

### Perfection through Innovation



Engineered in Germany

### **ABOUT US**

As Wertal with our portfolio of adhesives, lubricants, cleaners, maintenance and repair products, industrial and automotive products and our broad network of dealership network, we deliver service to a wide range of industry.

Our aim is to support the operations of our customers by making them more competitive in both actual and potential markets with reduced costs through our reasonable prices which are based on the advantage of our process perfection and sustainability.

Wertal delivers its precious partners swift and trustworthy service with its wide hands-on experience in industry and R&D and engineering studies in Germany.

Wertal has defined competency, professional development and happiness of its employees, market competitiveness and satisfaction of its customers, becoming a leading company in the line of its business, its continuous improvement to realize provision of quality and efficient service within social and environmental awareness as vision.

With high quality products and developed organizational network we aim to increase the competitiveness of our business partners globally by providing them high quality products and worldwide application oriented and prompt services.

We have determined supporting our business partners in the framework of the vision of accomplishing our sustainable and organizational targets with our policy of continuous improvement in following and contributing to worldwide advancements, with our stuff and management team aware of environmental and social responsibilities as our mission.





6 Adhesives

Maintenance and Repair Products

1 Aerosols

20 Automotive Products

16 Lubricants and Greases

22 Cleaning Products

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### **ADHESIVES**

### **INSTANT ADHESIVES**

These adhesives which are programmed for an adhesion within 10 seconds, have a temperature resistance between -60°C and +80°C.

Instant adhesives which are cured by surface moisture provides fast and strong adhesion especially on metal, plastic, rubber, most wooden and ceramic surfaces.

Thanks to the mentioned properties instant adhesives are often applied in both manufacturing processes and maintenance and repair applications.

#### W01

Ideal for very fast adhesion of metal, plastic, rubber, and EPDM surfaces. Provides very strong adhesion without requiring an activator. Transparent. Leaves no traces. Does not contain solvent.

### **W06**

Ideal for very fast adhesion of plastic, rubber, EPDM, and metal surfaces. Provides very strong adhesion without requiring an activator. Transparent. Leaves no traces.

### **W54**

Jelly-like formed instant adhesive. Initial adhesion time is 30 seconds on average. Ideal for the adhesion of metal, plastic, rubber, and EPDM surfaces. Especially used for joining porous material and vertical applications. Provides very strong adhesion without requiring an activator. Transparent. Leaves no traces.

### W80

Black-colored and flexible instant adhesive. Especially used for joining metal, plastic and rubber. Has a temperature resistance between -50°C and +120°C. Initial adhesion time is 20 seconds on average.

### WERTAL SCHNELL-MAX PRODUCT CLASS

Two-component and gap filling instant adhesives. Used for joining surfaces such as metal, plastic, PVC, ABS, PC, PBT, rubber, wooden, paper, paperboard, leather and fabric.





### INSTANT ADHESIVES



Application	Product	Curing Time (seconds)	Gap Filling (mm)	Temperature Resistance (°C)	Package Type	Article Nr.
Universal	W01	2-10	0,07	-60 - + 80	3g,20g,50g,500g	W101HYU
Metal/Plastic/Rubber	W06	2-10	0,05	-50 - + 80	3g,20g,50g,500g	W106HYP
Universal	W54	5-60	0,50	-60 - + 80	3g,20g	W104HYJ
Metal/Plastic/Rubber	W80	5-40	0,10	-50 - + 120	20g,50g,500g	W180HYS

# WERTAL SCHNELL-MAX PRODUCT CLASS



Application	Product	Curing Time (Seconds)	Processing Time (minutes)	Gap Filling (mm)	Temperature Resistance (°C)	Package Type	Article Nr.
Universal	CA-MAX-PRO	20-80	3	6	-40 - + 80	10g,50g	W100CMP
Universal	CA-MAX-FLEX	45-180	5	6	-40 - + 80	10g,50g	W100CMF
Universal	CA-MAX-ZEIT	30-60	35	6	-40 - + 80	10g,50g	W100CMZ

### ADHESIVES

### ANAEROBIC ADHESIVES

Anaerobic adhesives are applied on metal connections for the joining of screw, pipe, gearing, and retaining and surface bonding. They are well resistant to vibration and temperature.

