



# TCTEK PROFESSIONAL LIQUID AND GREASES PRODUCTS CATALOGUE

- METAL CONDITIONER
- HIGH-TECH MILITARY  
NANO TECHNOLOGY



## WHAT IS TCTEK PROFESSIONAL LIQUID?

- TCTEK WAS ESTABLISHED BY DR. RENATA LICKOVA AND MR. BULENT COSKUN AS A RESULT OF STABLE STUDIES CARRIED OUT SINCE DEC 2020.
- OUR COMPANY'S PRODUCTS HAVE BEEN DEVELOPED WITH NANO TECHNOLOGY AND SOLD IN EUROPE TOGETHER WITH AMERICA FOR A LONG TIME FOR MERCEDES BENZ, PORSCHE, CAT, DAKKAR, ETC. WE ARE AIMING TO BRING OUR PRODUCTS, WHICH ARE USED BY MANY WELL-KNOWN COMPANIES WITH DIFFERENT BRAND NAMES, TO TURKEY, MIDDLE EAST AND SOME EUROPEAN COUNTRIES WITH OUR CUSTOMERS UNDER THE TCTEK BRAND NAME.
- TCTEK PROFESSIONAL LIQUID IS A %100 SYNTHETIC LIQUID.
- WHEN TCTEK PROFESSIONAL LIQUID IS ADDED TO THE PRIMARY LUBRICANT OF ANY MACHINE, IT WILL IMPROVE OPERATING EFFICIENCY, EXTEND MATERIAL LIFE, REDUCE DOWNTIME AND REDUCE UNPLANNED MAINTENANCE.
- ALTHOUGH TCTEK PROFESSIONAL IS ADDED TO LIQUIDS OF ANY KINDS IT IS NOT AN ADDITIVE.
- TCTEK PROFESSIONAL LIQUID DOES NOT CONTAIN VISCOSITY ENHANCERS OR OTHER OIL-ENHANCING COMPOUNDS. IT DOES NOT CHANGE THE PRIMARY LUBRICANT IN ANY WAY. INSTEAD, TCTEK PROFESSIONAL IS A LIQUID METAL CONDITIONER.
- TCTEK PROFESSIONAL USES LIQUID, CIRCULATING FLUID AS A TOOL TO REACH CRITICAL HOT SPOTS AND METALLIC FRICTION SURFACES IN THE MACHINE. WHEN TCTEK PROFESSIONAL LIQUID IS TRANSPORTED TO THESE AREAS, IT EXITS THE FLUID, LEAVING THE FLUID COMPLETELY UNAFFECTED AND UNCHANGED.
- DEVELOPED USING NANO TECHNOLOGY WITH THE PARTNERSHIP OF NASA IN TCTEK PROFESSIONAL, EUROPE CONTINUOUS USE IN ALL METAL MECHANICAL PARTS AND USE OF METAL MECHANICAL EQUIPMENT, AS THE 4TH MOLECULE, WHICH INSPIRED THE METAL AND WAS SUBJECT TO THE METAL ARMOUR.

**TCTEK LIQUID WAS MADE BY NANO TECHNOLOGY BASED METAL ARMORING LIQUID WITH NANOTECHNOLOGY. IN DEVELOPED COUNTRIES IT HAS BEEN USED FOR MORE THAN 40 YEARS, PROVEN EFFICIENCY, WITH CONTRIBUTION TO THE DEVELOPMENT OF NASA AND US ARMY. PROVEN EFFICIENCY ANTI-WEAR PERFORMS IS 17 TIMES MORE THAN LEADING BRANDS.**





### WHERE IS TCTEK PROFESSIONAL LIQUID USED?

- TCTEK PROFESSIONAL LIQUID CAN BE USED IN ANY KIND OF MACHINE.
- TYPICAL USES INCLUDE TWO AND FOUR STROKE DIESEL AND GASOLINE ENGINES OF ANY SIZE, AUTOMOTIVE AND INDUSTRIAL TRANSMISSIONS AND DIFFERENTIALS, COMPRESSORS OF ALL KINDS, INCLUDING REFRIGERATION, ASSEMBLY LINE SPEED REDUCTION GEARS, ELECTRIC MOTORS, PUMPS, ETC. THE PERFECT CUTTING FLUID FOR THE MOST DIFFICULT TURNING AND MILLING WORKS.
- FROM NUCLEAR POWERED SUBMARINES TO DENTAL DRILLS, FROM ROCK BREAKERS TO BICYCLES, AIR CONDITIONERS TO SEWING MACHINES, TCTEK PROFESSIONAL LIQUID FULLY MEANS WORKING AT EACH OTHER WHERE METAL BONDS.
- TCTEK PROFESSIONAL'S BIGGEST DIFFERENCE FROM TRADITIONAL ANTI-WEAR LUBRICANTS, BASED ON REDUCING SLIPPERY, IS THE WORKING SYSTEM BASED ON INCREASING DURABILITY INSTEAD OF INCREASING LUBRICITY. TCTEK PROFESSIONAL PRODUCTS ARE USED IN MACHINES REQUESTING SLIDGE, BRAKING BY CONTACTING METAL SURFACES, MANUFACTURING ETC. IT'S EFFICIENCY IN APPLICATIONS. IT CAN BE USED IN ANY SITUATION WHERE METAL DURABILITY IS NEEDED AND PROVIDES EFFECTIVE PROTECTION.

