



MAINTENANCE REPAIR PRODUCTS



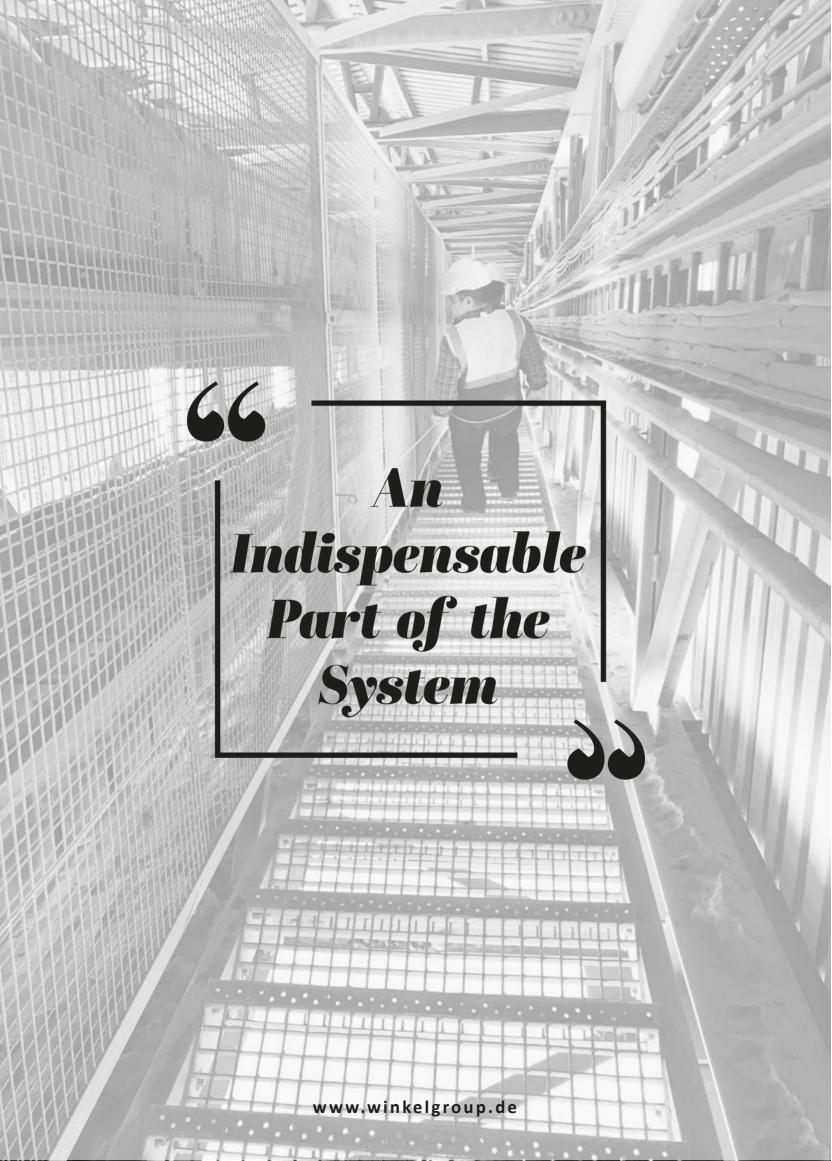
WINKEL

WINKEL











WINKEL GmbH has been producing "engineering adhesives, repair epoxies, maintenance / preventive maintenance aerosol products" to the MRO and OEM sectors in European standards with WINKEL or Private Label brands since 2001.

WINKEL is one of the leading companies in the industry as an engineering firm. Our company produces solutions in different areas of the industry under the slogan of "An Indispensable Part of the System" through its widespread distributor network. This catalog is a reference guide for our product portfolio. Please contact us for more detailed technical information or for your special requests.

Our targets are; ...To minimize your unplanned downtime in your business ...Provide sustainable skills to your maintenance / production staff ...Reducing your maintenance costs.

For additional information or requests, please visit our website or send e-mail to your responsible sales engineer.

Winkel GmbH Euskirchen-Germany



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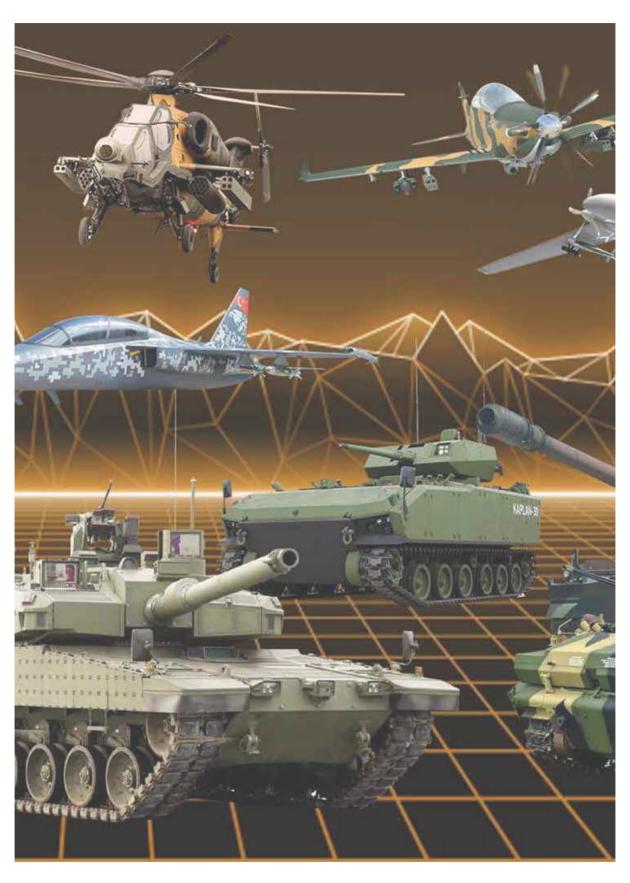
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You can visit www.winkelindustry.ca for additional information. You can direct your technical questions to your responsible technical sales engineer or to info@winkelgroup.de

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WINKEL DEFENSE INDUSTRY APPROVED PRODUCTS



For detailed information, please visit www.winkelgroup.de or contact info@winkelgroup.de for your requests.

THREADLOCKERS

	2W22	2W43	2W701	2W72	2W77	2W90
Color	Purple	Blue	Green	Red	Red	Green
Strength	Low	Medium	High	High	High	Medium
Viscosity (25°C)	800-1500 mPa·s	1500-4000 mPa·s	300-900 mPa·s	8000-17000 mPa·s	6000-8000 mPa·s	8-25 mPa·s
First Hold	5-15 min.	5-15 min.	< 15 min.	< 15 min.	< 15 min.	< 35 min.
Functional Strength	3-6 hr.	40 min.				
Latest Strength	12-24 hr.					
Recommended Ø Thread Size	M36	M36	M20	M36	M36	M36
Gap Filling	max. 0,10 mm	max. 0,25 mm	max. 0,35 mm	-	-	-
Breakaway Torque	5-15 Nm	20-30 Nm	30-45 Nm	30-45 Nm	30-45 Nm	20-30 Nm
Heat Resistance	-55°C to +180°C -67°F to +356°F					

NEW Products in this series have White MSDS. Meaning that there is no content in the product labels and MSDS that will a risk to the user and the environment. * Anaerobic auxiliary products: We recommend Winkel Pro Fast Cleaner for ideal surface cleaning and preparation and also Winkel Pro Anaerobic Activator for your fast curing needs at low temperatures.

WINKEL PRO 2W22



Size: 50 ml **Box**: 10 pcs **Art. No.**: 20300

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20301

It is a low-strength, removable, anaerobic adhesive product developed for fixing and sealing all kinds of bolt connections. The product is applied between metal connections and cures in the absence of air. Drying speed of active metals, stainless, chrome, etc. is faster than that of passive metals. It is highly resistant to vibration, oil and temperature up to 180°C (356°F). If necessary, it can be easily removed by hand tools.

WINKEL PRO 2W43

It is a medium-strength adhesive product developed for sealing and fastening all kinds of bolt connections. The product is applied between metal connections and cures in the absence of air. Faster reaction with ferrous alloys. It is highly resistant to vibration, oil and temperature up to 180°C (356°F). If necessary, it can be easily removed by hand tools.



Size: 50 ml Box: 10 pcs Art. No.: 20303 Size: 250 ml Box: 10 pcs Art. No.: 20304

THREADLOCKERS |

WINKEL PRO 2W701

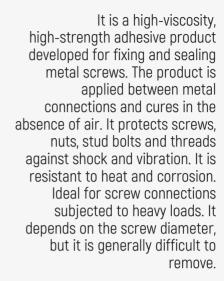
It is a high-strength adhesive product developed for fixing and sealing metal screws. It is highly resistant to oil and temperature up to 180°C (356°F). This ensures that the stud bolts are secured without dismantling the roller bearings. Especially ideal for thread connections that are used in heavy loads. It can also be used on slightly soiled surfaces.



Size: 50 ml **Box**: 10 pcs **Art. No**: 20306

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20307

WINKEL PRO 2W72





Size: 50 ml **Box**: 10 pcs **Art. No**.: 20309

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20310

WINKEL PRO 2W77



Size: 50 ml **Box**: 10 pcs **Art. No**: 20312

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20313 It is a high-strength adhesive product developed for fixing and sealing metal screws. The product is applied between metal connections and cures in the absence of air. It protects screws, nuts, stud bolts and threads against shock and vibration. It is resistant to heat and corrosion. Ideal for screw connections subjected to heavy loads. Viscosity is lower than 2W72. It depends on the screw diameter, but it is generally difficult to remove.



Size: 50 ml **Box**: 10 pcs **Art. No.**: 20315

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20316

WINKEL PRO 2W90

It is a medium-strength adhesive product developed for fixing and sealing preassembled metal screws. The product is applied between metal connections and cures in the absence of air. Due to the capillary effect, it easily penetrates into micro pores and capillary cracks. Safely seals cracks and welding joints in cast bodies. Ideal for fixing machine screws and cylindrical connections.

THREAD SEALANTS

	5W11	5W77	5W72	5W42
Color	White	Yellow	White	Brown
Strength	Low	Medium	Low	Medium
Viscosity (25°C)	15000-30000 mPa·s	15000-30000 mPa·s	15000-30000 mPa·s	400-1000 mPa·s
First Hold	< 15 min.	5-15 min.	< 15 min.	5-15 min.
Functional Strength	1-3 hr.	3-6 hr.	1-3 hr.	3-6 hr.
Latest Strength	12-24 hr.	12-24 hr.	12-24 hr.	12-24 hr.
Recommended Ø Thread Size	M80	M80	M80	M26
Gap Filling	-	max. 0,35 mm	-	max. 0,15 mm
Breakaway Torque	5-15 Nm	20-30 Nm	5-15 Nm	-
Heat Resistance	-55°C to +180°C -67°F to +356°F			

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WINKEL PRO 5W11



It is a low-strength, thixotropic thread sealant developed for parallel and bevel gears and their combinations. It has moderate mechanical resistance. The product is applied between metal gears and cures in the absence of air. It provides impermeability against water, compressed air, gas, gasoline, propane and also chemical products used in private and industrial facilities.

Size: 50 ml **Box**: 10 pcs **Art. No**.: 20400

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20401



WINKEL PRO 5W77

It is a medium-strength gear sealing product developed for parallel and bevel gears and their combinations. The product is applied between metal gears and cures in the absence of air. Resistant to temperature up to 180°C (356°F). It provides reliable sealing unlike traditional materials such as linen and PTFE.

Size: 50 ml **Box**: 10 pcs **Art. No**.: 20403

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20404

THREAD SEALANTS



WINKEL PRO 5W72

It is a low-strength, thixotropic thread sealant developed for parallel and bevel gears and their combinations. It has moderate mechanical resistance. The product is applied between metal gears and cures in the absence of air. It provides impermeability against water, compressed air, gas, gasoline, propane and also chemical products used in private and industrial facilities.

Size: 50 ml **Box**: 10 pcs **Art. No**.: 20406

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20407



Size: 50 ml **Box**: 10 pcs **Art. No**.: 20409

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20410

WINKEL PRO 5W42

It is a medium-strength sealing product developed for threaded connections in hydraulic and pneumatic systems. The product is applied between metal gears and cures in the absence of air. It provides impermeability against water, compressed air, gas, gasoline, propane and also chemical products used in private and industrial facilities. It has a high resistance to temperatures up to 180°C

RETAINING COMPOUNDS

	6W20	6W38	6W41	6W48	6W60
Color	Green	Green	Yellow	Green	Metallic Grey
Strength	High	High	Medium	High	High
Viscosity (25°C)	5000-10000 mPa·s	2000-5000 mPa·s	400-700 mPa·s	400-700 mPa·s	200000-600000 mPa·s
First Hold	< 20 min.	5-10 min.	< 10 min.	5-10 min.	< 15 min.
Functional Strength	3-6 hr.	1-3 hr.	4-8 hr.	1-3 hr.	3-6 hr.
Latest Strength	9-18 hr.	12-24 hr.	24 hr.	3-6 hr.	24 hr.
Recommended Ø Thread Size	M50	M36	M36	M20	M20
Gap Filling	max. 0,15 mm	max. 0,30 mm	max. 0,20 mm	max. 0,25 mm	max. 0,25 mm
Breakaway Torque	20-35 Nm	20-35 Nm	10-20 Nm	40-50 Nm	20-35 Nm
Heat Resistance	-55°C to +200°C -67°F to +392°F	-55°C to +180°C -67°F to +356°F			

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WINKEL PRO 6W20



It is a high-strength retaining compound that developed especially for passive surfaces. It has a resistance to hot oil. The product is applied between metal connections and cures by reacting in the absence of air. It works well on cylindrical parts to be assembled even if there is a slightly dirty surface.

Size: 50 ml **Box**: 10 pcs **Art. No.**: 20600

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20601

*This product does not have White MSDS



It is a medium-strength retaining compound developed especially for cylindrical joints. The product is applied between metal connections and cures by reacting in the absence of air. It is widely used for locking bearings that need to be removed and installed frequently. It is also used to lock rotating parts to gear wheels.

WINKEL PRO 6W41

Size: 50 ml **Box**: 10 pcs **Art. No.**: 20606

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20607

RETAINING COMPOUNDS

WINKEL PRO 6W38



Size: 50 ml **Box**: 10 pcs **Art. No**.: 20603

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20604

It is a fast curing, high-strength retaining compound. Developed especially for all kinds of cylindrical joints exposed to static shear strength and dynamic loads. The product is applied between metal connections and cures by reacting in the absence of air. It has a temperature resistance up to 180°C (356°F). It is widely used for bonding gear wheels, pulleys and rotor joints.