Anaerobic adhesives cure in airless medium with the presence of metal contact. They are divided into different classes depending on the disassembling purposes. They are used in both mass production and repair works.

### **THREADLOCKERS**

### **W22** (LOW STRENGTH)

Used on all types of screw and bolt connections, when easy disassembling is desired.

### W43 (MEDIUM STRENGTH)

Used on all types of metal screw and bolt connections exposed to vibration. Can be disassembled with hand tools.

### W70 (HIGH STRENGTH)

Used on all types of metal screw and bolt connections, where disassembling is not desired. Delivers full resistance to vibration. Cannot be disassembled with hand tools. Heating of the application area is required for disassembling (150°C and more).



### **W72** (HIGH STRENGTH)

Used on all types of metal screw and bolt connections, where disassembling is not desired. Delivers full resistance to vibration. Cannot be disassembled with hand tools. Heating of the application area is required for disassembling (230°C and more).

### W90 (HIGH STRENGTH)

Used on all types of metal screw and bolt connections, where disassembling is not desired. Delivers full resistance to vibration. Takes capillary action, can also fill the gaps on the metal. Cannot be disassembled with hand tools. Heating of the application area is required for disassembling (150°C and more).







#### PIPE SEALANTS

### W42 (MEDIUM STRENGTH)

Used on pipe and gear connections of all types of hydraulic and pneumatic systems. Can be disassembled with hand tools.

### W77 (MEDIUM STRENGTH)

A sealing product which can be used on all types of metal gears. Applicable up to M80. Can be disassembled with hand tools.

### **BEARING RETAINING COMPOUNDS**

### W38 (HIGH STRENGTH)

Used on bearing, shaft, and gearings for the purposes of retaining and clinching. Cannot be disassembled with hand tools. Heating of the application area is required for disassembling (150°C and more).



### W41 (MEDIUM STRENGTH)

Used on bearings, shafts and gears for retaining and bonding. Can be disassembled with hand tools.

### **FLANGE SEALANT**

### W73 (MEDIUM STRENGTH)

An oil-resistant sealant product for sealing engine covers, block gaps and flanges. Allows gap filling up to 0.30 mm and temperature resistance up to 150°C.

### W18 (MEDIUM STRENGTH)

An oil-resistant sealant product for sealing engine covers, block gaps and flanges. Allows gap filling up to 0.50 mm and temperature resistance up to 150°C.

### **W74** (MEDIUM STRENGTH)

An oil-resistant sealant product for sealing engine covers, block gaps and flanges. Allows gap filling up to 0.50 mm and temperature resistance up to 150°C.



### **W10** (MEDIUM STRENGTH)

An oil-resistant sealant product for sealing engine covers, block gaps and flanges. Allows gap filling up to 0.50 mm and temperature resistance up to 200°C.

