



Anti-Seize

High-performance
assembly pastes and
sprays

Reliable protection against
corrosion, seizure and
wear

Anti-Seize

The appearance of rust is not only annoying but also very expensive: every year the economy has to face costs amounting to billions. Reason enough to protect parts and constructions of steel and other metals against corrosion, seizure and metal wear. Day by day a large variety of factors causes corrosion damages and seizure on machines and installations.

Especially under critical conditions of application such as

- high operational temperatures
- high pressure
- long-term weather influences
- moisture and
- aggressive media

these negative consequences cannot be avoided without reliable protection. Seizure and extensive wear will be the result; disassembling of machines or their components becomes a real problem.

The solution is WEICON Anti-Seize



Due to its special formulation and most finely ground solid lubricants, this compound will fill all irregularities in the surface to be protected thus providing a reliable protection against

- seizure
- abrasion
- pitting and fretting corrosion.

Only surfaces that are perfectly sealed guarantee a reliable protection against corrosion.

WEICON Anti-Seize

- is temperature resistant from -180°C up to +1200°C. (High-Tech Grade: +1400°C
Special Nickel Grade: +1450°C.)
- has an excellent thermal conductivity
- is resistant against extreme pressure.

As such, WEICON Anti-Seize is an excellent lubricating agent for statically highly stressed parts and for low-speed rotating installations at high temperatures.



With its dual function as a lubricant and corrosion protection WEICON Anti-Seize becomes a rationalization factor, both in terms of time-saving and cost-reduction. Due to its extremely low coefficient of friction, WEICON Anti-Seize is exceptionally resistant to wear and therefore also acts as a sealant.

Why use WEICON Anti-Seize?

Conventional mineral oils and greases often cannot provide sufficient lubrication and protection in difficult industrial environment.

The basic component in WEICON Anti-Seize Standard Grade is a synthetic oil mixture which

- comes with a considerably lower content of sulphur than mineral oil products and therefore allows a vaporization of the oil at temperatures of +200°C to +250°C without leaving residues
- is especially suitable to protect rust-free steel products (e.g. stainless steels) because it avoids stress corrosion cracking
- under dynamic stress ensures excellent running-in performance at constant friction

WEICON Anti-Seize is economical in use. 1 kg is sufficient to coat approx. 45 m² with a layer of 0,01 mm (which is equal to a residual film of 12 µ).

WEICON Anti-Seize withstands nearly all mechanical and most chemical loads and is resistant against

- wash-out by fresh and sea water
- strong alkaline solutions
- most chemical vapours
- de-icing salt, water vapour, etc.

For specific or increased requirements e.g. under extremely high temperature or aggressive media conditions, two special grades are available: WEICON Anti-Seize „High-Tech“ and WEICON Anti-Seize Special Nickel grade.

Anti-Seize „High -Tech“

This metal-free* product is inert to high-alloyed steels and dissimilar materials. An interaction between components of the assembly paste and the materials to be treated thus can be eliminated to a large extent.

*below 0,1%



WEICON Anti-Seize „High-Tech“ Grade is especially recommended for assembly works

- if the use of metal-containing compounds is not wanted for optical reasons
- if the use of nickel-containing products is prohibited for health reasons
- if the use of copper-containing products is prohibited for electro-chemical reasons.

WEICON Anti-Seize „High-Tech“ prevents

- carbon fusion, cold-welding
- rusting

and therefore allows easy assembly and disassembly of screw connections of all kinds, even after very long operation periods.



Like any WEICON Anti-Seize grade, WEICON „High-Tech“ prevents stick-slip also where exposed to high surface pressure and low sliding movement (creeping speed).

It is used to meet hostile environments such as

- high temperatures (up to +1400°C)
- aggressive media
- high pressure.

WEICON Anti-Seize „High-Tech“ assembly paste

- is free of sulphurous additives and halogens
- resists hot, cold and salt water as well as most acids and alkalines
- is resistant to wash-out and abrasion
- prevents fretting corrosion





Typical applications

WEICON Anti-Seize solves basic problems and its application is not restricted to specific industries. Corrosion, seizure and wear are typical damages which may occur everywhere.



Metal working

Cutting and punching tools, sliding shears, gear-box housings, conveying chains, bearing shells, injection moulds, grinding and polishing machines, machine tools, screw connections of hydraulic equipment.

Maintenance of plants

Cleaning machines, shafts and arbours, toothed wheels, chain joints, cranes and elevators.

Mining

Slides and guiding rails, drilling equipments, fans, drag chains, winning machines, bolts of intermediate gears and drawing engines.

Marine

Stud bolts in motors, seals (e.g. in water pumps), threaded spindles, bearing housings, hatches, cranes and winches, masts, sheet and anchor winches, shroud-spanners, shackles



Oil industry

Drilling rigs, off-shore installations, oil extracting plants, pumping stations, oil refineries.