### HOW DOES TCTEK PROFESSIONAL LIQUID WORK?

- WHEN TCTEK PROFESSIONAL LIQUID IS APPLIED TO A METAL SURFACE, IT REACTS CHEMICALLY WITH THE METAL AND IS ABSORBED BY THE METAL.
- CHEMICAL REACTION OCCUR AT TEMPERATURES BETWEEN 38°C - 66°C DEPENDING ON FRICTION AND LOAD CONDITIONS.
- THE EFFECT OF THE CHEMICAL REACTION IS THE STRENGTHENING OF THE METAL SURFACE. WHEN THE REACTION IS COMPLETE, IT IS ABOUT SEVENTEEN TIMES STRONGER.
- INCREASED HARDNESS SIGNIFICANTLY REDUCES FRICTION, LIKE VENTILATION OF AN UNDER-INFLATED TIRE.

**TCTEK PRODUCTS SUPPORT SOCIAL DEVELOPMENT BY PROLONGING THE LIFE OF CONSUMABLES OF ALL KINDS OF MACHINES AND MOTORS, REDUCING EXTERNAL DEPENDENCE ON ECONOMICALLY.**

**THE SKODA FAVORIT CONTINUED TO WORK FOR 35 MINUTES AFTER ALL OIL HAS BEEN DRAINED AND TCTEK IS ADDED AND IT WAS OBSERVED TO NOT LOSE ENGINE POWER AND PERFORMANCE. PRESENTED AT GS ACR (MILITARY OF THE CZECH REPUBLIC) IN THE FIELD OF MILITARY EDUCATION IN CHINA IN JUNE 1999.**

**NOT OIL**



### TCTEK PROFESSIONAL LIQUID REDUCED FRICTION PROVIDES MANY BENEFITS

- WEAR RATE GREATLY REDUCE. MACHINES TREATED WITH TCTEK PROFESSIONAL LIQUID HAVE LONGER LASTING LIFE SPAN.
- LUBRICANTS AND OILS BECOME MORE EFFICIENT. PISTON RINGS PROVIDE BETTER SEALING AGAINST CYLINDER WALLS FOR BETTER COMPACTION AND REDUCED EXHAUST EMISSIONS. BEARINGS TURN MORE FREELY. THE GEAR FEED MORE EFFORTLESSLY. TCTEK PROFESSIONAL LIQUID TREATED MACHINES WORK MORE CLEAN AND USE LESS ENERGY TO DO THE SAME JOB.
- LESS HEAT IS PRODUCED IN MOVING PARTS. MACHINES TREATED WITH TCTEK PROFESSIONAL LIQUID WORK COOLER. ADDITIONALLY, THE BOND BETWEEN TCTEK PROFESSIONAL LIQUID AND METAL IS EXTREMELY DURABLE. MACHINERY TREATED WITH TCTEK PROFESSIONAL LIQUID IS PROTECTED AND MAINTAINS SUFFICIENT LUBRICATION DURING LONG TIMES EVEN IF THE PRIMARY LUBRICANT IS COMPLETELY LOST.

### WHAT DOES TCTEK PROFESSIONAL LIQUID CONTAIN?

- TCTEK PROFESSIONAL LIQUID IS A CHEMICALLY REACTED SYNTHETIC BASED HYDROCARBON DERIVATIVE.
- AT THE BEGINNING OF THE MANUFACTURING PROCESS, TCTEK PROFESSIONAL LIQUID WAS MIXED WITH EXTREME PRESSURE LUBRICANTS, NATURAL ANTI-CORROSION INGREDIENTS, EXTREMELY STABLE CHLORINE ESTERS, A COMPOSITION OF ANTI-WEARING COMPOUNDS AND ANTIOXIDANTS.
- THIS MIXTURE IS LATER DISTRIBUTED TO A CHEMICAL REACTOR.
- TCTEK PROFESSIONAL LIQUID IS NO LONGER A MIXING WHEN IT ARISES FROM OUR PROPRIETARY CHEMICAL REACTION PROCESS.
- IT IS ORGANIC AND IS BONDED TO ONE UNIQUE, PURE, ONE TYPE OF INGREDIENT.
- IN FINISHED TCTEK PROFESSIONAL LIQUID IS COMPLETELY STABLE, SO IT DOES NOT REQUIRE SHAKING BEFORE USE.