## *ADHESIVES*

	Article Nr.	W122VSD	W143VS0	W170VSY	W190VSY	W172VSY		Article Nr.	W142HP0	W177BD0		Article Nr.	W138RSY	W141RS0	Article Nr.	W173YC0	W118YC0	W174YC0	W110YC0
	Package Type	10g,50g,250g	109,509,2509	109,509,2509	109,509,2509	50g,250g		Package Type	10g,50g,250g	50g,250g		Package Type	10g,50g,250g	109,509,2509	Package Type	50g,250g	50g,250g	50g,250g	509,2509
	Strength Level	Low	Medium	High	High	High		Strength Level	Medium	Medium		Strength Level	High	Medium	Strength Level	Low	Medium	Medium	Medium
	Temperature resistance (°C)	-55-+150	-55-+150	-55-+150	-55-+150	-55-+230		Temperature resistance (°C)	-55- +150	-55- +150		Temperature resistance (°C)	-55 -+150	-55 -+150	Temperature resistance (°C)	-55-+150	-55-+150	-55-+150	-55-+200
	Strain (Nm)	2-4	8-12	50-65	30-40	40-70		Strain (Nm)	18-24	10-14	(	Strain (Nm)	50-70	16-22	Strain (Nm)	2-4	7-10	2-8	8-9
	Shear Strength (N/mm2) DIN 54452	3-5	9-13	15-20	8-12	15-25		Shear Strength (N/mm2) DIN 54452	8-12	6-13		Shear Strength (N/mm2) DIN 54452	25-30	8-12	Shear Strength (N/mm2) DIN 54452	4-6	8-13	5-10	5-10
	Breakaway Torque (Nm) DIN EN ISO 10964	4-8	17-22	28-35	15-25	20-35		Breakaway Torque (Nm) DIN EN ISO 10964	12-16	18-22		Breakaway Torque (Nm) DIN EN ISO 10964	30-40	12-15	Breakaway Torque (Nm) DIN EN ISO 10964				
	Strength Class DIN 30661	-	2	လ	က	က	4	Strength Class DIN 30661	2	2		Strength Class DIN 30661	3	2	Strength Class DIN 30661	2 <b>1</b> 2	2	2	2
	Maximum thread	24	36	20	9	36		Maximum thread	20	80		Maximum thread	36	20	Maximum thread				
1	Gap filling (mm)	0,2	0,25	0,15	70,0	6,0		Gap filling (mm)	0,15	9,0		Gap filling (mm)	0,2	0,12	Gap filling (mm)	06,0	0,50	0,50	0,50
	Viscosity at 25°C mPa.s	900-1100	2000-7500	400-700	70-90	8000-15000		Viscosity at 25°C mPa.s	200-700	24.000 <b>-</b> 70.000		Viscosity at 25°C mPa.s	1500-2500	200-200	Viscosity at 25°C mPa.s	17.000- 50.000	50.000- 250.000	30.000- 100.000	70.000-
N. A.	Functional tightness (hours)	1-3	1-3	1-3	1-3	3-6	Ž	Functional tightness (hours)	1-3	1-3		Functional tightness (hours)	1-3	1-3	Functional tightness (hours)	1-3	4.3	1-3	3-6
	Hand-Tight in (minutes)	15-30	10-20	10-20	10-20	20-40	7	Hand-Tight in (minutes)	10-20	15-30		Hand-Tight in (minutes)	2-5	10-20	Hand-Tight in (minutes)	20-40	10-20	15-30	15-30
	Product Appearance	Magenta	Dark Blue	Green	Green	Red		Appearance	Brown	Yellow		Appearance	Green	Yellow	Appearance	Green	Red	Turuncu	Red
	Product	W22	W43	W70	06M	W72		Product	W42	W77		Product	W38	W41	Product	W73	W18	W74	W10
	THREADLOCKER					PIPE				RETAINING			FLANGE SEALANT						

### LUBRICANTS AND GREASES



### **WER-GREASE LITO EP Series:**

Lithium soap thickened EP greases with different NLGI classes. These are multi-purpose greases that provide excellent protection in systems subjected to heavy and vibrating loads, especially bearings and plain bearings in industry.

Article Nr.

W301LS

Packing:

1 kg, 4 kg, 16 kg

### **WER-GREASE CSC 462:**

EP grease with calcium sulfonate technology. Shows high performance mainly in high temperature, aqueous and corrosive environments and also under heavy load.

Article Nr.

W302SC

Packing:

1 kg, 4 kg, 16 kg

### **WER-GREASE MS-PASTE 450:**

A multi-purpose assembly paste designed for very high temperatures. Contains a high percentage of graphite and molybdenum disulfide. Significantly reduces frictions up to 450°C. Can be used as a release agent for dry lubrication processes and processes at high temperatures.