WINKEL PRO 6W48



Size: 50 ml **Box**: 10 pcs **Art. No**.: 20609

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20610

It is a high strength retaining compound that makes it possible to fix cylindrical connections without cleaning. The product is applied between metal connections and cures by reacting in the absence of air. It has a temperature resistance up to 180°C (356°F). It fixes stud bolts that do not normally need to be loosened. It also locks the roller bearings. It is particularly suitable for screw connections that are subjected to overload.

WINKEL PRO 6W60

It is a metallic-colored.

high-strength anaerobic



retaining compound paste. It is developed to repair corroded clamping connections. The product is applied between metal connections and cures by reacting in the absence of air. Ideal for repairing worn ball bearings and keyways.

Size: 50 ml **Box**: 10 pcs **Art. No.**: 20612

Size: 250 ml **Box**: 10 pcs **Art. No.**: 20613

SEALANTS

	5W74	5W18	5W10
Color	Orange	Red	Pink
Strength	Medium	Medium	High
Viscosity (25°C)	30000-50000 mPa·s	30000-50000 mPa·s	80000-160000 mPa·s
First Hold	5-15 min.	5-15 min.	10-20 min.
Functional Strength	3-6 hr.	3-6 hr.	3-6 hr.
Latest Strength	12-24 hr.	12-24 hr.	12-24 hr.
Recommended Ø Thread Size	M80	M80	M56
Gap Filling	max. 0,35 mm	max. 0,35 mm	max. 0,25 mm
Breakaway Torque	10-15 Nm	21,2 Nm	5-10 Nm
Heat Resistance	-55°C to +180°C -67°F to +356°F	-55°C to +180°C -67°F to +356°F	-55°C to +180°C -67°F to +356°F

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WINKEL PRO 5W10

It is a high-strength sealing product developed for flange connections. The product is applied between metal gears and cures by reacting in an airless environment. Replaces solid gaskets in flange connections on gearboxes, pumps, etc. It is resistant to impact and vibration. It provides impermeability against water. gas, gasoline, oil, propane and also technical chemicals. It has temperature resistance up to 180°C (356°F).

Size: 50 ml **Box** : 10 pcs Art. No.: 20506

Size: 250 ml **Box** : 10 pcs Art. No.: 20507

WINKEL PRO 5W74



Size: 50 ml **Box** : 10 pcs Art. No.: 20500

Size: 250 ml **Box** : 10 pcs Art. No.: 20501

It is a medium-strength thixotropic surface sealing product developed for sealing metal gears and flanges. The product is applied between metal gears and cures by reacting in an airless environment. Widely used in factories and workshops for sealing covers, flanges and pump bodies against water, compressed air, gas, propane and gasoline; It can replace any type of flange gasket. It has high resistance to temperatures up to 180°C (356°F).

Size: 50 ml **Box** : 10 pcs Art. No.: 20503

Size: 300 ml **Box** : 10 pcs Art. No.: 20504



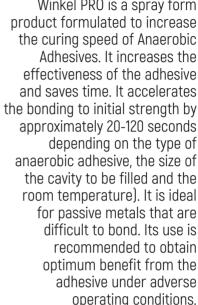
It is a medium-strength sealing and gasketing product developed for rigid flange connections. It provides high sealing at instant low pressure. The product is applied between metal gears and cures by reacting in an airless environment. It is widely used for sealing different metal material combinations, especially aluminum flanges. It is suitable for vertical surfaces and overhead applications. It has temperature resistance up to 180°C (356°F).

WINKEL PRO 5W18

ANAEROBIC AUXILIARY PRODUCTS



WINKEL PRO ANAEROBIC ACTIVATOR Winkel PRO is a spray form



WINKEL GARD BRITADER BRITADER AMERICAN AM

Size: 200 ml **Box**: 12 pcs **Art. No.**: 20700

WINKEL PRO FAST CLEANER



Size: 400 ml **Box**: 12 pcs **Art. No**: 20071

It is a solvent-based, high performance cleaner. The cleaning chemicals contain more than 90% active ingredients. It does not leave any residue, does not form a permanent film and does not corrode the surfaces. It dries quickly. eliminates moisture on metal surfaces and makes the surface ideal for adhesion. Generally for cleaning purposes before bonding or sealing processes. Ideal as a general degreaser and cleaner on all glass. ceramic and metal parts in workshops, businesses and homes. It is also used when surface pretreatment is required for painting or lining, or to remove silicone residues on metal surfaces.



Size: 50 ml Box: 50 pcs Art. No.: 20800 Color: Blue

Size: 50 ml **Box**: 50 pcs **Art. No.**: 20801 **Color**: Red

Size: 50 ml Box: 50 pcs Art. No.: 20802 Color: Yellow

WINKEL PRO GUARD SEAL PASTE

An innovative lacquer product for sealing, moving or warranted parts. This product replaces traditional sealing materials. This easily tear-off lacquer covers electrically conductive parts and protects them against corrosion and unknown external factors. Organic solvent based. Soluble preservation. Protection against outside interference. It covers electrically conductive parts. Very good adhesion. Widely use for many materials. It has an insulating feature.

INSTANT ADHESIVES

WINKEL PRO 4W01 SUPER GLUE - LONG LIFE

It is a long-lasting, cvanoacrylate-based instant adhesive developed for special purpose applications. It is used in individual applications where traditional adhesives do not give optimum results. It is used for leather, cardboard, cork, wood, foam, plastic, elastomer, metal and absorbent materials. High stability. High resistance to moisture. It does not soak paper and cardboard. Suitable for absorbent materials. Clean and aesthetic bonding. Fast hardening in 1-3 seconds.



Size: 20 g **Box**: 30 pcs **Art. No.**: 20105

WINKEL PRO 4W60 SUPER GLUE LOW ODOR & BLOOM

It is a cyanoacrylate-based instant adhesive specifically developed for applications where aesthetic bonding is important. It can be used safely with its own prescription. It is almost odorless. Creates a clean and aesthetic bond. Styrofoam has no abrasive effect in model making.



Size: 20 g **Box**: 30 pcs **Art. No**: 20100

WINKEL PRO 4W06 SUPER GLUE PLASTIC & RUBBER



It is a cyanoacrylate-based instant adhesive specially developed for bonding materials that are exposed to high temperatures and requiring high flexibility such as plastic-rubber. Different viscosities are available according to the application variety. Temperature resistant adhesion up to 125°C(257°F). It has improved impact resistance and high flexibility features.

 Size : 20 g
 Size : 20 g
 Size : 20 g

 Box : 30 pcs
 Box : 30 pcs
 Box : 30 pcs

 Art. No. : 20110
 Art. No. : 20111
 Art. No. : 20112

Low Viscosity Medium Viscosity High Viscosity

WINKEL PRO 4W15 SUPER GLUE METAL & RUBBER



Cyanoacrylate-based instant adhesive developed for bonding metal and metal rubber combinations. Where conventional adhesives do not give optimum results. It is also used for leather, cardboard, cork, wood, foam, plastic, elastomer and absorbent materials. It has high moisture resistance. It provides ideal bonding on aprons. Clean and aesthetic appearance. Fast hardening in 1-3 seconds.

Size: 20 g **Box**: 30 pcs **Art. No.**: 20205

INSTANT ADHESIVES

WINKEL PRO RUBBER BLACK TOUGHENED SUPER GLUE

It is a black cyanoacrylate-based instant adhesive. It has high moisture resistance, flexible structure, resistant to shock, impact and peeling. Paper and cardboard materials are not absorbed uncontrolled. Due to its black color, it is used to glue black parts, especially in model assembly, vehicle interior equipment and repairs of all kinds of plastics.





WINKEL PRO 2 COMPONENT SUPER GLUE

It is a gel form, two-component instant adhesive developed for special applications that require filling. The mixing ratio between components is 4:1. This high performance glue is suitable for demanding applications on surfaces such as metal, plastic and wood. Glues by filling the gaps on porous surfaces very well. Due to its gel form, it is ideal for vertical surfaces and overhead applications. It does not shrink while hardening and can be machined mechanically. It has an above average toughness and faster adhesion compared to conventional two-component adhesives.

Size: 11 g **Box**: 12 pcs **Art. No**: 20210

*Used with mixing tip

WINKEL PRO

CA PRIMER

WINKEL PRO GEL SUPER GLUE



It is a gel form instant adhesive developed for vertical surfaces and porous materials. It provides comfortable use on vertical surfaces and overhead applications without the risk of flowing. It prevents uncontrolled consumption of the adhesive and spreading to undesirable areas. Ideal for porous and absorbent materials such as metals, plastics, rubber, wood and cork.

Size: 20 g **Box**: 30 pcs **Art. No.**: 20200 It improves the adhesion of difficult-to-adhere materials such as PE, PP, PTFE, silicones and thermoplastics. Increases the bonding strength of the adhesive by balancing the surface energy. It is absolutely not used in plastics that can be bonded.



Size: 15 ml **Box**: 50 pcs **Art. No**: 20299

EPOXY & STRUCTURAL ADHESIVES

	5 MINUTE CLEAR EPOXY	A EASYMIX STEEL EPOXY PUTTY	F EASYMIX ALUMINUM EPOXY PUTTY	KNEAD STEEL EPOXY STICK	KNEAD WATER EPOXY STICK
Characteristic	Ероху	Ероху	Ероху	Ероху	Ероху
Color	Transparent	Black	Aluminum Grey	Grey	Green-White
Mixture Ratio (Volume)	1:1	1:1	1:1	1:1	1:1
Operating Time	3-5 min. (100 g)	30 min. (500 g)	20 min. (100 g)	3-5 min. (100 g)	20 min. (100 g)
First Holding Time/ Curing Time	5 min. 12 hr.	24 hr.	24 hr.	5 min. 20 min.	20 min. 1 hr.
Mixture Viscosity	10.000 cps	30.000 cps	25.000 cps	Ready Putty	Ready Putty
Shore D Hardness ASTM D 2240	85	80	80	85	85
Tension Strength	245 kg/cm²	476 kg/cm ²	567 kg/cm²	140 kg/cm²	490 kg/cm ²
Heat Resistance	-40°C to +93°C -40°F to +199.4°F	+149°C +300.2°F	+149°C +300.2°F	-29°C to +121°C -20.2°F to +249.8°F	+121°C +249.8°F

WINKEL PRO 5 MINUTE CLEAR EPOXY



It is a instant epoxy that makes the first fix in 5 minutes and reaches functional strength within an hour. Contains no fillers or solvents. It has excellent adhesion properties, high chemical resistance and is suitable for long periods of immersion in water. It bonds strongly to a wide variety of materials such as wood, ceramic, metals, fiberglass, glass, porcelain and concrete. Provide ideal use for multi-purpose repairs.

Size: 28,4 g **Box**: 14 pcs **Art. No.**: 20061

Size: 500 g **Box**: 1 pc

Art. No.: 20062 NATO Stock Number: 8040-01-548-3526

WINKEL PRO A EASYMIX STEEL PUTTY



It is an iron-filled casting repair epoxy with impact and abrasion resistance. It allows for quick repairs in an emergency. It can be drilled, tapped, leveled or painted over after curing. Ideal for engine bodies, furnace auxiliary components, molds, technical modification adaptation, modeling, casting bodies, hammer body repair, Zamak (kirksite) fillings, core boxes, prototypes.

Size: 500 g **Box**: 1 pc **Art. No**: 20013

EPOXY & STRUCTURAL ADHESIVES

	METAL MIX 5 MINUTE	HEAT RESISTANCE CLEAR EPOXY	WINPOX TWO COMPONENT	WINPOLY
Characteristic	Ероху	Ероху	Methyl Metacrylate	Hybrid Acrylate
Color	Grey	Transparent	Off White	Yellow
Mixture Ratio (Volume)	1:1	4:1	1:1	10:1
Operating Time	5-6 min.	60 min. (100 g)	5-7 min.	3 min.
First Holding Time/ Curing Time	6-8 min. 4-24 hr.	3 hr. (150°C)	10-12 min. 1 hr.	90-180 min. 8-24 hr.
Mixture Viscosity	Ready Putty	1.900 cps	150.000 - 200.000 mPa·s	-
Shore D Hardness ASTM D 2240	-	90	75	55
Tension Strength	6-7 N/m²	560 kg/cm ²	40 N/mm²	17 N/mm²
Heat Resistance	-60°C to +120°C -76°F to +248°F	+176°C +348.8°F	-55°C to +120°C -67°F to +248°F	-55°C to +80°C -67°F to +176°F

WINKEL PRO F EASYMIX ALUMINUM STEEL PUTTY



It is an aluminum-filled surface casting repair epoxy. It is suitable for hard and permanent repairs. It is a grey epoxy resin developed especially for casting in gaps between 0.4 and 12.5 mm. Once cured, it can be drilled or machined using conventional metalworking tools.

Size: 500 g **Box**: 1 pc **Art. No.**: 20022

HEAT RESISTANCE CLEAR EPOXY



It is a transparent epoxy specifically designed for places exposed to high temperatures. It is widely used in places where vacuum bag production is needed, such as the aircraft industry. It cures at room temperature. In final curing and autoclave applications, it can be subjected to a pressure of 100 kg / cm2 up to 6 hours between 176°C to 232°C (348.8°F to 449.6°F).

Meets the standard MIL Spec. MIL-S-83430A

Size: 50 ml **Box**: 10 pcs **Art. No**: 20060

EPOXY & STRUCTURAL ADHESIVES

WINKEL PRO KNEAD STEEL FPOXY STICK



It is an epoxy putty that is activated when kneaded by hand. It cures in 5 minutes and hardens like steel within 20 minutes. It adheres firmly even in water in a few minutes. After an hour, it can be cut, drilled and becomes suitable for other machining processes. The long-term heat resistance is 121°C (250°F) and the short-term heat resistance is 232°C (450°F).

Size: 114 g **Box**: 10 pcs **Art. No.**: 20051

NATO Stock Number: 8030-01-519-7679

WINKEL PRO KNEAD WATER EPOXY STICK



It is an epoxy putty that is activated when kneaded by hand. It cures in 20 minutes and hardens like steel within an hour. It adheres firmly even in water. After an hour, it can be cut, drilled and becomes suitable for other machining processes. The long-term heat resistance is 121°C (250°F) and the short-term heat resistance is 149°C (300°F).

Size: 114 g **Box**: 10 pcs

Art. No.: 20050 NATO Stock Number: 8030-01-436-8318

WINKEL PRO KNEAD STEEL & KNEAD WATER USAGE AREAS



PLUMBING - Sink drains, oil and water tanks, pipe connections, drain pipe leaks, etc.



ELECTRIC - Alternative usage such as tape, ceramic connector, control knob etc.



CERAMIC REPAIR - Cracked wall and floor ceramics, etc.



VEHICLE REPAIR - Metal strips, small dents, fuel tank, radiator, etc.



UNDERWATER REPAIR - Concrete swimming pools, aquarium etc.