**TCTEK PROFESSIONAL LIQUID DOES NOT CONTAIN CHLORINED PARAFINE, PTFE, FLUOR, SOLVENTS, CARRIER OILS, VISCOSITY INCREASERS, METALS, MOLYBDENE DISULFIDE, SULPHUR, GRAPHITE POWDERS OR OTHER SOLIDS.**

**IT IS ALSO IMPORTANT TO REALIZE THAT TCTEK IS NOT HAZARDOUS, NON-TOXIC, AND NON FLAMMABLE. THE MOST IMPORTANT IS ITS ECO FRIENDLY.**







### TCTEK PROFESSIONAL LIQUID BENEFITS:

- REDUCTION OF HARMFUL EXHAUST EMISSIONS IN ALL PETROLS, DIESEL AND TWO-STROKE ENGINES. TWENTY-FOUR HOURS LUBRICATION ON ALL METAL SURFACES REQUIRED.
- REDUCED WORKING TEMPERATURES AT ALL METAL FRICTION POINTS. INCREASED POWER USING THE SAME ENERGY.
- REDUCED OXIDATION, THERMAL DECOMPOSITION, CORROSION AND WEAR.
- HIGHER EFFICIENCY IN ELECTRIC MOTORS, ALTERNATORS AND GENERATORS.
- LESS ENERGY CONDITIONS ARE REQUIRED AT ENGINE START, DEPENDING ON WEATHER CONDITIONS. DOES NOT AFFECT THE VISCOSITY OF THE PRIMARY LUBRICANT.
- LONG LASTING - SUBSTITUTES ADHESIVES TO METAL SURFACES EVEN AFTER FEW OIL CHANGES AND TREATMENTS.
- IT PROTECTS FOR A LONG TIME EVEN IF PRIMARY OIL IS LOST OR IS CONTAMINATED WITH FUEL, ANTIFREEZE OR NON-COMBUSTIBLE PRODUCTS.
- CONTAMINANTS AND CORROSION METALS ADHESIVE TO TCTEK PROFESSIONAL LIQUID PROTECTED SURFACES.
- IT HELPS PREVENT JAMMING.
- REDUCES CUTTING WEAR.
- PROVIDES EXCELLENT PROTECTION AT CORROSION. REDUCES CARBON AND LEAD DEPOSITS.
- REMAINS ON METAL EVEN AFTER REPEATED IGNITION - (1 000 IGNITIONS).
- EXTREMELY CONCENTRATED AND LONG LASTING. 30ML PASSED TCTEK PROFESSIONAL, 237ML MILITARY STANDARD TYPE LUBRICANTS.
- THE METAL IS CONTINUOUSLY LUBRICATED AND IT HELPS AS A SHIELD AGAINST METAL CONTAMINATION. REMAINS PROTECTED. PREVENTS HARMFUL MATERIAL BUILDING.
- IT FACILITATES AFTER PROCESSING GUN CLEANING, BECAUSE IT PROVIDES 90% FRICTION REDUCTION TO CONTINUOUSLY LUBRICATED MOVING METAL PARTS AND DOES NOT ALLOW CONTAMINATION TO ADHESIVE TO METAL SURFACES.

