aluminium	90 - 120 sec.
Initial adhesion on Nora test rubber	5 - 30 sec.
Initial adhesion on Rigid PVC	10 - 120 sec.
Final strength after	24 h
Temperature resistance	-50 to +80°C *(-58 to + 176°F)* squatting temp. +150°C *(+302°F)*

WEICON Contact VA 1403 is highly viscous (1100-1800 mPa•s), low in odour when processing and has a reduced "blooming" effect. It hardens slowly and is less susceptible to moisture effects after curing.

VA 1403 is suited for the clean and visually attractive bonding of the most diverse products.

30 g	60 g	500 g
12252030	12252060	12252500

Contact GEL

Cyanoacrylate Adhesive for special requirements
pasty (highly thixotropic) • very slow-curing = position correction

Technical Data

Ester type	Ethyl
Condition / nature	colourless, clear liquid
Viscosity bei +25 °C *(+77°F)* in Brookfield	60.000 - 90.000 mPa·s
Max. gap covering	0,2 mm
Initial adhesion on aluminium	90 - 120 sec.
Initial adhesion on Nora test rubber	20 - 30 sec.
Initial adhesion on Rigid PVC	40 - 80 sec.
Final strength after	24 h
Temperature resistance	-50 to +80°C *(-58 to + 176°F)* squatting temp. +150°C *(+302°F)*

20 g tube

Contact Gel is pasty (highly thixotropic; 60000-90000 mPa•s) and hardens very slowly. By using WEICON Activator Spray, the cure time can be reduced.

WEICON Contact Gel is suited for porous surfaces and higher tolerance gaps and can be used on vertical surfaces. Positioning is also possible after the parts have been joined.

WEICON Contact Gel is suited for the bonding of the most diverse products.

WEICON Contact Gel can be used both in the hobby sector and in model building. It can also be used in many different industrial applications.

20 g	30 g
12500120	12500130

Technical Data

WEICON Contact in liquid form

		VA 20	VA 8312	VA 8406	VA 100	VA 110	VA 1401	VA 300	VA 1500	GEL	VA 5000 THIX	VA 2500 HT	VA 30 Black	VA 250 Black	VA 1408	VA 1460	VA 1403	VM 20	VM 120	VM 2000
Ester type		Ethyl													Alkoxy			Methyl		
Condition / nature		colourless, clear liquid, VA 2500 HT opaque, VA 30 Black and VA 250 Black																		
Properties		particularly suitable for rubber and plastic bonding								pasty		particularly suitable for rubber and plastic bonding			low odour, low blooming			particularly suitable for bonding metals		
Viscosity at +20°C *(+68°F)* (m.Pas.) Brookfield		< 20	20-40	20-50	60-120	70-110	100-150	200-300	1000-1500	60000-90000	20000-30000	2000-3000	250-300	2000-3000	20-40	120-200	1100-1800	20-40	100-130	1700-2000
Max. gap covering in mm **		0,10	0,10	0,10	0,15	0,15	0,15	0,15	0,20	0,20	0,20	0,20	0,20	0,20	0,10	0,15	0,20	0,10	0,15	0,20
Specific gravity at +20°C *(+68°F)* (g/cm³)		1,04	1,05	1,05	1,06	1,06	1,06	1,07	1,08	1,08	1,05	1,06	1,06	1,06	1,06	1,02	1,10	1,10	1,10	1,12
Flash point acc. to Abel-Pensky DIN 55213 in °C		87°C *(+189°F)*																		
Initial adhesion* in seconds	Aluminium [1]	30-60	30-60	2-10	30-60	20-50	2-10	60-90	90-120	90-120	30-70	40-80	40-50	90-120	30-60	30-60	90-120	50-70	50-70	70-90
	Nora Test rubber [2]	2-15	2-10	< 5	3-20	3-15	< 5	2-10	5-30	20-30	5-10	25-60	5-10	20-40	3-20	10-60	5-30	10-60	10-60	10-90
	Rigid PVC [3]	5-60	5-30	2-10	10-60	10-50	2-10	10-60	10-120	40-80	25-50	25-100	5-10	40-80	10-30	20-150	10-120	30-120	30-120	30-150
Final strength in hours		24																		