SOLID SEALS - Permanent sealing and bonding



INDOOR REPAIRS - Screw holes in wood or metal, hanging pictures on the wall, light fixture assemblies, fixing loose furniture armrests and legs, air duct leaks, etc.



WINPOLY / PE- PP

WINPOLY is a two-component special structural adhesive with high impact resistance. Does not contain solvent. It is used for difficult-to-bond surfaces / metals such as polypropylene (PP), polyethylene (PE), Teflon®, EPDM (ethylene propylene diene monomer) and low surface energy plastics. Due to its hybrid acrylate-based and high-quality formulation, WINPOLY has excellent resistance to moisture and chemicals.



Size: 37 ml **Box**: 12 pcs **Art. No.**: 200 125

EPOXY & STRUCTURAL ADHESIVES

WINKEL PRO METAL MIX 5 MINUTE

It is a two-component metal-filled epoxy adhesive developed for maintenance and repair applications. It has high viscosity and does not contain solvent. The high metal content (70%) in the formulation makes it ideal for emergency repairs of metal parts. Since the shrinkage rate after curing is very low, it is suitable for repairing large areas. It provides easy repair of damages on vertical surfaces. Can be molded and used in model making. It also can be drilled, leveled, grinded, painted over after hardening.









Size: 500 g **Box**: 8 pcs

Art. No.: 20014





WINPOX



This is an off-white methyl methacrylate adhesive with two components. High-strength adhesive for plastics and metals. It is resistant to weather conditions. It can be drilled, leveled, grinded and painted over after hardening.

*It is used with the application gun and mixer tip.



Size: 25 ml **Box**: 14 pcs **Art. No.**: W200 001 **Size**: 50 ml **Box**: 12 pcs **Art. No**.: W200 002 **Size**: 400 ml **Box**: 20 pcs **Art. No.**: W200 003

	W-A Steel Putty	W-B Steel Liquid	W-F Aluminum Putty	W-F2 Aluminum Liquid	W-WR Wear Resistant	W-CB Wear Resistant
Structure	Putty	Liquid	Putty	Liquid	Putty	Putty
Color	Dark Grey	Dark Grey	Aluminum Grey	Aluminum Grey	Aluminum Grey	White
Operating Time on *Room Temp.	45 min. 500 g mix	45 min. 500 g mix	55 min. 500 g mix	55 min. 500 g mix	55 min. 500 g mix	55 min. 500 g mix
Mixture Ratio Weight/Volume	100:11 3:1	100:11 3:1	100:11 5.1:1	100:11 5:1	100:11 4:1	100:11 5.1:1
Shore D Hardness *ASTM D2240	90	90	90	90	85	90
Bond Strength *ASTM D1002	224 kg/cm ²	364 kg/cm²	280 kg/cm ²	280 kg/cm ²	280 kg/cm²	280 kg/cm ²
Compressive Load Strength	595 kg/cm²	847 kg/cm ²	735 kg/cm²	735 kg/cm ²	735 kg/cm ²	1085 kg/cm ²
Tension Strength	378 kg/cm ²	427 kg/cm²	350 kg/cm ²	350 kg/cm ²	350 kg/cm²	350 kg/cm²
Heat Resistance	+149°C +300.2°F	+149°C +300.2°F	+149°C +300.2°F	+149°C +300.2°F	+149°C +300.2°F	+149°C +300.2°F



W-WR2 Anti-Wear	W-CB2 Anti-Wear	CERAMIC COATING LIQUID	WINBACK ULTRA HIGH IMPACT	WINBACK 2 ACID RESISTANT	WINBACK PS1
Putty	Putty	Liquid	Putty	Liquid	Liquid
Aluminum Grey	White	White	Light Blue	Dark Blue	Light Blue
2-3 hr. 100 g mix	55 min 100 g mix	35 min. 100 g mix	45 min.	30 min.	45 min.
100:5 10:1	100:11 5.1:1	100:7,5 7.3:1	5.8:1.3	-	-
90	90	85	90	-	-
280 kg/cm ²	280 kg/cm²	280 kg/cm ²	-	15.8 MPa	-
735 kg/cm²	1085 kg/cm²	1085 kg/cm ²	-	118 MPa	-
350 kg/cm²	350 kg/cm²	350 kg/cm²	-	46 MPa	-
+205°C +401°F	+149°C +300.2°F	+149°C +300.2°F	+200°C +392°F	+220°C +428°F	+110°C +230°F

WINKEL W-A STEEL EPOXY PUTTY

It is suitable for steel, brass, wood, glass, ceramic and iron. Can be used for patching, repairing and rebuilding stainless steel equipment. Ideal for repairing pipes, valves, worn equipment etc. After the epoxy has hardened, it can be drilled, tapped, leveled and painted.

NATO Stock Number: 8040-00-180-6312 8040-00-157-8677

MIL SPEC: A-A-56015A (MIS-13894 TY2 CL2)



Size: 500 g (Resin + Hardener)

Box: 10 pcs **Art. No.**: W200 055

WINKEL W-B STEEL EPOXY LIQUID

It is for maintenance, repairing and prototyping applications. It is used to take molds on the model. Ideal for repairing pipes, valves, worn equipment, tool making, holding apparatus, metal forming molds etc.

After the epoxy has hardened, it can be drilled, tapped, leveled and painted.

NATO Stock Number: 8030-00-051-4012



Size: 500 g (Resin + Hardener)

Box: 10 pcs **Art. No.**: W200 057



WINKEL W-F ALUMINUM EPOXY PUTTY

It is used for maintenance and repair of aluminum castings. Ideal for repairing pipes, valves, worn equipment, tool making, holding apparatus, metal forming molds etc. After the epoxy has hardened, it can be drilled, tapped, leveled and painted.

NATO Stock Number: 6850-01-206-2359 8030-01-206-2359



Size: 500 g (Resin + Hardener)

Box: 10 pcs **Art. No.**: W200 060

WINKEL W-F2 ALUMINUM EPOXY LIQUID

It is an Aluminum-filled pourable liquid epoxy. It can be used for mold, prototype and apparatus making. The product is perfect for modeling precision or complex parts. Ideal for repairing pipes, valves, worn equipment, tool making, holding apparatus, metal forming molds etc.



Size: 500 g (Resin + Hardener)

Box: 10 pcs **Art. No.**: W200 061

WINKEL PRO W-WR2 ANTI-WEAR EPOXY PUTTY

It is used for maintenance, repair and styling applications. Suitable for parts that will enter the paint oven after application. It does not cause cracking. After the epoxy has hardened, it can be drilled, cut, processed and painted.

Size: 1 Kg (Resin + Hardener)

Box:1 pc **Art. No.**: 20032



WINKEL W-WR ANTI-WEAR EPOXY PUTTY

It provides a permanent solution for wear resistant epoxy repair, maintenance and tool applications. Ideal for repairing pipes, valves, worn equipment etc.

After curing, it can be drilled, tapped, leveled or painted.

NATO Stock Number: 8030-00-229-8735

Size: 500 g (Resin + Hardener)

Box: 10 pcs **Art. No.**: W200 066

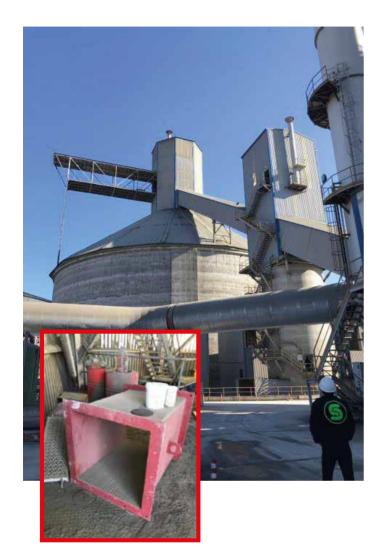


It is a two-component epoxy system consisting of hardener and resin developed for maintenance and repair applications. It can be applied with a brush and creates a smooth surface without brush marks.



Size: 1 Kg (Resin + Hardener)

Box :1 pc **Art. No.** : 20042





WINKEL W-CB CERAMIC BEAD WEAR RESISTANT PUTTY

It is an anti-corrosion epoxy that can be used with a spatula. It is strong against abrasion since it has small ceramic balls inside. After use, a smooth surface will be formed. Ideal for reconstruction and protection of systems exposed to corrosion, erosion, cavitation and chemicals. Can be used for pump repairs, gutter repairs, pipes, sludge lines and all parts subject to wear.

Size: 500 g (Resin + Hardener)

Box: 10 pcs **Art. No.**: W200 065

WINKEL PRO W-CB2 CERAMIC FILLED EPOXY PUTTY

This epoxy putty is developed for maintenance, repair and tool applications using a special hardener. It is a durable compound that can be drilled, cut, processed or painted after curing.

Size: 500 g (Resin + Hardener)

Box: 10 pcs **Art. No.**: 20041



WINKEL PRO WINBACK PS1 WET SURFACE COATING BLUE

It is a coating material with 100% pure copolymer. Developed for dams, tanks, pipes and retaining walls. It is applied to the dry surface and after curing, works in dipping conditions in a wet environment. It provides very hard and smooth structure after application. It has excellent resistance to acids, chlorine, corrosion and friction on steel surfaces. It can be used for a wide variety of surfaces. Its unique surface coating properties provide the desired maximum coating thickness in a single layer application.

Size: 1 Kg (Resin + Hardener)

Box : 6 pcs **Art. No.** : 60010

Size: 10 Kg (Resin + Hardener)

Box :1 pc **Art. No.** : 60011

WINKEL PRO WINBACK ULTRA HIGH IMPACT WEARING COMPOUND

It is a elastic epoxy that is applicable to apply with a trowel. Resistant to impact, chemical and wear. The special formulation provides ideal protection for slurry pumps, grooves and all equipment exposed to high friction. Its excellent filling provides excellent protection against wear, chemicals and corrosion. Due to the high density of fillers used, the excess heat that can be generated on the surface can be well dissipated.

* It has Naval Engineering Standard 713 Smoke Toxicity conformity ideal for underground applications.

Size: 7 Kg (Resin + Hardener)

Box :1 pc **Art. No.** : 50000

WINKEL PRO WINBACK 2 ACID RESISTANT

It is a coating material with 100% pure copolymer. Can be used on many surfaces, especially ideal for steel. It is a product with high resistance to severe corrosion, acid and wear. The product is suitable for food applications.



Size: 1 Kg (Resin + Hardener)

Box: 6 pcs **Art. No.**: 60000

ELASTIC SEALANTS

	IMPERMEABLE ADHESIVE	POLYURETHANE ADHESIVE SAUSAGE	LIQUID GASKET	AUTOMATIC CARTRIDGE LIQUID GASKET	AUTOMATIC CARTRIDGE LIQUID GASKET (GASKET PLUS)	HYLOMAR
Chemical Structure	Polyurethane	Polyurethane	Acetoxy Silicone	Acetoxy Silicone	Oxime Silicone	Polyester Resin
Color	White Grey Black	White Grey Black	Black	Transparent-Grey Black-Red	Grey-Black	Blue
Dry To Touch	40 ± 10 min.	40 ± 10 min.	15 min.	8 min.	8 min.	-
Drying Speed	3 mm 24 hr.	3 mm 24 hr.	2 mm 24 hr.	2 mm 24 hr.	2 mm 24 hr.	-
Shore A Hardness	35 - 40	50 ± 5	30	30	~40	-
Breakpoint Stretching	min. % 350	> % 350	-	-	% 300	-
Heat Resistance	-40°C to +90°C -40°F to +194°F	-40°C to +90°C -40°F to +194°F	-65°C to +250°C -85°F to +482°F	-65°C to +260°C -85°F to +500°F	-65°C to +260°C -85°F to +500°F	-50°C to +250°C -58°F to +482°F

IMPERMEABLE ADHESIVE

It is a one-component polyurethane-based adhesive and filling material. It has a high modulus and cures with the humidity of the air. It provides impermeability against water, air, gas and dust. It can be adhered to materials such as glass, porcelain, aluminum, iron, steel, lead, copper, wood, concrete, plastic without the need for a primer.

Size: 300 ml **Box** : 12 pcs Art. No.: W160 261-W Color: White

Size: 300 ml **Box** : 12 pcs Art. No.: W160 261-G Color: Grey

Size: 300 ml **Box** : 12 pcs Art. No.: W160 261-B Color: Black

LIQUID GASKET

It is a one-component silicone sealant. It is especially suitable for use in materials such as engines, gearboxes, oil seals, cylinder liners, carburetor covers, water pumps etc. (It is resistant to weather conditions, UV rays, hot water, oil, grease and temperatures between -65°C (-85°F) and 250°C (482°F) Art. No.: W200 502-Black

POLYURETHANE ADHESIVE



It is a one-component polyurethane-based adhesive and filling material. It has a high modulus and cures with the humidity of the air. It provides impermeability against water, air, gas and dust. It can be adhered to materials such as glass, porcelain, aluminum, iron, steel, lead, copper, wood, concrete, plastic without the need for a primer. Can be used for automobiles, containers, caravans and ships; sealing and gluing of ventilation ducts, gutters and taps; It reduces vibration in all types of metal plate assembly work. It is recommended to polish the glossy surface first.

> **Size**: 600 ml Box: 20 pcs Art. No.: W160 259-W Color: White

Size: 70 ml

Box : 30 pcs

Size: 600 ml Box: 20 pcs Art. No.: W160 259-G Color: Grey

Size: 600 ml Box: 20 pcs Art. No.: W160 259-B Color: Black

ELASTIC SEALANTS

RTV HIGH-TEMP SILICONE	HIGH-TEMP SILICONE (OXIME)	TRANSPARENT CRYSTAL ADHESIVE	UNIVERSAL SILICONE	NEUTRAL SILICONE	MS POLYMER	WINZOL Sealant Spray
Acetoxy Silicone	Oxime Silicone	MS Polimer	Alcoxy Silicone	Alcoxy Silicone	MS Polymer	Rubber
Red	Black	Transparent	Transparent White	Transparent	White-Transparent Black	White-Black Grey-Transparent
20-30 min.	8 min.	35 min.	-	45-50 min.	20 min.	-
3 mm 24 hr.	2 mm 24 hr.	3 mm 24 hr.	2 mm 24 hr.	1.8 mm 24 hr.	3 mm 24 hr.	2-4 hr.
20	~40	35 ± 5	-	10	60	-
% 500	% 300	-	-	% 500	% 500	-
-50°C to +255°C -58°F to +491°F	-65°C to +260°C -85°F to +500°F	-40°C to +90°C -40°F to +194°F	-45°C to +150°C -49°F to +302°F	-	-40°C to +100°C -40°F to +212°F	-25°C to +80°C -13°F to +176°F



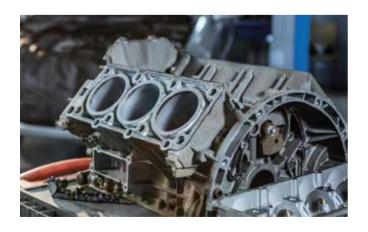
AUTOMATIC CARTRIDGE LIQUID GASKET - (GASKET PLUS)

It is a silicone liquid gasket with high temperature resistant and gap filling feature for flexible flange connections. It has high oil tolerance and impermeability. It can be used for sealing of many areas such as engine block, gearbox, crankcase, timing chain cover, intake manifold. It has little odor and does not cause corrosion. It provides ergonomic use and long shelf life thanks to its 200 ml packaging.