**NOT OIL**



•SHIELDS METALS



•PREVENTS FRICTION WEAR



•INTEGRATES WITH METAL



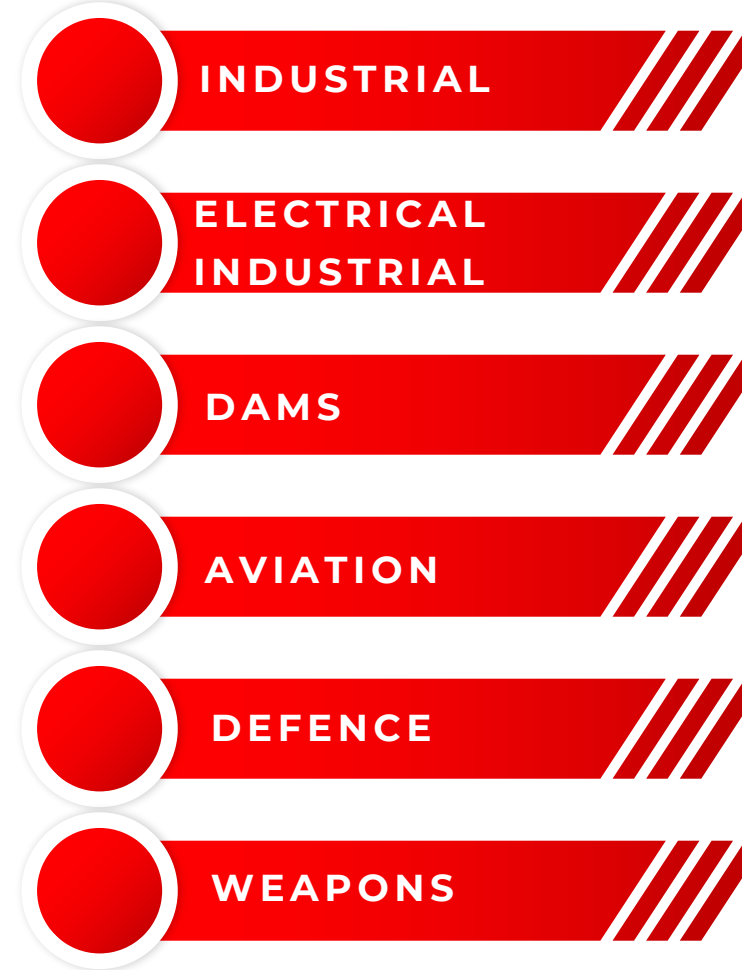
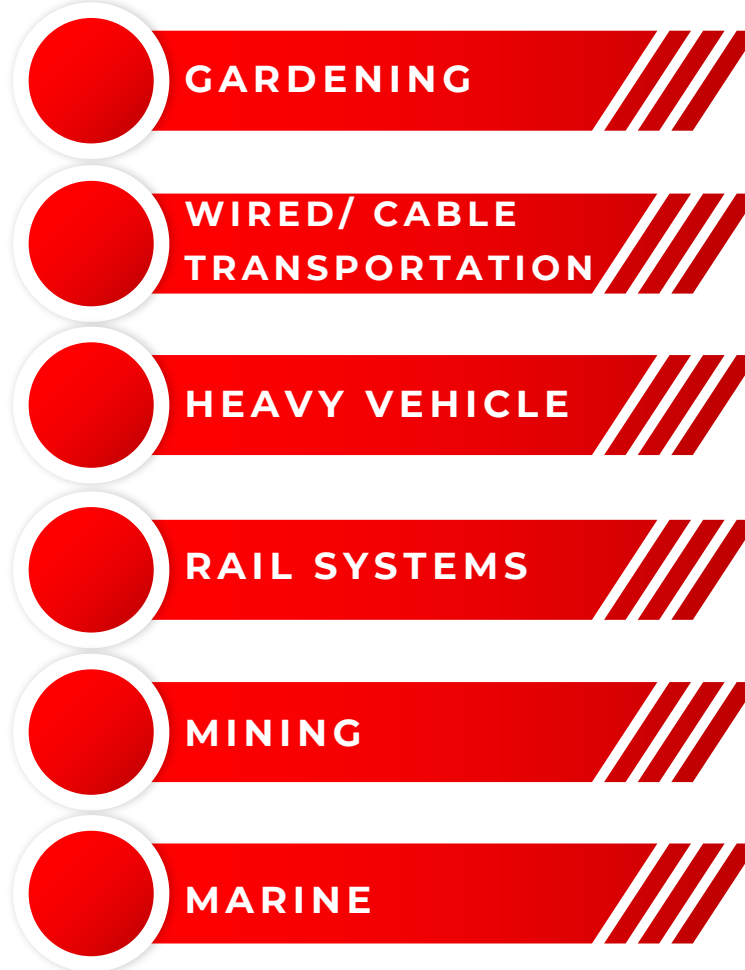
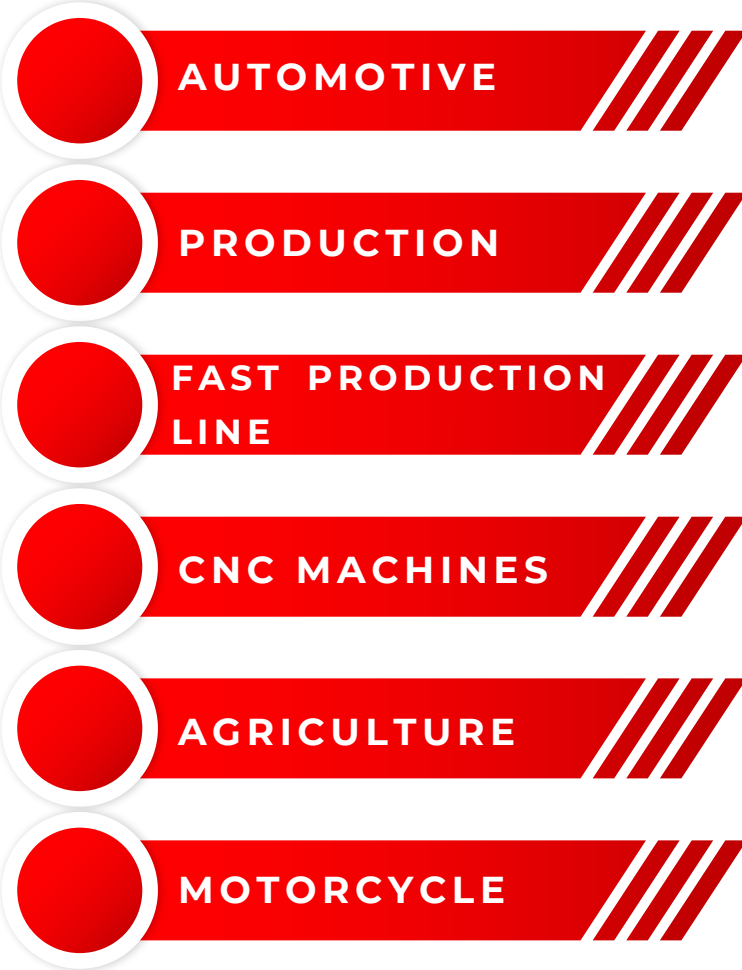
•RESISTANT LONG TIME UNDER DIFFICULT CONDITIONS



•EFFECTIVE ON AGGREGATE SURFACES AND ECO FRIENDLY



### TCTEK PROFESSIONAL LIQUID ALL USAGE AREAS:



### FEATURES:

- NO PETROL
- NO PTFE
- NO CHLORINATED PARAFFIN
- NO FLUORIDE
- NO SOLVENTS
- NO OIL CARRIERS
- NO VISCOSITY ENHANCER
- NO METAL PARTICALS
- NO MOLYBDENUM DISULFIDE

- NO SULPHUR
- NO GRAPHITE POWDERS OR OTHER SOLIDS
- NON-TOXIC
- NON FLAMABLE
- 100% ECO FRIENDLY
- 100% SYNTHETIC LIQUID
- 100% NON HAZARDOUS TO ANIMALS AND HUMANS.