1-Component Adhesives and Sealants

Cyanoacrylate Adhesives

Technical Data

WEICON Contact in cured state

		VA 20	VA 8312	VA 8406	VA 100	VA 110	VA 1401	VA 300	VA 1500	GEL	VA 5000 THIX	VA 2500 HT	VA 30 Black	VA 250 Black	VA 1408	VA 1460	VA 1403	VM 20	VM 120	VM 2000
Shear strength in N/mm² according to DIN 53283 (ASTM D 1002 psi)	Sand-blasted Steel	19 *(2.750)*	20 *(2.900)*	22 *(3.200)*	20 *(2.900)*	20 *(2.900)*	22 *(3.200)*	21 *(3.050)*			22 *(3.200)*	24 *(3.450)*	22 *(3.200)*	24 *(3.450)*	18 *(2.600)*			25 *(3.600)*		
	Sand-blasted Aluminium	14 *(2.050)*	14 *(2.050)*	16 *(2.300)*	15 *(2.175)*	15 *(2.175)*	16 *(2.300)*	15 *(2.175)*			18 *(2.600)*	18 *(2.600)*	18 *(2.600)*	18 *(2.600)*	12 *(1.750)*			19 *(2.750)*		
	Rigid PVC	12 *(1.750)*	13 *(1.900)*	14 *(2.050)*	13 *(1.900)*	13 *(1.900)*	14 *(2.050)*	13 *(1.900)*			12 *(1.750)*	13 *(1.900)*	14 *(2.050)*	13 *(1.900)*	7 *(1.000)*			12 *(1.750)*		
	ABS	11 *(1.600)*	12 *(1.750)*	13 *(1.900)*	12 *(1.750)*	12 *(1.750)*	13 *(1.900)*	12 *(1.750)*			10 *(1.450)*	12 *(1.750)*	11 *(1.600)*	12 *(1.750)*	10 *(1.450)*			11 *(1.600)*		
	PC	12 *(1.750)*	13 *(1.900)*	13 *(1.900)*	13 *(1.900)*	13 *(1.900)*	13 *(1.900)*	12 *(1.750)*			12 *(1.750)*	13 *(1.900)*	13 *(1.900)*	13 *(1.900)*	8 *(1.150)*			12 *(1.750)*		
	NBR	> 8 *(1.150)* (bonding exceeds strength of substrate)																		
Temperature resistance		-50 to +80°C *(-58 to +176°F)* (briefly to +100°C/*+212°F*)					-50 to +120°C *(-58 to +302°F)* (briefly to +150°C/*302°F*)	-50 to +80°C *(-58 to +176°F)* (briefly to +100°C/*+212°F*)			-50 to +90°C *(-58 to +194°F)*	-55 to +140°C *(-67 to +284°F)*			-50 to +80°C *(-58 to +176°F)* (briefly to +100°C/*+212°F*)					
Squatting temperature		+150°C *(302°F)*					+170°C *(338°F)*	+150°C *(302°F)*			-	+160°C *(320°F)*			+150°C *(302°F)*					
Refractive index n^{D20}		1.49 (similar to glass) / for types VA 2500 HT, VA 30 Black and VA 250 Black not applicable																		
Linear thermal expansion coefficient ISO 11359 / ASTM D 696 (K^{-1})		80×10^{-6}																		
Specific forward resistance DIN 53482* / ASTM D 257 (Ω mm)		$> 10^{15}$																		
Dielectric strength, DIN 53481* / ASTM D 149 (KV/mm)		25																		
Thermal conductivity ISO 8894-2 / ASTM C 177 (W/m•K)		0,1																		
Solubility		Dimethyl formamide, dimethyl sulfoxide, acetonitrile, alkali. Swelling is possible after long-time storage in ethyl acetate, acetone and methylene chloride.																		

*Achieved in normal climate DIN 50014 +23°C *(+73°F)* and 50% relative air humidity.
Within the given time period, handling strength can be reached.
** These details are dependent on the type of material to be bonded and its properties
*** Following the DIN-norm measured on bonding joints.

1) Aluminium. Type Al Cu Mg 2pl., not pre-treated
2) NBR-rubber, smoothed
3) Rigid PVC Trovidur® EN, not pre-treated

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1-Component Adhesives and Sealants