AUTOMATIC CARTRIDGE LIQUID GASKET

It is a one-component, acetoxybased, elastic, liquid gasket. Provides high quality and permanent elastic gasket by adhering very well to the material. It is resistant to weather conditions, UV rays, hot water, oil, grease. It is resistant to changing weather conditions, UV rays, hot water, oil and grease. It has temperature resistance between -65°C (-85°F) and 260°C (500°F), in short term up until +300°C (572°F).



Size: 200 ml **Box** : 12 pcs **Art. No.:** W200 504-0 Color: Black

Size: 200 ml **Box** : 12 pcs Art. No.: W200 505-0 Color: Grey



Size: 200 ml **Box**: 12 pcs Art. No.: W200 503 Art. No.: W200 504

Color: Transparent Color: Black

Size: 200 ml **Box**: 12 pcs

Size: 200 ml **Box**: 12 pcs

Color: Grey

Size: 200 ml **Box**: 12 pcs Art. No.: W200 505 Art. No.: W200 506 Color: Red

ELASTIC SEALANTS

RTV HIGH-TEMP SILICONE



It is an acetoxy-based, high temperature resistant adhesive / sealant silicone that cures with the humidity of the air. It is 100% silicone polymer and has high strength. Does not contain solvent. Conforms to ISO 11600 - F&G - 25 LM. It is resistant to ozone and UV rays. Heat resistance is up to 255°C (491°F), in short term 285°C (545°F). Ideal for non-porous surfaces such as aluminum, glass, ceramic, tiles.

Size: 280 ml Box: 25 pcs Art. No.: W160 254 Color: Red

UNIVERSAL SILICONE

It is an acetoxy-based, general purpose silicone sealing / filling material. It provides excellent adhesion to non-porous surfaces. Generally it is used in joints of building elements, door and window openings, bathroom and kitchen applications, filling and insulation purposes, glass attachment, assembly works. Ideal materials are wood, metal, glass, porcelain, steel, etc.



 Size : 310 ml
 Size : 310 ml

 Box : 25 pcs
 Box : 25 pcs

 Art. No. : W160 250-T
 Art. No. : W160 250-W

 Color : Transparent
 Color : White

HIGH-TEMP SILICONE



It is an oxime-based, high temperature resistant adhesive / sealing silicone. Provides high quality and permanent elastic gasket by adhering very well to the material. It has excellent resistance to gasoline / diesel fuels, oils, grease, water, sea water, UV rays and ozone. Ideal for use in engine block sealing, crankcase connections, all flanges, gearboxes, axles, air conditioning and heating devices, furnace sections, ceramic furnaces.

Size: 310 ml Box: 20 pcs Art. No.: W160 255 Color: Black

HYLOMAR

Hylomar is a technically advanced, permanent plastic polyester-urethane sealant. It is resistant to all industrial fuels, oils, water and salt water, air, turbine and piston engine combustion products. It is resistant to water, water / glycol and methanol blends. It is resistant to a wide variety of liquids (Avtur and Avcat), including petroleum, fluorocarbon coolants, synthetic ester-based oils, diesel and kerosene fluids.



Size: 80 ml **Box**: 10 pcs **Art. No.**: W200 073



/INKE

TRANSPARENT CRYSTAL **ADHESIVE**

It is a modified silane based, one component, adhesive / sealing material. It cures with the humidity of the air. Contains no solvent or isocvanate. It has excellent resistance to weather conditions.

Size: 310 ml **Box** : 25 pcs Art. No.: W160 266

WINZOL SEALANT SPRAY

It is a rubberized protective coating that can be used to fill and seal leaks and cracks. It acts as a waterproof and flexible seal on metals, aluminum, PVC, wall, asphalt roofing materials, vinyl facade, fiberglass and similar materials. Resistant to mechanical impact. In addition to industrial applications, it is used for repairs under vehicle covers.



Size: 500 ml **Box** : 12 pcs **Art. No.**: W150 304 Color: Black

Size: 500 ml **Box** : 12 pcs Art. No.: W150 305 Art. No.: W150 306

Color: Grey

Size: 500 ml **Box** : 12 pcs Color: White

Size: 500 ml **Box** : 12 pcs Art. No.: W150 308 Color: Transparent

MS POLYMER

It is a one-component, MS polymer-based, elastic adhesive / sealant that cures with the humidity of the air. It is applied for bonding various materials and sealing welded joints. Medium viscosity and elasticity. It is used in industrial, manual body construction, air conditioning engineering, ventilation systems, electrical engineering, material engineering, metalworking, sheet metal forming, polymer engineering and environmental protection. Suitable for use as a sealant just before painting.

Size: 290 ml **Box** : 12 pcs Art. No.: W160 270-T Color: Transparent

Size: 290 ml **Box** : 12 pcs Art. No.: W160 270-B Color: White

Size: 290 ml **Box** : 12 pcs Art. No.: W160 270-S Color: Black

NEUTRAL SILICONE



It is a one-component, alcoxybased, neutral silicone. Developed for use in building exteriors and interiors. It is used for filling and bonding glass, joinery, metal, tiles, PVC and architectural elements. It is easy to use and has high elasticity. It has excellent adhesion to many types of surfaces without primer. Resistant to ozone and UV rays. It does not cause metal corrosion.

Size: 310 ml **Box** : 25 pcs Art. No.: W160 252

WINBACK®

CRUSHER & MILL REPAIR PRODUCTS

ACID, CHEMICAL RESISTANT COATING AND WEAR RESISTANT PRODUCTS



Miracle in the Box

Innovation not Imitation

WINBACK® - NORDBAK®

"An Indispensable Part of the System"

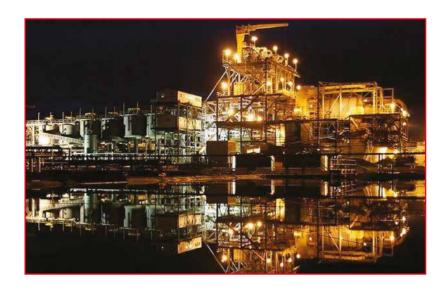
In the 50 years that **NORDBAK®** has been in South Africa, its products have developed from a single product, used only in crushers, to its wide range of world-renowned products. **WINKEL®** is proud to add the World Giant **NORDBAK®** group in Wear and Abrasion Resistant Compounds and Crusher & Mill Repair Products to its product family. The products are now in the Canadian market with varieties that will meet the increasing needs of the sector under the guarantee of **WINBACK®-NORDBAK®** brands.

- · Acid resistant coating and linings
- Grouting
- · Crusher backing
- · Corrosion solutions
- · Abrasion resistant products

Manufacturers and trademark holder, **NORDBAK**® attributes the development of the broader range to a growing need by the industry for different types of products. These include an expansion into world renowned abrasive resistant, acid, alkaline and corrosion resistant coatings, and a large range of general-purpose products for the construction and industrial sectors. Continuous research by the **NORDBAK**® principal and associated company's worldwide support the development of these products. **NORDBAK**® products are continually on test in new applications with great success. **NORDBAK**® will tailor make a product for a specific application.

By utilizing the latest generation of chemicals available we have improved the quality of all our products to a level, which surpass the previously set standards for all applications. The highest standards of quality control methods are applied to the manufacturing process and to applications.

We are the preferred supplier at a host of mines as well as a diverse sector of specialized industries, including food and food packaging. **NORDBAK®** polymer based products are used successfully in general engineering, petrochemicals, building and civil construction, sugar mills, cement manufacture and water reticulation. Repair and maintenance uses are constantly evolving.



CRUSHER & MILL REPAIR PRODUCTS ACID, CHEMICAL RESISTANT COATING AND WEAR RESISTANT PRODUCTS

PRODUCT USAGE AREAS AND REPRESENTATION

WINBACK® - NORDBAK® ranges of products are supplied extensively to all the Mining Houses in South Africa and many countries in Africa, a few of which include Tanzania, Zambia, Botswana, Namibia, the DRC, Ghana, Mali, Mauritania, Guinea, Ivory Coast, Sierra Leone and Burkina Faso.

The types of applications for which the **WINBACK®** - **NORDBAK®** range of products can be utilized are as follows:

Crusher & Mill Repair Products

- For the backing and reinforcement of metal liner plates and the filling of gaps between liners and support structures and the protection of new liners in trunion ends.
- They can be used in Cone Crushers, Primary Gyratory Crushers, Rotating Mills, Pulverisers and other Reduction machinery.

Wear and Abrasion Resistant Compounds

- For all high wear and erosion areas in the plant process with various applications from water, slurry, aggregate transportation to protection from acid and chemicals.
- For the internal lining of pipes, pipe bends, chutes, pumps, tank walls, agitator blades, cyclones, splitter and distribution boxes, launders, de-watering bins and granulation bins.

Coatings

- A range of coatings for superb resistance in corrosion, wear, water and acid environments. Can be used on concrete and steel as well as a wide variety of other substrates. Each kit is a two-part system (Resin & Hardener) which when mixed, create a single product for one or more individual coating applications. (No primer or intermediate coats required).
 - For application to internal and externals of Pipes, Pipe Bends, Structural Steel, Tanks, Thickeners, Agitators, Process Vessels and various Workshop Floors.

Grouts

- Grouts are for the reinforcing or repair of all heavy machinery foundations and offer unique advantages in their combination of strength and economy. One-hundred percent (100%) solids with no shrinkage.
 - For all foundations of large Crushers and Mills, Bund Walls, Pump Plinths and Workshop Machinery.

Pulleys

• Supply of Hi Impact Pulley compound (SANS1669) as well as new pulleys manufactured and lagged to SANS1669 specifications.

Other Products

· For detailed information, please visit our website www.winkelindustry.ca

CRUSHER & MILL REPAIR PRODUCTS ACID, CHEMICAL RESISTANT COATING AND WEAR RESISTANT PRODUCTS

ADVANTAGES

- Longer life of WINBACK® NORDBAK® minimises downtime, maintenance costs and shutdown periods
- · Extends the life of the steel pipe
- Superior adhesion bond between steel and lining prevents corrosion and ingress of foreign matter between lining and steel
- · Pipe continuously reusable as product lining is repairable
- · Pipes are not discarded after a timely wear as WINBACK® NORDBAK® is easily repaired.
- Not affected by temperature extremes, climatic conditions and UV radiation
- · Does not break out in chunks to block pumping systems and choke pipelines
- · Easily repairable by unskilled labor
- · WINBACK® NORDBAK®, can be disposed of in terms of ISO 14002

"We are using Nordwear 5 on our water pipes and hot water return pipes. The first pipe lined with Nordwear 5 was installed in October 1998, and to date is still running with no deterioration to the product."

"Since using the Nordbak coating product we have not experienced any Micro problems or any off taste, smell or appearance problems in our treated water."

"Nordcoat 6 was used to corrosion protect the spreader on the crane. The coating is clearly seen to provide good protection in the harsh marine conditions in which the spreader operates"

"Nordwear 8 is used in our slag and granulation lines where we were experiencing severe wear problems. Since the change over to Nordwear 8 we have extended the life of our pipes, reducers and bends to six times longer than we were achieving with rubber lining."

"Nordbak wearing compounds have proved to be cost affective, resulting in less downtime and increased productivity, and I would gladly give references."

CRUSHER & MILL REPAIR PRODUCTS

For the backing and reinforcement of metal liner plates and the filling of gaps between liners and support structures and the protection of new liners in trunnion ends.

They can be used in Cone Crushers, Primary Gyratory Crushers, Rotating Mills, Pulverizers and other Reduction machinery.

Art. No.	Product	
70107 (20 kg)	WINBACK® - NORDBAK® PRIMARY BACKING	PRIMARY BACKING for backing metal wear plates in Primary Gyratory Crushers giving exceptional compressive and impact strengths together with improved tensile strength
70105 (10 kg) 70106 (20 kg)	WINBACK® - NORDBAK® HI-PERFORMANCE BACKING	HI-PERFORMANCE BACKING for backing metal wear plates in large Gyratory Crushers and Seven-foot Cone Crushers. It offers excellent impact strength and resilience, together with high compression and tensile strengths.
70100 (10 kg) 70108 (20 kg)	WINBACK® - NORDBAK® STANDARD BACKING	STANDARD BACKING is a tough, resilient and ideal backing for smaller Cone Crushers, Gyratory Crushers, Rotating Mills, Pulverizers and other heavy reduction machinery.
70101 (10 kg) 70109 (20 kg)	WINBACK® - NORDBAK® SUPERBAK BACKING	SUPERBAK BACKING is a low budget backing that is tough, resilient and ideal for smaller Cone Crushers, Gyratory Crushers, Rotating Mills, Pulverizers and other heavy reduction machinery.
70110 (10 kg)	WINBACK® - NORDBAK® LOW VISCOSITY BACKING	LOW VISCOSITY BACKING is a low viscosity backing that is tough, resilient and ideal for pouring into small orifices of smaller Cone Crushers, Gyratory Crushers, Trunion Liners, Pulverisers and other heavy reduction machinery
70104 (2.8 kg)	WINBACK® - NORDBAK® LOCKING COMPOUND	LOCKING COMPOUND is a high temperature and high impact material for locking inner and outer eccentric bushes in Symons Cone Crushers.
70103 (4 x 1 kg) 70102 (12 kg)	WINBACK® - NORDBAK® TROWEL MIX	TROWEL MIX is ideal for sealing backing liners in all types of Crushers and Mills. Its paste-like consistency eliminates the need for dismantling the mill or removing the grinding charge. Trowel Mix also secures liner bolts in their holes.





























WEAR AND ABRASION RESISTANT COMPOUNDS

WEAR AND ABRASION RESISTANT COMPOUNDS

For all high wear and erosion areas in the plant process with various specifications from water, slurry, aggregate transportation to protection from acid and chemicals.

For the lining of pipes, pipe bends, chutes, pumps, tank walls, agitator blades, cyclones, splitter and distribution boxes, launders, de-watering bins and granulation bins.

- Up to 10 times the life of steel and extensively outlasts rubber in many applications (SABS).
- · Does not perish.
- · Does not break loose.
- · Does not block pump systems or pipe lines.
- · Integral bond to substrate.
- · Elevated temperature resistance.
- · Easily repaired and applied in situ.
- Safe to use (FDA 21 CFR 175 & 176)
- · Toxicity Tested.