TCTEK WAS DEVELOPED USING NANO TECHNOLOGY IN PARTNERSHIP WITH NASA IN EUROPE. IT IS A PRODUCT THAT PENETRATES INTO THE METAL AS A 4TH MOLECULE AND PROVIDES A SIGNIFICANT INCREASE IN THE USAGE TIME OF ALL METAL MECHANICAL COMPONENTS THAT ARE EXPOSED TO WEAR AS A METAL SHIELD.







**TCTEK PROFESSIONAL LIQUID TECHNICAL SPECIFICATIONS:**

NO.	SPECIFIC QUALITY, TESTING CONDITIONS	MEASUREMENT RESULT
1.	FORM	LIQUID
2.	COLOUR	DARK AMBER
3.	SMELL (SCENT)	MODERATE
4.	DENSITY AT 20°C PN-ISO 3675:2004 G/ML	1,194
5.	RELATIVE MASS (H2O=1) 25°C	1,142
6.	BOILING POINT °C	275
7.	VAPOR PRESSURE (MM HG) AT 20°C	1
8.	IGNITION POINT IN OPEN CONTAINER PN-EN 22592:1999 °C	210
9.	BURNING POINT °C	240
10.	SELF-IGNITING POINT °C	380
11.	MELTING POINT PN-ISO 3016:2005 °C	-16
12.	FREEZING POINT °C	-43
13.	CINEMATIC VISCOSITY PN-EN ISO 3104:2004 AT 40°C MM2/S	117,7
14.	CINEMATIC VISCOSITY PN-EN ISO 3104:2004 AT 100°C MM2/S	5,63
15.	SETTLEMENT NUMBER – COAGULATION D91	0,00
16.	SPECIFIC WEIGHT API D82	7,10
17.	SOLUBILITY IN OILS	COMPLETELY SOLUBLE





## TCTEK PROFESSIONAL GREASES

TCTEK PROFESSIONAL GREASE IS MADE OF THE BEST MATERIALS AVAILABLE, ONLY PREMIUM QUALITY POLYMERS, THE BEST HIGH VISCOSITY BASED OILS, ADVANCED ANTI-WEAR AGENTS AND NATURAL COMPLEX INHIBITS. IF WE USED SOMETHING OTHER THAN THESE QUALITY FINE MATERIALS, OUR GREASE WOULD HAVE BEEN NO LESS THAN ANY OTHER GREASE IN THE WORLD. THAT'S WHY OUR PRODUCTS SEPARATES TCTEK PROFESSIONAL GREASE FROM NORMAL GREASE. WE BLEND BY ADDING 5% TCTEK PROFESSIONAL GREASE BY WEIGHT. TCTEK PROFESSIONAL GREASE IS UNIQUE IN IT'S ABILITY TO FORM A PHYSICAL AND CHEMICAL BOND ON ALL METAL SURFACES. THE RESULT, TCTEK PROFESSIONAL GREASE IS UNIQUE IN INCREASING MECHANICAL EFFICIENCY, REDUCING DOWNTIME AND PREVENTING DISASTER FAILURE.

TCTEK GREASES IS DEVELOPED TO PERFORM THE BEST IN HEAVY INDUSTRY CONDITIONS, STRENGTHENED BY NANO TECHNOLOGY. DEFINITIONS ON THE EXTENDED LIFE OF THE EQUIPMENTS AND SPARE PARTS THAT ARE CONTINUOUSLY REPLACED DUE TO ABRASION, TCTEK PROFESSIONAL GREASE AND EXTENDED LIFE OF THE EQUIPMENT YOU USE IN YOUR ACTIVITIES, SUCH AS PRODUCTION SERVICE.

## TCTEK PROFESSIONAL GREASE BENEFITS:

- SUPERIOR SHOCK-LOAD PROTECTION
- CORROSION & WEAR REDUCTION
- LUBRICATION OF EXTENDED RANGE
- EXTENDING MACHINE LIFE
- REDUCING WORKING TEMPERATURES
- PREVENT RUST AND OXIDATION
- COMPATIBLE WITH VERSATILE TEMPERATURE RANGE
- EXCELLENT WATER TREATMENT RESISTANCE
- EXTREMELY WIDE APPLICATION DIVERSITY
- EXTENDED BEARING LIFE (35% TO 50%)
- COMPATIBLE WITH OTHER LITHIUM COMPLEX GREASES
- LUBRICATION ON BEARINGS EVEN AFTER USING GREASE
- STAYS IN PLACE AND LUBRICATES UNDER THE WORST CONDITIONS
- PROVIDES REDUCED MAINTENANCE

LOW  
CONSUMPTION

PROTECTION







3

MOLECULAR PROTECTION  
OF METAL

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## TCTEK PROFESSIONAL 3 GREASE LITHIUM PLASTIC LUBRICANT FOR BEARINGS

FOR MANAGING INDUSTRIAL EQUIPMENT ESPECIALLY SUBJECT TO WEAR SUCH AS ROLLER BEARINGS, INCLUDING HIGH SPEED BEARINGS, SLIP BEARINGS, GEAR, GUIDE RAILS, ELECTRIC TOOLS AND OTHER FRICTION DEVICES.