Article Nr.

W303MMP

Packing:

1 kg, 4 kg, 16 kg

### **WER-GREASE PFPE 2000:**

Manufactured with PFPE and PTFE. It has the highest operating temperature among all grease types. Resistant to chemicals, acids, alkalis and solvents. Nonflammable. No toxic properties. Compatible with plastic, rubber and elastomers. For special loads and temperatures, where very high performance of the grease is expected, especially in the cardboard and textile industries.

Article Nr.

W304PFP

Packing:

1kg

### **WER-GREASE PU EM Series:**

A grease manufactured with a polyurethane thickener designed for the lubrication of ball and spherical bearings of electric motors.

Article Nr.

W305PU

Packing:

1 kg, 4 kg, 16 kg



### **WER-GREASE LITOX HI-SPEED:**

A lithium complex soap and a synthetic polyalphaolefin grease specifically designed for high speed bearings.

Ideal for plastic and elastomer applications, CNC mirror bearings and fan applications.

Article Nr.

W306YHG

Packing:

1 kg, 4 kg, 16 kg

### **WER-GREASE COPPER PASTE:**

It is a copper assembly paste that can be used at very high temperatures up to 1100°C. Especially preferred in applications, where conductivity is desired.

Article Nr.

W307BKG

Packing:

1 kg, 4 kg, 16 kg



### WER-GREASE SILICONE GREASE:

High viscosity silicone grease. Provides electrical insulation, is nonflammable and does not drip. A perfect lubricant and release agent for plastic-plastic and metal-plastic application surfaces. Used as a sealing grease in all kinds of valves.

Article Nr.

W308SYG

Packing:

1 kg, 4 kg, 16 kg

### **WER-MOLD MOLD RELEASE SIL-FREE 2000**

Used as a silicone-free mold release agent, because it adheres to metal even at high temperatures.

Article Nr.

W309KAS

Packing:

30 It

### WERTAP

Ideal for chipping, tapping, threading, broaching, drilling and reaming all types of the hardest steels. Used in hobbing machines. Extends the lifespan of tool tips.

Article Nr.

W310DAY

Packing:

400 ml, 5 lt, 20 lt



### MAINTENANCE AND REPAIR PRODUCTS

### **RTV GASKET MAKER**

Used for part assembly and all surface sealing processes. Fills corrosion gaps and provides waterproofness. It is a one-component sealing product with an operation array of -60°C-+300°C (with a sudden shock temperature tolerance). Resistant to fuels, oils, seawater, gases, corrosive liquids, sunlight, UV light and ozone.

Appearence	Black	Article Nr.	W401SCS	Packaging	80 ml
Appearence	Gray	Article Nr.	W402SCG	Packaging:	80 ml
Appearence	Red	Article Nr.	W403SCK	Packaging:	80 ml



### **AUTOMATIC RTV GASKET MAKER**

Used for part assembly and all surface sealing processes. Fills corrosion gaps and provides waterproofness. It is a one-component sealing product with an operation array of -60°C-+300°C (with a sudden shock temperature tolerance). Resistant to fuels, oils, seawater, gases, corrosive liquids, sunlight, UV light and ozone.

Article Nr.

W404SCO

Packing:

200 ml

### WERTAL METALL-FIXER-WATER

Used for repairing defective holes in metal, wood and plastic, holes in pipes, air vents and all cracks. 20 minutes after mixing the 2 components, mechanical operation can be started. Parts can be sanded, milled, drilled and painted over. It has a temperature tolerance up to 180°C (300°C for short periods). The cured product has a higher Shore hardness (87) than concrete (60). Used in lathe leveling operations, factories, production maintenance repair departments and metalworking workshops.

Article Nr.