WEAR AND ABRASION RESISTANT COMPOUNDS

Art. No.	Product	
50000 (7 kg)	WINBACK® - NORDBAK® NORDTILE	NORDTILE is a high alumina filled co-polymer trowelable monolithic paste with excellent wear properties together with resilience, high impact strength and chemical resistance. It is designed specifically for slurry lines, pump casings, chutes, hoppers and very high wear abrasion applications.
50001 (4 X 1 kg)	WINBACK® - NORDBAK® NORDTILE FAST SET	NORDTILE Fast Set is a fast curing high alumina filled copolymer trowelable monolithic paste with excellent wear properties together with resilience, high impact strength and chemical resistance. It is designed specifically for slurry lines, pump casings, chutes, hoppers and very high wear abrasion applications.
50600 (10 kg)	WINBACK® - NORDBAK® NORDWEAR 8	NORDWEAR 8 is an alumina filled co-polymer trowelable paste with very good wear properties together with resilience, high impact strength and chemical resistance. The product is also suitable for both waterborne slurries and pneumatic conveyancing.
50200 (10 kg)	WINBACK® - NORDBAK® NORDWEAR 5	NORDWEAR 5 is an alumina filled co-polymer trowelable paste with good wear properties together with resilience, high impact strength and chemical resistance. The product is also suitable for both waterborne slurries and pneumatic conveyancing.
50202 (10 kg) 50203 (4 x 1 kg)	WINBACK® - NORDBAK® NORDWEAR 5 ACID	NORDWEAR 5 ACID is a co-polymer trowelable paste with excellent acid resistant and wear properties together with resilience and impact strength. Specifically designed for plants where high levels of salts (sodium sulphate and ammonium sulphate are present at pH values between 3 and 10).
50201 (4 x 1 kg)	WINBACK® - NORDBAK® NORDWEAR 5 Fast Set	NORDWEAR 5 Fast Set is a fast setting paste designed for quick repair applications. It is an alumina filled co-polymer trowelable paste with good wear properties together with resilience, high impact strength and chemical resistance. The product is also suitable for both waterborne slurries and pneumatic conveyancing.
50400 (12.5 kg)	WINBACK® - NORDBAK® HIGH IMPACT PULLEY	HIGH IMPACT PULLEY was designed to meet the South African National Standard SANS 1669 for pulley lagging. It complies with Naval Engineering Standard 713 for Smoke Toxicity, ISO 340 - 2004 for Flammability and is suitable for underground applications. Meets the requirements of SANS 1669-2:2008.
50300 (10 kg) 50500 (4 x 1 kg)	WINBACK® - NORDBAK® FIXWEAR	Designed for armor-surfacing wear areas caused by solids or slurries.
50501 (4 x 1 kg)	WINBACK® - NORDBAK® FIXWEAR Fast Set	Fast Set is a fast curing armor-surfacing for wear areas caused by solids or slurries





























COATINGS

A range of coatings for superb resistance in corrosion, wear, water and acid environments.

Can be used on concrete and steel as well as a wide variety of other substrates. Each kit is a two-part system (Resin & Hardener) which when mixed, create a single product for one or more individual coating applications. (No primer or intermediate coats required).

For application to internal and externals of Pipes, Pipe Bends, Structural Steel, Tanks, Thickeners, Agitators, Process Vessels and various Workshop Floors.

Advantages of using Nordbak:

- · Longer life of **WINBACK® NORDBAK®** minimizes downtime, maintenance costs and shutdown periods.
- · Extends the life of the steel pipe
- Superior adhesion bond between steel and lining prevents corrosion and ingress of foreign matter between lining and steel.
- · Pipe continuously reusable as product lining is repairable.
- · Pipes are not discarded after a failure as WINBACK® NORDBAK® is easily repaired.
- · Not affected by temperature extremes, climatic conditions and UV radiation.
- Does not break out in chunks to block pumping systems and choke pipelines.
- · Easily repairable by unskilled labor.
- WINBACK® NORDBAK® can be disposed of in terms of ISO 14002.
- WINBACK® NORDBAK® coatings only require a one product application.
- · No primers or undercoats required.
- · Can be applied in damp, humid and dry conditions.
- · Curing times as low as 1 hour.
- · Can be applied by brush, roller or spray.
- · Safe for underground usage (Low Toxicity Index)



COATING PRODUCTS

OIL SEAL

60053 (10 kg)

Art. No.	Product	
60030 (10 kg) 60032 (3 x 1 kg)	WINBACK® - NORDBAK® NORDCOAT 1	NORDCOAT 1 is an outstanding corrosion and water proof coating which can be used on both concrete and steel, as well as a wide variety of other substrates. NORDCOAT 1 complies with SANS 1217 for coating of pipes and with NES 713 for Smoke Toxicity.
60033 (10 kg) 60031 (3 x 1 kg)	WINBACK® - NORDBAK® NORDCOAT 1 SPECIAL	NORDCOAT 1 SPECIAL is an outstanding corrosion, acid resistant and water proof coating which can be used on both concrete and steel, as well as a wide variety of other substrates. NORDCOAT 1 SPECIAL is ideal for coating at low ambient temperatures. NORDCOAT 1 complies with SANS 1217 for coating of pipes and with NES 713 for Smoke Toxicity.
60034 (3 x 1 kg)	WINBACK® - NORDBAK® NORDCOAT 1/4	NORDCOAT 1/4 is an outstanding water proof, corrosion and solvent resistant coating which can be used on both concrete and steel, as well as a wide variety of other substrates. NORDCOAT 1/4 complies with SANS 1217 for coating of pipes and is resistant to most of the common acids in a "spill type" environment.
60000 (3 x 1 kg)	WINBACK® - NORDBAK® NORDCOAT 2	NORDCOAT 2 is an outstanding heavy duty wear, acid and corrosion resistant coating which can be used on steel, as well as a wide variety of other substrates. Specifically designed for plants where high levels of salts are present at pH values between 3 and 10.
60041 (5 L)	WINBACK® - NORDBAK® NORDCOAT 6 ANTI-STAT	NORDCOAT 6 ANTI-STAT is an anti-static ANTI-STAT coating with outstanding corrosion and water-resistant properties which can be used on steel, as well as a wide variety of other substrates. Tested against SANS 1217 for pipe lining and against SANS 241 (drinking water)
60043 - GREY 60044 - WHITE 60045 - BLUE 60046 - BRUNSWICK GREEN 60047 -H10-BRLNT GREEN 60048 - YELLOW 60049 - BLACK 60050 - POST OFFICE RED 60051 - RAL ORANGE	WINBACK® - NORDBAK® NORDCOAT 6 COLOUR	NORDCOAT 6 COLOUR is a coating range with various colors suitable for underground applications with outstanding corrosion and water-resistant properties which can be used on steel and concrete (walls and floors) as well as a wide variety of other substrates. Tested against and complies with NES 713 for Smoke Toxicity, SANS 1217 for pipe lining and against SANS 241 (drinking water).
60042 (5 L)	WINBACK® - NORDBAK® NORDCOAT 6 GALV	NORDCOAT 6 GALV is a coating which can be used on galvanized steel and underground applications with outstanding corrosion and water-resistant properties. Tested against and complies with NES 713 for Smoke Toxicity.
60040 (5 L)	WINBACK® - NORDBAK® NORDCOAT 6 ACID	NORDCOAT 6 ACID a coating suitable for underground applications with outstanding acid, corrosion and water-resistant properties which can be used on steel and concrete as well as a wide variety of other substrates. Tested against and complies with NES 713 for Smoke Toxicity, SANS 1217 for pipe lining.
60052 (3 x 1 kg)	WINBACK® - NORDBAK® NORDCOAT 7 ACID	NORDCOAT 7 is an outstanding heavy duty acid, wear and corrosion resistant coating which can be used on steel, as well as a wide variety of other substrates. Specifically designed for plants where high organic and inorganic acid levels and salts are present at pH values between 1 and 13.
60020 (10 kg)	WINBACK® - NORDBAK® PS 1	PS 1 gives a very hard smooth corrosion, acid resistant and wear resistant finish to dams, tanks, pipes and retaining walls. PS 1 is designed for general acids and higher levels of chlorine.
60010 (3 x 1 kg)	WINBACK® - NORDBAK®	OIL SEALER is a water miscible co-polymer concrete sealer that is absorbed into the concrete sealing it from ingress of oil and other

general contaminants. OIL SEALER gives a non-slip, washable finish.

















GROUTS

80020 (10 kg)

20051 (114 g)

Grouts are for the reinforcing or repair of all heavy machinery foundations and offer unique advantages in their combination of strength and economy. Onehundred percent (100%) solids with no shrinkage. For all foundations of large Crushers and Mills, Bund Walls, Pump Plinths and Workshop Machinery.



GROUTS AND METAL REPAIR















It is an epoxy putty that is activated when kneaded by hand. It cures in 5 minutes and hardens like steel within 20 minutes. It adheres firmly even in water in a few minutes. After an hour, it can be cut, drilled and becomes suitable for other machining processes. The long-term heat resistance is 121°C (250°F) and the short-term heat resistance is 232°C (450°F).

mine hoists diesel engines and hydraulic presses, as well as other types of special machinery in severe service



KNEAD STEEL

WINKEL® PRO - NORDBAK®

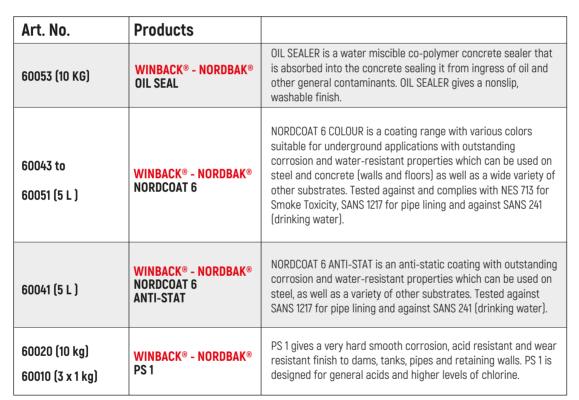
It is an epoxy putty that is activated when kneaded by hand. It cures in 20 minutes and hardens like steel within 1 hour. It adheres firmly even in water. After an hour, it can be cut, drilled and becomes suitable for other machining processes. The long-term heat resistance is 121°C (250°F) and the short-term heat resistance is 149°C (300°F).

FLOORING

A range of durable floor coatings with superb resistance in corrosion, wear, water and acid environments. Designed to provide protection, easy to clean and maintain to new and existing floors. Can be used on concrete and steel as well as a wide variety of othersubstrates. Floors are treated with oil seal to remove any underlying residues and then coated to a maximum of 200 microns with Nordcoat 6.



FLOORING PRODUCTS





























SUGAR MILLS

The maintenance costs of a sugar mill can be reduced by applying the correct coatings to corrosion – prone materials. Our coatings and wearing compounds each have unique properties and areas of application in the sugar mill industry. Experience of our products used in various applications in the sugar industry has illustrated the potential of these products when used at the design stage and during plant maintenance, to reduce running costs and increase the life of the plant.

PRODUCTS UTILISED IN SUGAR INDUSTRY

Art. No.	Product	
60020 (10 kg)	WINBACK® - NORDBAK® PS 1	PS 1 gives a very hard smooth corrosion, acid resistant and wear resistant finish to dams, tanks, pipes and retaining walls. PS 1 is designed for general acids and higher levels of chlorine.
60030 (10 kg) 60031 (3x 1 kg)	WINBACK® - NORDBAK® NORDCOAT 1	NORDCOAT 1 is an outstanding corrosion and water proof coating which can be used on both concrete and 8110 01003 (3x 1 kg) steel, as well as a wide variety of other substrates. NORDCOAT 1 complies with South African National Standard 1217 for coating of pipes and with Naval Engineering Standard 713 for Smoke Toxicity.
60000 (3 x 1 kg)	WINBACK® - NORDBAK® NORDCOAT 2	NORDCOAT 2 is an outstanding heavy duty wear, acid and corrosion resistant coating which can be used on steel, as well as a wide variety of other substrates. Specifically designed for plants where high levels of salts are present at pH values between 3 and 10.
60043 - GREY 60044 - WHITE 60045 - BLUE 60046 - BRUNSWICK GREEN 60047 -H10-BRLNT GREEN 60048 - YELLOW 60049 - BLACK 60050 - POST OFFICE RED 60051 - RAL ORANGE	WINBACK® - NORDBAK® NORDCOAT 6	NORDCOAT 6 COLOUR is a coating range with various colors suitable for underground applications with outstanding corrosion and water-resistant properties which can be used on steel and concrete (walls and floors) as well as a wide variety of other substrates. Tested against and complies with NES 713 for Smoke Toxicity, SANS 1217 for pipe lining and against SANS 241 (drinking water).
80040 (12 KG)	WINBACK® - NORDBAK® STEEL TROWEL MIX	STEEL TROWEL MIX is a metal repair product that can be machined, drilled tapped or filed just like steel. It does not sag, and applies readily to horizontal, vertical or overhead surfaces. It resists abrasion and chemical corrosion, cures without heat or special devices, and is non-shrinking.
50501 (4 x 1 kg)	WINBACK® - NORDBAK® FIXWEAR Fast Set	Fast Set is a fast curing armor-surfacing for wear areas caused by solids or slurries.
50200 (10 kg)	WINBACK® - NORDBAK® NORDWEAR 5	NORDWEAR 5 is an alumina filled co-polymer trowelable paste with good wear properties together with resilience, high impact strength and chemical resistance. The product is also suitable for both waterborne slurries and pneumatic conveyancing
50600 (10 kg)	WINBACK® - NORDBAK® NORDWEAR 8	NORDWEAR 8 is an alumina filled co-polymer trowelable paste with very good wear properties together with resilience, high impact strength and chemical resistance. The product is also suitable for both waterborne slurries and pneumatic conveyancing.