TCTEK 3 PROFESSIONAL GREASE IS AN EXCEPTIONAL PRODUCT FOR INDUSTRIAL USE, CONTAINING A FORMULA FOR METAL REFINING ON A MOLECULAR BASIS IN IT'S OIL STRUCTURE.

THE FORMULA CONTAINED IN TCTEK 3 PROFESSIONAL GREASE LUBRICANT IS MOLECULARLY ATTACHED TO THE METAL, HEALING IT AND CREATING A SUPER PERMANENT NETWORK. A MOLECULAR BOND RESISTANT TO HIGH TEMPERATURES AND HIGH MECHANICAL LOADS (EXCESSIVE FRICTION).

TCTEK 3 PROFESSIONAL GREASE DOES NOT ONLY LUBRICATE THE AREAS SUBJECT TO WEAR, IT ALSO AFFECTS THE METAL WHERE FRICTION IS EXHIBITED.

EXTREMELY HIGH EFFICIENCY DUE TO, TCTEK 3 PROFESSIONAL GREASE IS USED IN RACES WITH MANY MACHINES AND EQUIPMENT OPERATED IN HARD CONDITIONS: HIGH DUST, WATER, HIGH TEMPERATURE, DYNAMIC AND EXTREME FRICTION. IT IS USED AS FILLER IN ALL KINDS OF LUBRICANTS AND ALSO WITH DIRECT APPLICATION TO FRICTION KNOTS.

OPERATING TEMPERATURE RANGE IS BETWEEN -30°C AND +150°C.

### FEATURES:

- VERY GOOD CORROSION PROTECTION
- SIGNIFICANT DECREASE OF FRICTION COEFFICIENT
- REDUCING SYSTEM WEAR AND PROTECTION AGAINST SEIZURES
- NOISE REDUCTION BY COLLABORING COMPONENTS
- VERY GOOD WATER RESISTANCE
- BETTER ADHESION TO THE SUBSTRATE

WAY BEYOND KNOWN  
GREASES

THE PRODUCT IS NON  
EXPLOSIVE - CAN BE USED  
IN UNDERGROUND MINING



**TCTEK PROFESSIONAL 3 GREASE - LITHIUM PLASTIC LUBRICANT FOR BEARINGS - TECHNICAL SPECIFICATIONS**

NO.	SPECIFIC QUALITY, TESTING CONDITIONS	UNIT	MEASUREMENT RESULT
1.	COLOR	---	RUBY
2.	STRUCTURE	---	HOMOGENEOUS
3.	CONSISTENCY CLASS	NLGI	2
4.	PENETRATION OF KNEADED LUBRICANT AT 25 °C, 60 STROKES (PN-ISO 2137: 2011)	mm/10	300 ± 14
5.	DROPPING POINT (PN-ISO 2176: 2011)	°C	180 ± 9
6.	THICKENER TYPE	---	LITHIUM STEARATE
7.	OPERATING TEMPERATURE RANGE	°C	-30 +150
8.	MINERAL OIL L-AN 150 - BASE OIL VISCOSITY AT 40 °C	---	61,2-74,8 MM <sup>2</sup> /S
9.	LUBRICANT OIL SEPARABILITY AT 100 °C IN 24 HOURS (PN-V-04047: 2002)	%(m/m)	7,9 ± 1,1
10.	LUBRICATION ACCORDING TO THE TEST ON A FOUR-BALL DEVICE T02 (PN-C-04147: 1976)-LOAD CAUSING WEL-PZ	kG	400 ± 1 DEGREE OF LOAD
11.	LUBRICANT RESISTANCE TO DYNAMIC WATER WASHOUT (PN-ISO 11009: 2011)	%(m/m)	1 ± 2
12.	MAXIMUM LOAD WITHOUT SEIZURE (OK) - TEST BY TIMKEN INSTRUMENT (ACCORDING TO ASTM D 2509-03)	daN(lbf)	22,2 (50)
13.	LOWEST LOAD WITH SEIZURE (SC) - TIMKEN TEST (ACCORDING TO ASTM D 2509-03)	daN(lbf)	24,4 (55)
14.	MOLECULAR - BASED METAL REFINING FORMULAS	---	ACCORDING TO TECHNOLOGY



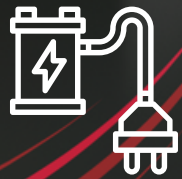


6

MOLECULAR PROTECTION  
OF METAL



**MoS<sub>2</sub> İLE LİTYUM  
PLASTİK YAĞLAYICI**



**-30°C +150°C**

## TCTEK PROFESSIONAL 6 GREASE LITHIUM PLASTIC LUBRICANT WITH MOS<sub>2</sub>

IT IS DESIGNED IN INDUSTRY TO PROTECT A SYSTEM ESPECIALLY SUBJECT TO WEAR, SUCH AS JOINTS, LOW SPEED BEARINGS, SLIP BEARINGS, GEAR, GUIDE RAILS, SLIDING RAILS, PINS, BOLTS, AND OTHER ASSEMBLY. ELEMENTS WITH CONTACT CORROSION OR FINISHING CONNECTIONS (FIXED CONNECTIONS OF PINS AND AXLES). LUBRICANT EFFECTIVELY PREVENTS THESE PROBLEMS AND REDUCE THE NUMBER OF FRICTION COATS. RESISTANT TO WATER AND OTHER WEATHER CONDITIONS.