W405MFS

Packing:

56 g





### WERTAL METALL-FIXER-WOOD

Used for furniture parts, gluing hinges, repairing holes, fixing screws and quick repair of wood. Remains slightly flexible. Used for repairing defective holes in metal, wood and plastic, holes in pipes, air vents and all cracks. 20 minutes after mixing the 2 components, mechanical operation can be started. Parts can be sanded, milled, drilled and painted over. Has a temperature tolerance up to 180°C (300°C for short periods). The cured product has a higher Shore hardness (87) than concrete (60).

Article Nr.

W406MFA

Packing:

56 g

#### WERTAL METALL-BOXER-COPPER

Used for quick repairs of pipes and bends, hot and cold water pipes, copper channels and plates, water tanks and flanges. Used for repairing defective holes in metal, wood and plastic, holes in pipes, air vents and all cracks. 20 minutes after mixing the 2 components, mechanical operation can be started. Parts can be sanded, milled, drilled and painted over. Has a temperature tolerance up to 180°C (300°C for short periods). The cured product has a higher Shore hardness (87) than concrete (60).

Article Nr.

W407MFB

Packing:

56 g

### WERTAL METALL-FIXER-FLUX

Repairs faulty holes, cracks and broken pitches on metal, wood and plastic. Provides tolerance up to 120°C. A mechanical operation can be performed after 30 minutes. Parts can be sanded, milled, drilled and painted over. Ideal for quick and urgent repairs.

Article Nr.

W408MFF

Packing:

56 g, 115 g



### AUTOMOTIVE PRODUCTS

### **TIRE REPAIR KIT**

Thanks to its special formula, it rubberizes on contact with air, thus allows the repair of punctured tires without disassembly. An essential product that should always be carried in vehicles such as cars, light commercial vehicles, caravans, motorcycles and bicycles. After repair, the tire can be inflated to 20 psi. Does not harm the tire. Practical, fast and reliable product.





### **GASOLINE FUEL ADDITIVE**

Increases octane and reduces fuel consumption. It facilitates the operation of the engine in cold weather. It reduces exhaust gases and thus pollution. Can be used for all gasoline-powered vehicles with fuel injection and carburetor.

Article Nr.

W502BKS

Packing:

300 ml

### **DIESEL FUEL ADDITIVE**

Removes residues contained in the engine, prevents gelling and freezing of the fuel. Facilitates the operation of the engine in cold weather and saves fuel by making the engine run more efficiently. It reduces exhaust gases and thus pollution. Can be used for all gasoline-powered vehicles with fuel injection and carburetor. Can be used on all diesel-powered turbo, common rail and atmospheric vehicles.

Article Nr.

W503DKS

Packing:

300 ml



### **GASOLINE INJECTOR CLEANER**

Removes deposits from the combustion area of the engine with the valve and injection heads. Increases the efficiency of the gasoline spray system. Optimizes the gasoline-air mixture ratio. Improves the working performance of the engine in cold weather conditions.

Article Nr.

W504BET

Packing:

300 ml

#### DIESEL INJECTOR CLEANER

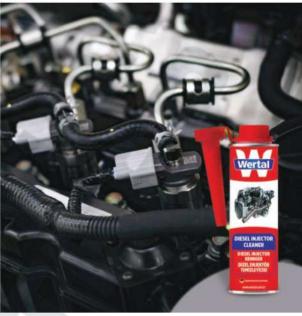
Removes deposits from the combustion area of the engine, the valve and injection heads. Increases the efficiency of the diesel spray system. Optimizes the diesel-air mixture ratio. Improves the working performance of the engine in cold weather conditions.

Article Nr.

W505DET

Packing:

300 ml





### CLEANING PRODUCTS

### **WERSOAP**

A product designed for easy cleaning of very heavy oil, carbon, tar, paint, ink and stubborn dirt from hands in industry and workplaces. Thanks to the special particles in its formula, it is effective in removing stubborn dirt. Unlike its competitors, it does not scratch the hands and cares for the skin with its special formula. Creates the feeling of being creamed.

Article Nr.

W601EES

Packing:

3,30 It







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