ACID, CHEMICAL RESISTANT COATING AND WEAR RESISTANT PRODUCTS **CRUSHER & MILL REPAIR PRODUCTS**

Acid Resistance Chart

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ACID, CHEMICAL RESISTANT COATING AND WEAR RESISTANT PRODUCTS CRUSHER & MILL REPAIR PRODUCTS

PRODUCT SELECTION SUMMARY

PRODUCT DESCRIPTION	Coverage	Uses
CRUSHER REPAIR PRODUCTS		
TROWEL MIX		Sealing liners and slight wear capabilities
LOCKING COMPOUND		Locking inner and outer eccentric in Symons cone crusher
BACKING-SUPERBAK		Inexpensive General purpose backing
BACKING-STANDARD		Improved General Purpose backing
BACKING-HI-PERFORMANCE		Superior Backing for extended life
BACKING-PRIMARY		Ultimate life and performance
WEARING COMPOUNDS		
PNEUWEAR-STANDARD	1m²/kit @ 6mm	Designed for pneumatic conveyancing
PNEUWEAR-HIGH TEMP	1m²/kit @ 6mm	Designed for pneumatic conveyancing
WEARING COMPOUND - STANDARD	1m²/kit @ 6mm	General purpose Abrasion resistant lining
WEARING COMPOUND - HI TEMP	1m2/kit @ 6mm	Higher Temperature General purpose Abrasion resistant lining
WEARING COMPOUND - HI IMPACT	1m²/kit @ 6mm	Improved impact General purpose Abrasion resistant lining
FIXWEAR	1m²/kit @ 5mm	Hi Tech General purpose Abrasion resistant lining
FIXWEAR Fast Set	0.4m²/kit @ 5mm	Fast Curing Hi Tech General purpose Abrasion resistant lining
HI-IMPACT PULLEY LAGGING	1m²/kit @ 6mm	Hi Tech Abrasion resistant pulley lagging
NORDWEAR 5	1m²/kit @ 5mm	Hi Tech Long life Abrasion resistant lining
NORDWEAR 5 Fast Set	0.4m²/kit @ 5mm	Hi Tech Long life Abrasion resistant lining
NORDWEAR 5 ACID	1m²/kit @ 5mm	Hi Tech Strong Acid and Abrasion resistant lining
NORDWEAR 8	1m²/kit @ 5mm	Superior Hi Tech Long life Abrasion resistant lining
NORDTILE	0.5m ² /kit @ 6mm	Ultimate Hi Tech Abrasion and Acid resistant lining
MISCELLANEOUS		
DEEP POUR GROUT	1m²/kit @ 13mm	Fast Curing Grout with exceptional compressive strength. e.g. crusher bases
ACID GROUT	1m²/kit @ 13mm	Fast Curing Acid Grout with exceptional compressive strength.
FAST SET GROUT	1m²/kit @ 6mm	Fast Curing Self Leveling Grout with exceptional compressive strength.
STEEL TROWEL MIX	minkit & omm	Metal repair mix. Machinable, replaces metal loss.
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CHEMICAL RESISTANT & ANTI-CORF	OSION COATINGS	
NORDCOAT 1		Coating approved for water lines
NORDCOAT 1 SPECIAL		High acid and excellent adhesion coating. Also approved for water lines
NORDCOAT 1/4 ETHANOL		Coating approved for alcohol and water lines
NORDCOAT 2		Abrasion and High acid resistant coating. Also approved for water lines
NORDCOAT 6 ACID		Acid resistant coating for structural steel and flooring. Approved for water lines
NORDCOAT 6 ANTI-STAT STANDARD		Anti-static coating for structural steel and flooring. Approved for water lines
NORDCOAT 6 COLOURS		Acid resistant coating for structural steel and flooring. Approved for water lines
NORDCOAT 7 SPECIAL		Exceptionally acid resistant coating
PS 1 - WHITE/BLUE		Acid resistant coating for chloride environments













ALUMINUM CHROME SPRAY



It provides aluminum coating with bright chrome effect. Provides excellent adhesion on metal, ceramic, wood and glass. Application surfaces must be clean, dryand free from oil, rust and other contaminations. Shake well before using, for about 1 minute until ball moves freely. Hold can upright spray from 10-12 inches away. It can be used in boiler production plants, ventilation and pipe installations as well as in furnaces.

ZINC SPRAY (LIGHT)

Size: 400 ml Box: 12 pcs Art. No.: W140 441

Art. No. :

WINKEL EINE SPRAY HELL ZINE SPRAY LIGHT CONGO SPREY ACID

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Size: 400 ml Box: 12 pcs Art. No.: W140 443

Provides protection against long-term corrosion in metals. It is a dry film product with over 90% zinc compounds.

Suitable for repairing damaged galvanized sheet, coating, drilling, cutting and spot welding applications. It can also be applied as a protective primary coating for parts exposed to moisture. It has a +300°C (+572°F) temperature resistance. Shake well before using, for about 1 minute until ball moves freely. Hold can upright spray from 10-12 inches away. It meets the ASTM-A780 standards.

COPPER SPRAY



Weather resistant, copper colored protective spray. It is used for coating and protection of parts subject to heavy work load. It provides aesthetic application especially for copper, yellow and brass parts. Can be used on all metal parts and other materials. Shake well before using, for about 1 minute until ball moves freely. Hold can upright spray from 10-12 inches away.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W140 442



ALUMINUM SPRAY

Provides heat-resistant corrosion protection for most metal surfaces.
Allows excellent protection for corrosion with long lasting effect. It has more than 90% layered zinc compounds. Shake well before using, for about 1 minute until ball moves freely. Hold can upright spray from 10-12 inches away. It can be used for protection against corrosion in industrial areas, protection in heating, cooling and ventilation systems, repair of galvanized parts

Box: 12 pcs **Art. No.**: W140 440

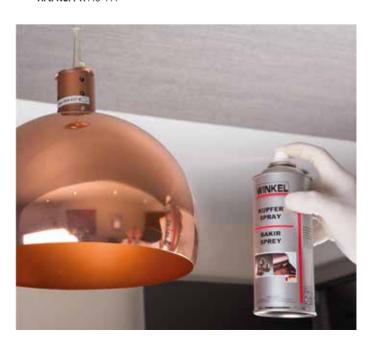
Size: 400 ml

ZINC SPRAY (DARK)



Corrosion preventive dry film product with high metallic zinc content. It is a general purpose guard for surfaces which are required to be protected against corrosion. Can be painted over, resistant to salt water. Typical applications are steel and construction, engineering, shipbuilding and welding. Shake well before using, for about 1 minute until ball moves freely. Hold can upright spray from 10-12 inches away. It meets the ASTM-A780 standards.

Size: 400 ml Box: 12 pcs Art. No.: W140 444





INOX SPRAY (LIGHT)



Wear resistant stainless coating.
Used for repairing damaged stainless
steel parts. Provides protection
against corrosion in severe weather
conditions. It is an effective surface
coating for many metals as well as
plastics. Shake well before using, for
about 1 minute until ball moves freely.
Hold can upright spray from 10-12
inches away.

Size: 400 ml Box: 12 pcs Art. No.: W140 448

INOX SPRAY (DARK) Strong durability to weather



Strong durability to weather conditions. Heat resistance up to 280°C (536°F). It provides very good adhesion to metal, wood, glass, stone etc. Protects against friction and scratches. Stainless steel color. Shake well before using, for about 1 minute until ball moves freely. Hold can upright spray from 10-12 inches away.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W140 447

ZINC PASTE



Size: 1 lt Box: 6 pcs Art. No.: W140 620 It contains 96% by weight of zinc and 99% of purity. Single component. It can be applied as topcoat protection on aluminum surfaces or on the old galvanized layers. Provides cathodic protection. Meets the standards of ISO 3549 and ASTM A780. Before application, it should be mixed thoroughly with a suitable mixer until it becomes homogeneous inside the box. It provides 40 to 60 μ thickness in single coat application.

MOISTURE PROTECTION SPRAY



Repels moisture and water from the surface. Creates transparent colored protective film against corrosion. Protects electrical installations, electrical devices, engines and machines, hand tools and weapons from moisture damage. It is easily used in places where humidity and humidity are intense. Ex. Food industry, industrial kitchens, beverage filling factories, workshops and workshops, etc.

Size: 400 ml **Box**: 12 pcs **Art. No.**: W150 166

WINKEL MELLING SPRAY PRINC SPREY

BRASS COATING SPRAY

Gold-plated, weather and brass resistant brass coating. Used in painting and decoration. It is preferred for aesthetic application in gold colored items. It can also be used to cover weld marks. Shake well before using, for about 1 minute until ball moves freely. Hold can upright spray from 10-12 inches away.

Size: 400 ml **Box**: 12 pcs **Art. No.**: W140 450

SEALING WAX SPRAY



It forms a wax layer resistant to water and salt water vapor where it is applied. It is easy to remove from surfaces. It provides protection against corrosion especially in overseas loads. It is also suitable for long-term protection of machines and tools. The surface to be used must be clean and dry.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W160 106

CORROSION PROTECTION SPRAY

Repels water and moisture from surfaces due to high penetration effect. Ideal for corrosion protection of processed surfaces. It is used for long-term protection of metal surfaces in workshops, precision equipment, measuring instruments, and in stock-carrying enterprises. Shake well before using, for about 1 minute until ball moves freely. Hold can upright spray from 10-12 inches away.

Size: 500 ml **Box**: 12 pcs **Art. No**: W160 117

LIQUID SEALING WAX



Size: 30 L Box:-

Art. No.: W140 621

It forms a wax layer resistance to water and salt water vapor where it is applied. It is easy to remove from surfaces. It provides protection against corrosion especially in overseas loads. It is also suitable for long term protection of machines and tools. The surface to be used must be clean and dry. Can be applied by brush.

MOLD PROTECTANT SPRAY



Does not contain metal. Resistant to corrosion, steam and water. Provides long-lasting coating. Forms a permanent dry film that is insoluble in water. It is used for maintenance, repair and lubrication in water contact environments. Ideal for all motor vehicles, repair shops and maintenance shops. Shake well before using, for about 1 minute until ball moves freely. Hold can upright spray from 10-12 inches away.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W150 170



WINKEL Cartestan Wink Aff Of the seal of 10 ft and 10

WINPLAST PLASTIC GUARD SPRAY

It is a varnish that provides plastic protection and prevents corrosion. When applied, it forms a flexible and impermeable layer. If necessary, it can be easily peeled off from the surface. Blue color provides visual control. Used in all plastics and elastomers. It can also be applied to protect metal materials during production, storage or transportation. Shake the tube thoroughly before use.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W160 113

WINKEL PROPERTY Surface Surface Marks

STAINLESS MAINTENANCE SPRAY

Cleaning, maintenance and protection of all stainless steel surfaces. It removes rust and water marks and prevents the formation of fingerprints. Provides general purpose polishing and protection on stainless surfaces. It can be used for sanitary cleaning in kitchen, hotel, airport and industry. After application, polish the surface with a clean cloth. See product label for details.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W150 159

B.R.

Box : 12 pi Art. No. : V



BLACK EXHAUST SPRAY

Protects metal surfaces against heat, scratching, deterioration and friction. Provides protection in pipelines, metal structures and undercarriages. It is also used for retouching iron, steel and aluminum wheels to correct defects and to cover light scratches. Shake well before using, for about 1 minute until ball moves freely. Hold can upright spray from 10-12 inches away.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W150 110



STAINLESS CARE OIL SPRAY

Provides protection and maintenance on all stainless steel surfaces. It is effective in removing rust and water-borne stains and cleaning fingerprint stains. It is used for cleaning and polishing industrial equipment.

Size: 400 ml **Box**: 12 pcs **Art. No.**: W150 152



ANTI-SEIZES

ANTI-SEIZE COPPER ASSEMBLY PASTE



Fully synthetic lubricant. It is an assembly paste that contains copper particles. Prevents clamping of moving parts. Works under high temperature and pressure. Resistant to pressure washing.

Color : Copper Size: 1 Kg **NLGI Category Box**: 12 pcs :2

Operating Temperature : -20°C +1700°C Art. No.: W150 202 -4°F +3092°F

ANTI-SEIZE COPPER SPRAY



Fully synthetic lubricant. It is an assembly paste that contains copper particles. Prevents clamping of moving parts. Works under high temperature and pressure. Resistant to pressure washing. It is resistant to water, gasoline, oil, grease and gases. Provides remote application on moving parts that are difficult or impossible to remove.

Color : Copper Size: 400 ml **NLGI Category** :2 **Box** : 12 pcs

Operating Temperature : -100°C +1200°C Art. No.: W160 101

-148°F +2192°F

ANTI-SEIZE CERAMIC ASSEMBLY PASTE



It is an excellent assembly paste enriched with ceramic particles. Water repellent, excellent adhesion to surfaces. It gives excellent results in connections, bearings, chain systems and pressure devices exposed to high temperature and pressure.

: Off-White Size: 1 Kg **NLGI Category** :2

Box : 12 pcs Operating Temperature : -20°C +1700°C Art. No.: W150 200

-4°F +3092°F

ANTI-SEIZE CERAMIC SPRAY



Metal and graphite-free spray assembly paste. It provides efficient lubrication due to ceramic structure. Resistant to gas, salt, acid and solutions. Provides friction-induced adhesion for heavy rolling bearings and sliding surfaces, also prevents from corrosion.

: Off-White Color Size: 400 ml **NLGI Category** :2

Box : 12 pcs

Operating Temperature : -40°C +1700°C Art. No.: W160 200 -40°F +2552°F

ANTI-SEIZE METAL ASSEMBLY PASTE



It is an assembly paste with heavy metal and silicone-free metal additives. Excellent protection against fresh-salt water, steam, gas, acid, solutions and gasoline.

Size: 1 Kg Color : Grey **NLGI Category Box**: 12 pcs :2

Art. No.: W150 219 Operating Temperature : -20°C +1700°C

-4°F +3092°F

ANTI-SEIZE METAL SPRAY



It is a spray assembly paste with heavy metal and silicone-free metal additives. Excellent protection against fresh-salt water, steam, gas, acid, solutions and gasoline.

Size: 400 ml Color : Grey **NLGI Category**

:2 **Box** : 12 pcs Operating Temperature : -40°C +1200°C Art. No.: W160 100

-40°F +2192°F

LUBRICANTS





MoS, DRY LUBRICATION SPRAY

Provides dry film lubrication in equipment with slip friction. MoS2 additive reduces friction in heavy duty systems. For best results, it is important that the application surfaces are clean and dry.

Size: 400 ml Box: 12 pcs Art. No.: W160 109



PTFE DRY LUBRICATION SPRAY

Colorless, PTFE dry lubricant for metals, rubber, plastics and other materials. Ideal for applications where grease cannot be used due to contamination and aesthetics. Suitable for use in the electrical, plastic, textile and automotive industries.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W150 130



SILICONE SPRAY

Silicone spray has a good release and lubrication characteristics. It removes moisture and protects elastomer materials against freezing. It prevents adhesion and abrasion and reduces the noise caused by friction.

Size: 500 ml **Box**: 12 pcs **Art. No**.: W160 112



SILICONE SPRAY (H1)

Silicone spray has a good release and lubrication characteristics. It removes moisture and protects elastomer materials against freezing. It prevents adhesion and abrasion and reduces the nois caused by friction. It is the ideal lubricant for all equipments that wear out and lose efficiency as a result of friction in the food industry.

Size: 500 ml Box: 12 pcs Art. No.: W160 119

LUBRICANTS

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Size: 400 ml **Box**: 12 pcs **Art. No.**: W160 115

WINKEL

CHAIN AND ROPE CARE SPRAY

It forms a flexible protection layer against corrosion. Resistant to abrasion and pressure. Resistant to water and moisture. It produces a solution that does not collect jam and dirt in the moving mechanisms where greases cause problems. Prevents bimetal corrosion. Ideal for moving equipments, especially gear mechanisms, chains etc. With excellent penetration effect, it descends to the center of chain link and makes homogeneous lubrication.