TCTEK 6 PROFESSIONAL GREASE IS AN EXCEPTIONAL PRODUCT DESIGNED FOR INDUSTRY USE, CONTAINING MOLYBDENE DISULFIDE MOS<sub>2</sub> IN IT'S STRUCTURE AND A UNIQUE FORMULA FOR METAL-BASED METAL REFINING. THE FORMULA CONTAINED IN THE LUBRICANT ATTACHES MOLECULARLY TO THE METAL, HEALING IT AND CREATING A SUPER-PERMANENT NETWORK. MOLECULAR BOND RESISTANT TO HIGH TEMPERATURES AND HIGH MECHANICAL LOADS (EXCESSIVE FRICTION).

TCTEK 6 PROFESSIONAL GREASE NOT ONLY LUBRICATES AREAS SUBJECT TO CORROSION AND EXTREME HEATING, BUT IT ALSO ADS TO THE METAL WHERE FRICTION OCCURS AND EFFECTIVELY PREVENTS EXTREME HEATING OF THE CONTACT JOINTS.

DUE TO IT'S EXTREMELY HIGH EFFICIENCY, TCTEK 6 PROFESSIONAL GREASE IS USED IN COMPETITION WITH MANY MACHINES AND EQUIPMENT OPERATED IN HARD CONDITIONS: HIGH DUST, WATER, HIGH TEMPERATURE, DYNAMIC AND HIGH FRICTION. IT IS USED AS FILLER IN ALL KINDS OF LUBRICANTS AND ALSO WITH DIRECT APPLICATION TO FRICTION KNOTS.

OPERATING TEMPERATURE RANGE IS BETWEEN -30°C AND +150°C.

### FEATURES:

- VERY GOOD CORROSION PROTECTION
- SIGNIFICANT DECREASE OF FRICTION COEFFICIENT
- REDUCING SYSTEM WEAR AND PROTECTION AGAINST SEIZURES
- NOISE REDUCTION BY COLLABORING COMPONENTS
- VERY GOOD WATER RESISTANCE
- BETTER ADHESION TO THE SUBSTRATE
- PROTECTION AGAINST EXTREME HEAT CONTACT CONNECTIONS

**BESTS ALLWAYS WORKS  
WITH BESTS**

**THE PRODUCT IS NON  
EXPLOSION - CAN BE  
USED IN UNDERGROUND  
MINING**

**TCTEK PROFESSIONAL 6 GREASE - LITHIUM PLASTIC LUBRICANT WITH MOS<sub>2</sub> - TECHNICAL SPECIFICATIONS**

NO.	SPECIFIC QUALITY, TESTING CONDITIONS	UNIT	MEASUREMENT RESULT
1.	COLOR	---	GRAPHITE
2.	STRUCTURE	---	HOMOGENEOUS
3.	CONSISTENCY CLASS	NLGI	2
4.	PENETRATION OF KNEADED LUBRICANT AT 25 °C, 60 STROKES (PN-ISO 2137: 2011)	mm/10	300 ± 14
5.	DROPPING POINT (PN-ISO 2176: 2011)	°C	180 ± 9
6.	THICKENER TYPE	---	LITHIUM STEARATE
7.	OPERATING TEMPERATURE RANGE	°C	-30 +150
8.	MINERAL OIL L-AN 150 - BASE OIL VISCOSITY AT 40 °C	---	61,2-74,8 MM <sup>2</sup> /S
9.	LUBRICANT OIL SEPARABILITY AT 100 °C IN 24 HOURS (PN-V-04047: 2002)	%(m/m)	7,9 ± 1,1
10.	LUBRICATION ACCORDING TO THE TEST ON A FOUR-BALL DEVICE T02 (PN-C-04147: 1976)-LOAD CAUSING WEL-PZ	kG	400 ± 1 DEGREE OF LOAD
11.	LUBRICANT RESISTANCE TO DYNAMIC WATER WASHOUT (PN-ISO 11009: 2011)	%(m/m)	1 ± 2
12.	MAXIMUM LOAD WITHOUT SEIZURE (OK) - TEST BY TIMKEN INSTRUMENT (ACCORDING TO ASTM D 2509-03)	daN(lbf)	22,2 (50)
13.	LOWEST LOAD WITH SEIZURE (SC) - TIMKEN TEST (ACCORDING TO ASTM D 2509-03)	daN(lbf)	24,4 (55)
14.	MOLECULAR - BASED METAL REFINING FORMULAS	---	ACCORDING TO TECHNOLOGY





11

MOLECULAR PROTECTION  
OF METAL

## TCTEK PROFESSIONAL 11 GREASE LITHIUM PLASTIC LUBRICANT FOR CENTRAL LUBRICATION

IN INDUSTRIAL CENTRAL LUBRICATION SYSTEMS, IN THE MAINTENANCE-FREE LUBRICATION OF LEAKABLE FRICTION NODES, AND SPECIALLY SUPPOSED TO BE CONSIDER ABRASION, SUCH AS BEARINGS AND SLIDING BEARINGS, LOW SPEED GEAR, JOINTS.