Paper mills and textile industry

Link chains, spools and reels, steam valves, beater drums and shafts, pump installations.

Power plants

Flange gaskets e.g. on steam turbines, slag fans, air and injection nozzles, burner nozzles and fastening bolts, preheating chambers, filtering installation, steam generators and turbines, furnace screws.

Plastic industry

Heating cartridges, laminating machines, extruders, moulds, waste disposal machines, conveyor belts.

Chemical industry

Flange and pipe joints, heat exchanger joints, valve spindles, compressors, mixing plants.

Heavy industry

Plug-in chains for conveyor plants, transmissions, valve stems and spindles, compressors, glands, cranes, press machine parts, wedgings.



Construction equipment

Hydraulic cylinders, splined shafts, toothed wheels, track bearings, brake cams and bolts, wheel studs.



Food industry

Large link chains, bearing shells and pedestals, threaded spindles, rotating components and connections, pump shafts.

Aviation

Heat resistant engine components, brake systems, elevators, rudders, propeller bosses, spark plugs in engines.

Agriculture

Irrigation plants, conveyor belts, wind mill rotors, shackles, chain couplers, filling equipments, couplings e.g. trailer couplings.



Sewage installations

Seals and glands, filter presses, aerators, stop valves, rotating parts on sluices.

WEICON Anti-Seize in the automotive industry

WEICON Anti-Seize is used by renowned car manufacturers and is recommended for repair and maintenance.

It is approved for

- passenger cars, trucks
- tankers
- concrete mixers
- bulldozers
- excavators
- harvesters and tractors.

WEICON Anti-Seize protects all

- springs
- screws
- bolts
- cotter pins, etc.

against corrosion and facilitates and accelerates disassembly of the parts. For all threads the correct turning moment can be determined, so that the threads cannot be overturned and will not seize.

WEICON Anti-Seize lubricates and seals permanently and prevents leakages even in humid conditions. It ensures perfect, non-curing seals.



Automobiles

Battery poles and connections, springs, suspensions, exhaust fittings and seals, bogies, screwed connections in chassis and body, brake cams and pins, wheel bolts and nuts, driving wheels and chains, hose connections, engine suspensions, injection nozzles, cylinder-head screws.

Heavy-duty trucks, tractors, etc.

Rubber bushes, brake shoe pins, pneumatic cylinder parts, disk brake systems, spring retentions, splined shafts, stud bolts, cylinder-head gaskets, track rod bearings, couplings.

Diesel engines

Metal gaskets, cylinder-head screws, valve guides, injection nozzles, connection in hydraulic systems.

Anti-Seize „Special Nickel Grade“



Anti-Seize „Special Nickel Grade“ finds its application where extreme temperatures (from -180°C up to $+1450^{\circ}\text{C}$) occur or where aggressive chemicals and acids evaporate (e.g. in cement rotary kilns, power plants or in the whole chemical industry).

This product ensures special protection against seizing or caustic solvents which contain e.g. dilute hydrochloric acid, sulphuric or nitric acid.



WP-300

WEICON WP-300 is a white food-grade lithium soap grease of high quality which contains a combination of white solid lubricants amongst other lubricating components. WEICON WP-300 provides

- excellent adhesion
- aging stability
- resistance against high loads and corrosion.

The very special product composition makes WEICON WP-300 particularly suitable for lubricating

- machines and equipments in food and beverage industry
- filling and packing machines
- machines in the pharmaceutical and textile industry
- paper processing machines
- electric household appliances
- precision and optical instruments.



WEICON WP-300 considerably reduces the coefficient of friction and, due to the white solid lubricants prevents metal-to-metal contact.

As such it protects from excessive wear and ensures

- extremely long regreasing cycles
- increased operational safety and a lasting value of machines and production equipments
- reduction of maintenance works and improved economic efficiency.

Technical data

Product	Anti-Seize Standard Grade	Anti-Seize "High-Tech"	Anti-Seize "Special-Nickel Grade"	WP-300
NLGI-grade:	NLGI-class 1	NLGI-class 0-1	NLGI-class 1	NLGI-class 2
Colour:	grey	white	darkgrey	white
Density at +20°C:	1,16 g/cm ³ , DIN 51757	1,42 g/cm ³ , DIN 51757	1,30 g/cm ³ , DIN 51757	0,96 g/ml, ISO 2811
Coefficient of friction:	0,14-SRV Test	0,19-SRV Test	0,16-SRV Test	0,10 µm at N 15500
Compressive strength:	4000 N (four-ball test)	3800-4000 N (four-ball test)	4600 N (four-ball test)	2600 N (four-ball test)
Water resistance:	1-90°C, DIN 51807	1-90°C, DIN 51807	1-90°C, DIN 51807	1-90°C, DIN 51807
Temperature resistance	-180°C to +1200°C	-40°C to +1400°C	-180°C to +1450°C	-30°C to +110°C
Pressure load:	> 230 N/mm ²	230 N/mm ²	230 N/mm ²	---

WEICON Anti-Seize (all grades) is resistant against most gases, e.g. propane, butane, natural gas, helium, freon and nitrogen.