CHAIN CARE SPRAY

Ideal for cleaning and maintaining chain systems that damaged by improper lubrication. It has superior penetration ability. It proceeds towards the center of the surfaces it is applied and makes effective lubrication. Resistant to water and moisture. Prevents bimetal corrosion. It is especially used for the maintenance of chained equipment such as forklift chains that require periodic maintenance and to extend the service life.

Size: 400 ml Box: 12 pcs Art. No.: W160 116

WINKEL

SPRAY

FOOD LUBRICATION SPRAY

NSF H1 approved lubricant for direct contact with food or food processing processes. Extends service life, especially in expensive equipment that is in danger of wear due to friction.



GUN CARE LUBRICANT SPRAY

It is a multipurpose spray lubricant.

Protects equipment against corrosion, lubricates and cleans. It facilitates the disassembly of rustproof parts. Typically, it is ideal for trouble-free operation of the mechanisms of rifles and pistols.



Size: 150 ml Box: 24 pcs Art. No.: W160 111

MULTI-PURPOSE OIL (H1)



NSF H1 (157453) approved spray lubricant for use in food processing equipment. It penetrates the surfaces very well and repels water and moisture from the surface. Provides protection against corrosion.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W150 211

THE STATE OF THE S

Size: 30 L Box:-

Art. No. : W600 540

HIGH TEMP RESISTANT CHAIN OIL

It provides effective lubrication by penetrating into the metal on the applied surface. Prevents from corrosion, jamming, bimetallic corrosion and noise problems due to incorrect lubrication. It does not migrate from the applied surface. Resistance up to +250°C (482°F). Particularly suitable for high-speed chains and ropes.

LUBRICANTS



MULTI PURPOSE LUBRICANT 30lt.

Mineral based 5-function 30lt container lubricant; protects against corrosion, oils, cleans, removes rust and removes moisture. Due to its special formula and versatility, it can be used in many applications. For example; lubrication in hinges and guide pins, opening of latched connections, removing of water and moisture from electronic devices etc.

Size: 30 L

Size:5L

Art. No.: W140 609-30

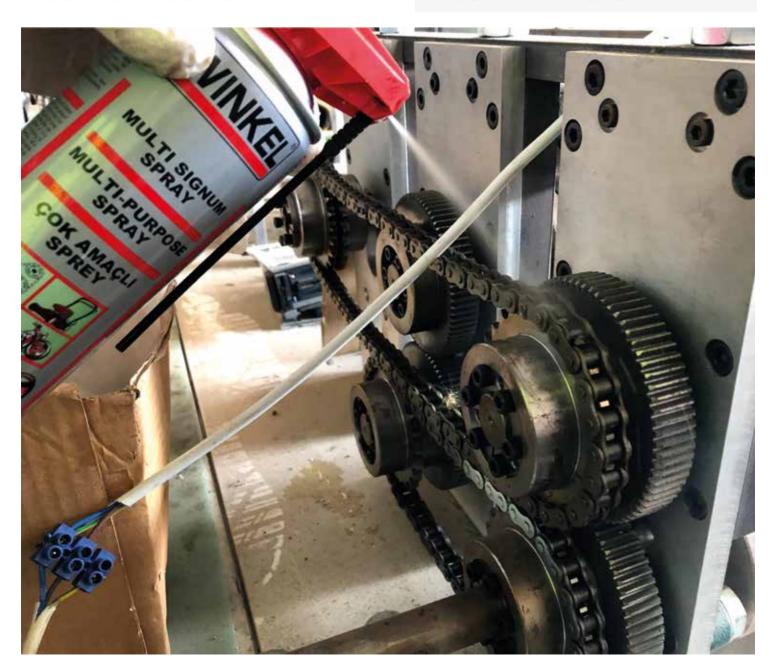
MULTI PURPOSE LUBRICANT

Mineral based 5-function spray lubricant; protects against corrosion, oils, cleans, removes rust and removes moisture. Due to its special formula and versatility, it can be used in many applications. For example; lubrication in hinges and guide pins, opening of latched connections, removing of water and moisture from electronic devices etc.

 Size: 200 ml
 Size: 400 ml

 Box: 12 pcs
 Box: 24 pcs

 Art. No.: W160 110-200
 Art. No.: W160 110



GREASES

SILICONE GREASE



Silicone grease used for filling and lubrication in combination of plastic, metal and rubber materials. Odorless. Delays dirt and moisture, reduces noise. Usually used for maintenance of O-ring seal groups, prevents loosening.

 Size : 1 Kg
 Size : 25 Kg

 Box : 6 pcs
 Box :

Art. No.: W150 210-1 **Art. No.**: W150 211-25

SILICONE GREASE H1

Fully synthetic silicone grease for the food and beverage industry. Synthetic silicone grease with a low quantity of solid highly dispersed thickener. High thermal stability, outstanding resistance to water and steam up to +140°C, compatible with most plastics and elastomers, base oil with a high viscosity index and very good low temperature performance. Lubrication of components for which food grade lubricants are required. The product is perfectly suitable for the combinations plastic/plastic, metal/ plastic, ceramic/plastic and ceramic/ceramic. It is compatible with nearly all plastics and elastomers incl. PC and EPDM.

Size: 1 Kg Size: 25 Kg Box: 6 pcs Box: -

Art. No.: W150 212-1 **Art. No.**: W150 212-25

MULTI PURPOSE BALL-BEARING GREASE



A general purpose bearing grease with lithium soap containing EP additives. Resistant to washing with water. Provides long-term lubrication where applied. Minimizes corrosion and wear. Ideal for lubrication of systems operating under extreme pressure, heavy and vibrating loads.

Art. No.: W150 206 **Art. No.**: W150 205-16

MULTI PURPOSE FOOD GREASE



It is a food approved grease used for lubrication and corrosion prevention in parts in contact with food. Transparent and odorless. Resistant to water, salt water and steam. Prevents friction, wear and corrosion. Extends the service life of the equipment in all food operating processes.

Art. No.: W150 204-1 **Art. No.**: W150 204-18

HIGH TEMP. GREASE 700°C (1292°F)



Significantly reduces friction with rich MoS₂content. It is successfully used in equipments that operated under heavy load and where friction wear causes problems. Ideal for moving parts in the industrial, automotive and textile industries. It has 700°C (1292°F) heat resistance.

 Size: 1 Kg
 Size: 16 Kg

 Box: 12 pcs
 Box:

Art. No.: W150 218 **Art. No.**: W150 218-16

Si



Significantly reduces friction with rich MoS₂ content. It is successfully used in equipment operating under heavy load and where friction wear causes problems. Ideal for moving parts in the industrial, automotive and textile industries. It has 400°C [752°F] heat resistance.

HIGH TEMP. GREASE

400°C (752°F)

Art. No.: W150 217 **Art. No.**: W150 217-16

GREASES

WW3000 LIQUID GREASE SPRAY

It is a semi-synthetic lubricant spray. Salt water resistant lubricant. Lubricates and protects parts exposed to high pressure, shock and vibration. It can be used in moving points in brake or fuel lines and in many points for industrial purposes.

Size: 500 ml **Box** : 12 pcs Art. No.: W160 114

105, GREAS



MoS₂ GEARWHEEL SPRAY (400°C) (752°F)

Creates a friction-resistant elastic protection layer. Repels water from the surface and protects against corrosion. Resistant to washing with pressurized water. It is used for chain, machine and gear etc. lubrication. Minimizes noise and friction. Shake well before using, for about 1 minute until ball moves freely.

Size: 400 ml **Box** : 12 pcs Art. No.: W160 104

LITHIUM WHITE GREASE SPRAY

Suitable for metals as well as engineering plastics. Does not contain metal. Due to its lithium content, it is resistant to salt water and steam. Provides longterm protection against corrosion. Provides remote application on parts that are difficult or impossible to reach.

Size: 400 ml **Box** : 12 pcs Art. No.: W160 108

MULTI PURPOSE CARTRIDGE GREASE



It is a general purpose bearing grease that ensures safe and long-term lubrication of heavy loads and reduces friction and wear. Can be pumped with standard grease pumps that supply oil to the systems. The bearing manufacturer's instructions must be followed when operating.

Size: 400 g **Box** : 12 pcs Art. No.: W150 220



WW3000 LIQUID GREASE 30lt.

It is a semi-synthetic lubricant spray. Salt water resistant lubricant, Lubricates and protects parts exposed to high pressure, shock and vibration. It can be used in moving points in brake or fuel lines and in many points for industrial purposes. For bulk usage.

Size: 30 L Box :-

Art. No.: W150 213

METAL-WORKING FLUIDS

WINKEL BEAMEROOL BPAAV BOTHAR OS BPAAV WINAMI STIME PAGE STIME

METAL WORKING OIL/SPRAY

Used for machining soft metals such as copper and aluminum. Minimizes cutting tool consumption in all kinds of drilling, cutting and tapping applications. Low viscosity, fast cooling. Provides protection against oxidation of parts after treatment.

Size: 400 ml **Box**: 12 pcs **Art. No.**: W160 103

GRINDING LIQUID

It is a synthetic lubricant developed for grinding iron and steel. Excellent cooling and rust prevention provides clean working surfaces. Increases grinding accuracy. The anti-corrosive feature provides additional protection of machined parts in turning/milling and threading/profile applications.

 Size: 5 L
 Size: 30 L

 Box: 1 pc
 Box:

Art. No.: W150 226-5 **Art. No.**: W150 226-30

WINCUT METAL WORKING OIL

Aluminum, stainless steel and all steel surfaces, surface machining, threading, tapping etc. Excellent coolant for applications. Minimizes friction and extends the life of cutting tools. Not recommended for yellow and copper surfaces.

Size: 460 ml Box: 12 pcs

Art. No.: W150 214-460

Size: 5 L Box: 4 pcs Art. No.: W150 214-5

Size: 30 L Box:-

Art. No.: W150 214-30





METAL-WORKING FLUIDS

SYNTHETIC COOLANT

It is a non-foaming white emulsion liquid in soft and hard water. Resistant to bacterial growth and odor formation. Designed for machining all types of ferrous and non-ferrous metals. It is concentrated. It is mixed with water in a certain ratio according to the type of metal to be used.

Size: 20 L **Size**: 30 L Box :-Box :-

Art. No.: W150 208-20 Art. No.: W150 208-30



METAL WORKING OIL

It is a cutting fluid developed for soft metals, brass and its alloys. Provides a precise machining surface for soft metals with superior cooling effect. Increases the efficiency and service time of cutting tools.

Size:5 L Size:30 L Box: Galon Box :-

Art. No.: W150 207-5 Art. No.: W150 207-30

WINPASTE (METAL WORKING **PASTE**)



High alloy carbon types, chromiumnickel alloys, stainless and heat resistant alloys, titanium, manganese, cast steel, cast iron and so on. Ideal for leveling operations such as tapping, drilling, turning and cutting metals. Due to its paste form, it provides longterm cooling and lubrication where it is applied.

Size: 500 g Box:6 pcs Art. No.: W150 216

EROSION OIL



Size: 60 L Box :-

Art. No.: W150 203

The erosion oil ensures the perfect working of the part in wire erosion processes. Particularly suitable for precision and fine detail parts. It provides the most suitable dielectric feature in EDM (Electro Discharge Machining) processes. Low volatile. Creates little smoke. It can also be applied by immersion method.

RUST REMOVERS & DETECTING PRODUCTS



CRACK DETECTING SPRAY

Enables non-destructive crack control on surfaces. It is a set which is applied gradually in 3 different colors. Suitable for all industries. It is especially used for the detection of cracks after welding.

Size: 500 ml (Kit)
Box: 12 pcs
Art. No.: W150 141
Color: Red-White-Green

Size: 500 ml **Box**: 12 pcs **Art. No.**: W150 14

 nl
 Size : 500 ml
 Size : 500 ml

 iss
 Box : 12 pcs
 Box : 12 pcs

 i/150 142
 Art. No. : W150 143
 Art. No. : W15

 Color : White
 Color: Green

WINKEL LECKSBOCHER SPRAY KAGAK ANAMA SPREY

LEAK DETECTING SPRAY

Recommended for the detection of leaks in natural gas connections and air lines. Typical application areas: pipes, hoses, valves, threaded or welded connections, pressure containers, compressors, etc. Non-flammable. It does not interact with gases such as propane, butane, acetylene, natural gas, nitrogen, compressed air, hydrofluorocarbon.

Do not use with oxygen.

Size: 400 ml Box: 12 pcs Art. No.: W150 150



residue.



Resolves rusty connections quickly and easily. It makes the rust on the metal surface brittle by its cooling effect. No waiting required. It reaches even the finest gaps on the surface to which it is applied. No

Size: 400 ml **Box**: 12 pcs **Art. No.**: W160 102



SURFACE RUST CLEANER

It allows easy removal of rusted connections due to corrosion. If the surfaces are free from coarse dirt before application, the effect and speed of effect of the product on rust problem increases. It does not allow the formation of rust on the surfaces it is applied.

Size: 30 L Box:-

Art. No.: W140 617

SMOKE DETECTING SPRAY



Tests the capacity of smoke detectors quickly and safely without the need for additional test equipment. The spray product does not leave any residue and does not cause pollution. Provides reliable control in industrial facilities, service buildings or homes.

Size: 200 ml Box: 12 pcs Art. No.: W150 145



RUST REMOVERS & DETECTING PRODUCTS



RUST REMOVER LIQUID

Versatile mineral based lubricant with special formula. Repels moisture and water where it is applied. It penetrates the rust layer and breaks the bonds between the rust molecules. Due to its liquid form, it can be applied by brush or dipping method.

Art. No.: W140 613-5 **Art. No.**: W140 613-30



PENETRATING RUST REMOVER

Mineral based rust remover with excellent penetration. MoS₂ content reduces friction. Provides longterm and effective corrosion protection. It allows removal of extremely rusted and oxidized moving parts

 Size : 200 ml
 Size : 400 ml

 Box : 12 pcs
 Box : 24 pcs

 Art. No. : W160 120
 Art. No. : W160 170



SPECIAL PURPOSE PRODUCTS

ANTISTATIC SPRAY



The product forms an anti-static layer on plastic, metal, leather and wood surfaces. The protective layer is resistant to corrosion and moisture. Used as lubricant in rails, conveyor belts, hinges, plain bearings etc. It is a good separator especially for plastic and metal forms. It has a protective effect against aging of plastic and rubber parts and gaskets

Size: 400 ml Box: 12 pcs Art. No.: W150 140

GAS METAL ARC WELDING SPRAY



It is applied to the area to be welded and prevents the burrs that appear during welding to stick to the surface. It can also be applied to protect the welding torch. Silicone and acid-free.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W150 147

SILICONE FREE MOLD RELEASE SPRAY



Formulated as a mold release agent in metal injection molds. Ensures smooth separation of metal and plastic. Since it does not contain silicone, it does not leave oil residue on molded parts.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W150 154

COOLING SPRAY



Thanks to its special content, it cools the surfaces it is applied to -50°C in a short time. It reduces the repair time and saves time by rapidly cooling the hot parts in case of urgent intervention of hot parts. Can be used in industrial areas and electronics

Size: 500 ml **Box**: 12 pcs **Art. No**: W170 121

INSULATING VARNISH SPRAY



It is an insulating varnish resistant to bad weather and corrosion, which forms a water-resistant protective layer. It meets DIN 53482 standard with high insulation value. Particularly suitable for hard to reach places. It can be used in repair and maintenance workshops of electronic products, furniture repairs and hobby purposes (artworks, model making, sports, hand tools, etc.).

 Size : 400 ml
 Size : 400 ml

 Box : 12 pcs
 Box : 12 pcs

 Art. No. : W140 448
 Art. No. : W140 449

 Color : Red
 Color : Transparent



SPECIAL PURPOSE PRODUCTS



CERAMIC WELD AND TORCH PROTECTION SPRAY

Prevents welding burrs from sticking to the surface and torches in MIG / MAG welding and in all types of plasma and laser cutting. It provides long-term protection and extends the reapplication period.

White color.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W150 303

ADHESIVE SPRAY

Synthetic rubber based, very high adhesion strength spray contact adhesive. Typical applications: Handicrafts, industry and automobile workshops; paper, cardboard, polystyrene, metal, many plastic, foam, wood, fabric, insulation mats etc.

Size: 500 ml **Box**: 12 pcs **Art. No**.: W150 158

WINKEL TRESSERVENT SPRAY V-REAT SPRAY V-REAT SPREY

V-BELT SPRAY

Developed for maintenance of all flat, axial and V belts made of PVC, rubber and leather. It feeds the belt, reduces the noise and keeps the belt on the pulley axis. As it provides protection against abrasion, it increases the belt's pulling force and efficiency.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W150 157

Table Street

TORCH&WELD CLEANING LIQUID

It has been developed especially for welding processes in containers, wagons and shipbuilding. Depending on the intensity of the welding work applied, it is sufficient to apply it once or twice a day. It effectively protects torches as well as surfaces.

Size: 25 L **Box**: -

Art. No.: W140 616





GENERAL CLEANING SPRAY

Cleans oil, dirt, soot and resin on all metals, glass, ceramics and wood quickly and without any trace. It has the ability to penetrate even the finest gaps. Not suitable for plastic and rubber.

Size: 500 ml **Box**: 24 pcs **Art. No**.: W170 104



MULTI PURPOSE CLEANING SPRAY (H1/K1)

Perfectly cleans oil and grease in the food industry where there is no direct contact with food.

Size: 500 ml **Box**: 12 pcs **Art. No**: W170 126



PAINT, POLISH, GASKET REMOVER SPRAY

A strong remover product that allows you to clean all kinds of glue and sealant residues without scratching the surfaces and sensitizing them. It is not recommended for use in sensitive plastics and PVC. The performance increases when the application surface is first free from coarse dirt and subsequently applied to the product.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W170 100

FAST CLEANER



It is an alcohol, ether and hydrocarbon solvent based high performance cleaner spray product. The cleaning chemicals in its content contain more than 90% active ingredients. It does not leave any residue, does not form a permanent film, and does not corrode the surfaces. It dries quickly, eliminating moisture on metal surfaces. making the surface ideal for adhesion. It is used for cleaning purposes before bonding and sealing processes. Ideal for use as a general oil remover and cleaner on all glass, ceramic and metal parts in workshops, businesses and homes. It is used in situations where the surfaces need to be pre-treated for painting or lining, and also to remove silicone residues from metal surfaces.

Size: 400 ml **Box**: 10 pcs **Art. No**: 20071

LABEL DISSOLVING SPRAY



Removes adhesive residues, labels, resin, tar and most stubborn dirt from the surfaces of metal, glass, ceramics, porcelain, enamel and all synthetic materials. Cleans without residue.

Size: 400 ml **Box**: 12 pcs **Art. No**: W170 103



FOAMY CLEANER SPRAY

Removes oil, nicotine, insect residues and fingerprints from all surfaces. It provides deep cleaning by hanging on the surfaces it is applied with foam form.

Size: 400 ml **Box**: 12 pcs **Art. No**: W170 112

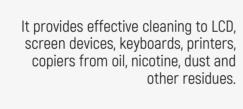
WINKEL ROHTALT ROHTALT ROHTALT BYREY BILLYYAGASI PRILYYAGASI

CONTACT SPRAY (DRY FILM)

Effectively removes dirt that may form an arc on the contacts of electrical parts. It provides safe use in electronic devices for cleaning and maintenance purposes. It forms a dry film that repels moisture and water after application.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W170 109

LCD CLEANING SPRAY



Size: 400 ml Box: 12 pcs Art. No.: W170 110

AIR CONDITIONER CLEANING SPRAY



An effective cleaner that prevents fungus formation for internal cleaning of air conditioners. Effectively removes odors in air conditioners that have not been used for a long time.

Size: 200 ml **Box**: 12 pcs **Art. No**.: W170 118

CONTACT SPRAY (WET FILM)



Mineral oil based organic solvent developed for cleaning electronic boards and sockets. Purifies contacts, fuses, cable connections from oxidation and dirt. Repels water and moisture. Forms a wet film on the surface after application.

Size: 400 ml **Box**: 12 pcs **Art. No**.: W170 108

STAIN REMOVER SPRAY



It removes stains from almost all fabric surfaces including silk without any problem and without any trace. Repeated application may be required depending on the type and density of the stain.

 Size : 400 ml
 Size : 500 ml

 Box : 12 pcs
 Box : 12 pcs

 Art. No. : W140 447
 Art. No. : W170 101

WINKEL

PRESSURED CLEANING SPRAY (NON-FLAMMABLE)

Dry and thorough cleaning spray for sensitive parts that are difficult to reach. It is especially used for sensitive cleaning of electronic devices. The product is dual function; When applied upside down acts as a coolant spray.

Size: 400 ml **Box**: 12 pcs **Art. No.**: W170 188

WINOI INOX PASTE



General purpose cleaning and maintenance paste. Removes dirt, lime and yellowing residues in one step. Provides industrial performance in kitchens, bathrooms, garden furniture and many other places.

Size: 300 gr **Box**: 36 pcs **Art. No.**: W170 123

WINOL GLANZ (METAL POLISHER)



It is used for cleaning, maintenance, protection and polishing of all pure metals. Not suitable for anodized metals. Non-toxic and exclusive content does not disturb the skin. Delays stain formation in metals. It can be used on all metals as well as on fiberglass, painted surfaces and worn coatings.

Size: 150 ml **Box**: 50 pcs **Art. No**.: W140 623

suitable for anodized on-toxic and exclusive s not disturb the skin. ormation in metals. It all metals as well as

Size: 30 lt **Box**:-

Art. No.: W140 604

WINOL UNIVERSAL BIO CLEANER



Art. No.: W170 120-1 Art. No.: W170 120-5 Art. No.: W170 120-30

PHOSPHATE FINISH

Cleaner used for degreasing from metals such as iron, steel, brass and aluminum. In addition to cleaning surfaces, it prepares surfaces before wet or powder coating.

DECALCIFIER LIQUID



Size: 30 lt **Box**:-

Art. No.: W140 605

It is developed for cleaning lime residues in pipes such as copper and aluminum etc. in cooling towers. It is very effective in removing residues in heating and cooling systems (eg heat exchanger). It can be diluted to different concentrations according to the degree of dirt. Please see TDS for dilution rates.



SP-K STAINLESS SURFACE CLEANER

It removes weld marks, oxide layer, dirt and oil especially on stainless metal surfaces. It can be applied by spraying on surfaces. Interacts within 30-60 minutes depending on the degree of pollution. After cleaning, rinse with water.

Size: 20 lt Box:-

Art. No.: W140 619

PLASTIC INJECTION FURNACE CLEANING

Cleans the mold in injection molds, plastic raw material in different colors. Eliminates color-induced problems in future printing. The product is mixed with plastic raw material. When feeding the system, it is effectively cleaned not only the mold surface but also the runners.



Art. No.: W800 655



not allow yellowing and rust formation in any way. It is especially ideal for the production of industrial kitchen equipments. It is applied to surfaces with the help of a brush.

Size: 2 Kg Box: 6 pcs

Art. No.: W140 618-2

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ALUMINUM CLEANER

It is a maintenance and polishing material on all metal surfaces including aluminum and stainless steel. Delays stain formation on surfaces. It is used on refrigeration equipments and other surfaces that do not contact food directly.

Size: 30 lt

Art. No.: W140 600



Size: 30 lt

Art. No.: W140 612-30

PART CLEANER INCOMBUSTIBLE

WETOX WELD

CLEANING GEL

Gel-form cleaner used for

cleaning surfaces after

stainless welding. It does

Solvent-based cleaner that moves away quickly from the surface. It produces fast solutions in enterprises that need effective cleaning in a short time. It can also be applied with a brush or cloth on very dirty surfaces. Since it does not create a risk of burning, it is used especially for fast cleaning of large surface parts.

PART CLEANER LIQUID

Provides cleaning of grease, tar and other oils without excessive effort. It is particularly effective in cleaning brake fluid, oil and grease as well as removing dust from automobile components.



Size: 60 lt Box:-

Art. No.: W140 611-60



Size: 30 lt Box:-

Art. No.: W140 614-30

STAINLESS POLISHING AND PROTECTION LIQUID

Liquid product for cleaning and maintenance of stainless steel, chrome, nickel and alloy metal surfaces. While it easily removes stains such as dirt and fingerprints, it delays contamination and provides brightness with the film layer it creates.

SKIN CARE AND PROTECTION LOTION



A care and protection lotion that does not cause an allergic reaction. Due to its safe structure, it can be used on hands, face, arms and legs. For professional use only.

NATURAL HAND CLEANSING CREAM



Silicone-free hand cleansing cream that provides protection and care for all skin types. Clinically tested and does not cause problems with food contact. Citrusy fragrance. Supplied with dispenser box for ergonomic use.

Size:2 lt Box:6pcs Art. No.: W140 627

Size:1lt Box:6 pcs Art. No.: W140 626

HIDDEN GLOVES



It is designed to prevent direct skin contact with oil and watersoluble substances such as detergent, acid, oil, grease, coolant, cutting oils, drilling emissions, adhesives. Small amount of product is taken prework and applied to hands by rubbing. It must be cleaned properly at the end of the work. The use of natural hand cleansing cream is recommended

Size:1lt Box:6 pcs Art. No.: W140 628

HAND CLEANING **CREAM**

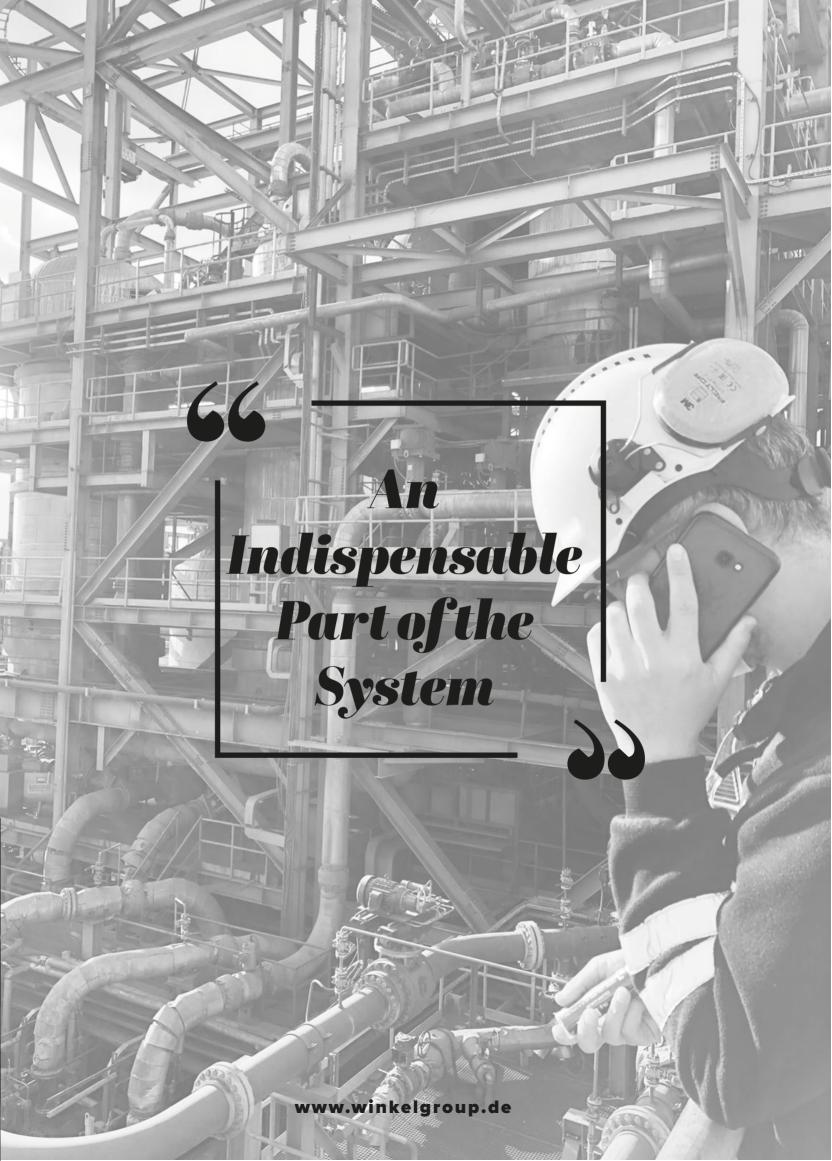
It is a hand cleaning product developed for cleaning stubborn dirt, oil and tar residues. Its pumice stone granules allow deep cleansing without irritating the skin. The product is ideal for waterless hand cleaning. Requires rinsing before contact with any food. It can be used for effective cleaning of equipment surfaces as

well as hand cleaning.

Size:3 lt Size: 30 lt Box:6 pcs Box:1pc Art. No.: W140 601

Art. No.: W140 603





SPRAY PAINTS



SPRAY PAINTS

Multi-purpose acrylic spray paint, developed for use indoors and outdoors and on various surfaces. It dries fast, has superior coating quality. It creates stable and durable film. It has a wide selection of **RAL** codes with optional matte and glossy options.

Dry film thickness is 13 micron for additional layer. If more than one layer is applied, the thickness will increase.





For different RAL codes, please proceed to contact us at info@winkelgroup.de