WEICON Anti-Seize (all grades) is not suitable to be used on oxygen bottles and acetylene equipments.

WEICON Anti-Seize (all grades) is free of lead and other toxic heavy metals. In general, it shows good elastomer compatibility (except EPDM, IIR butyl rubber, NR and SBR).

Available packaging

Produkt	Anti-Seize Standard Grade	Anti-Seize "High-Tech"	Anti-Seize "Special Nickel Grade"	WP-300
Injection dispenser 10 g	X	X		
Brush-top can 120 g	X	X		
Can 350 g				X
Cartridge 400 g	X			X
Can 450 g	X	X	X	
Can 1,0 kg	X	X	X	X
Bucket 1,8 kg	X	X	X	
Bucket 3,6 kg	X	X	X	
Bucket 5,0 kg	X	X	X	
Bucket 10,0 kg	X	X	X	
Bucket 20,0 kg	X	X	X	
Spray can 100 ml	X			
Spray can 400 ml	X	X		

Work hygiene

Provided the rules for worker's protection and plant hygiene relevant to lubricants have been followed, experience has shown that in general health defects do not occur.

Note

All recommendations and technical data are based on extensive laboratory tests and experience. They have been compiled to the best of our knowledge and serve the purpose of product information. Tests on the part of the user are, however, indispensable. The user is fully responsible for any improper use for purposes other than originally intended.

Material Safety Data Sheet are available upon request.



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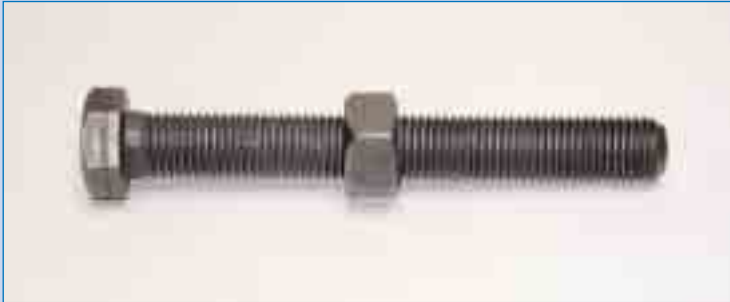
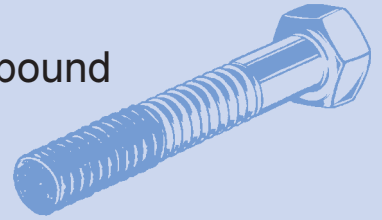


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Anti-Seize

High-performance lubricating and anti-corrosion compound

Temperature resistant from -180°C to +1400°C



Reliable protection against:
corrosion, seizing, wear and cold welding
(especially on stainless steel)

- superior sliding properties
- withstands salt water as well as most acids and alkalines
- eliminates squeaky and creaky noises on disk brakes
- good adherence and abrasion resistance
- prevents fretting corrosion
- good sealing properties
- high-pressure resistant (230 N/mm²)
- allows easy assembly and disassembly
- prevents cold welding
- economical in use (1 kg for 40–50 m²)
- free of toxic heavy metals



Technical data

Product	Anti-Seize „Standard Grade“	Anti-Seize „High-Tech“
NLGI-grade:	NLGI-class 1	NLGI-class 0-1
Colour:	grey	white
Density at +20°C:	1,16 g/cm ³ , DIN 51757	1,42 g/cm ³ , DIN 51757
Coefficient of friction:	0,14-SRV Test	0,19-SRV Test
Compressive strength:	4000 N (four-ball test)	3800-4000 N (four-ball test)
Water resistance:	1°C–90°C, DIN 51807	1°C–90°C, DIN 51807
Temperature resistance:	-180°C to +1200°C	-40°C to +1400°C
Pressure load:	< 230 N/mm ²	230 N/mm ²

The specifications and recommendations given in this brochure must not be seen as guaranteed product characteristics. They are based on our laboratory tests and on practical experience. Since individual application conditions are beyond our knowledge, control and responsibility, this information is provided without any obligation. We do guarantee the continuously high quality of our products. However, own adequate laboratory and practical tests to find out if the product in question meets the requested properties are recommended. A claim cannot be derived from them. The user bears the only responsibility for non-appropriate or other than specified applications.