- MINES
- POWER PLANTS - THERMAL PLANTS
- MINING
- MACHINE FACTORIES (HARVERSTERS)
- IN MANY OTHER PLANTS AND CONSTRUCTION MACHINES

TCTEK 11 PROFESSIONAL GREASE IS AN EXCEPTIONAL PRODUCT DESIGNED FOR INDUSTRIAL USE, INCLUDING IN IT'S OIL A FORMULA FOR METAL PURIFICATION ON A MOLECULAR BASE IN IT'S OIL.

THE FORMULA CONTAINED IN TCTEK 11 PROFESSIONAL GREASE LUBRICANT IS MOLECULARLY ATTACHED TO THE METAL, HEALING AND CREATING A SUPER PERMANENT NETWORK. A MOLECULAR BOND RESISTANT TO HIGH TEMPERATURES AND HIGH MECHANICAL LOADS (EXCESSIVE FRICTION).

TCTEK 11 PROFESSIONAL GREASE NOT ONLY LUBRICATES THE AREAS SUBJECT TO WEAR AND FRICTION, IT ALSO AFFECTS THE FRICTION OCCURRENT METAL AND EFFECTIVELY PREVENTS THE IRRIGATION OF THE CONTACT JOINTS.

DUE TO IT'S EXTREMELY HIGH EFFICIENCY, TCTEK 11 PROFESSIONAL GREASE IS USED IN COMPETITION WITH MANY MACHINES AND EQUIPMENT OPERATED IN HARD CONDITIONS: HIGH DUST, WATER, HIGH TEMPERATURE, DYNAMIC AND EXTREME FRICTION. IT IS USED AS FILLING MATERIAL IN ALL KINDS OF LUBRICANTS AND ALSO WITH DIRECT APPLICATION TO FRICTION KNOTS.

OPERATING TEMPERATURE RANGE IS BETWEEN -30°C AND +150°C.

### FEATURES:

- VERY GOOD CORROSION PROTECTION
- SIGNIFICANT DECREASE OF FRICTION COEFFICIENT
- REDUCING SYSTEM WEAR AND PROTECTION AGAINST SEIZURES
- NOISE REDUCTION BY COLLABORING COMPONENTS
- VERY GOOD WATER RESISTANCE
- BETTER ADHESION TO THE SUBSTRATE

MORE THAN A GREASE

THE PRODUCT IS NON  
EXPLOSION - CAN BE  
USED IN UNDERGROUND  
MINING

**TCTEK PROFESSIONAL 11 GREASE - LITHIUM PLASTIC LUBRICANT FOR CENTRAL LUBRICATION - TECHNICAL SPECIFICATIONS**

NO.	SPECIFIC QUALITY, TESTING CONDITIONS	UNIT	MEASUREMENT RESULT
1.	COLOR	---	RUBY
2.	STRUCTURE	---	HOMOGENEOUS
3.	CONSISTENCY CLASS	NLGI	2
4.	PENETRATION OF KNEADED LUBRICANT AT 25 °C, 60 STROKES (PN-ISO 2137: 2011)	mm/10	300 ± 14
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10.	LUBRICATION ACCORDING TO THE TEST ON A FOUR-BALL DEVICE T02 (PN-C-04147: 1976)-LOAD CAUSING WEL-PZ	KG	400 ± 1 DEGREE OF LOAD
11.	LUBRICANT RESISTANCE TO DYNAMIC WATER WASHOUT (PN-ISO 11009: 2011)	%(m/m)	1 ± 2
12.	MAXIMUM LOAD WITHOUT SEIZURE (OK) - TEST BY TIMKEN INSTRUMENT (ACCORDING TO ASTM D 2509-03)	daN(lbf)	22,2 (50)
13.	LOWEST LOAD WITH SEIZURE (SC) - TIMKEN TEST (ACCORDING TO ASTM D 2509-03)	daN(lbf)	24,4 (55)
14.	MOLECULAR - BASED METAL REFINING FORMULAS	---	ACCORDING TO TECHNOLOGY





16

MOLECULAR PROTECTION  
OF METAL



**-50°C +150°C**  
**(SHORT TERM +160°C)**

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## **TCTEK PROFESSIONAL 16 GREASE**

### **LUBRICANT FOR HIGH SPEED ELECTRIC MOTOR BEARINGS**

DUE TO IT'S HIGH DURABILITY, THE POLYURETHANE LUBRICANT IS TCTEK 16 PROFESSIONAL GREASE. IT CAN BE USED IN BEARINGS THAT REQUIRE MAINTENANCE WITHOUT ADDITIONAL "LUBRICATION" DURING NORMAL OPERATION. LUBRICANT CHEMICAL STABLE AGAINST ENVIRONMENT. THE LUBRICANT IS DESIGNED FOR RUNNING BEARINGS. IN HIGH SPEED PUMPS, FANS, ELECTRIC MOTORS, PULLEY AND MANY OTHER DEVICES.

- MINES
- POWER PLANTS-THERMAL PLANTS
- MINING
- MACHINE FACTORIES (HARVERSTERS)
- IN MANY OTHER PLANTS AND CONSTRUCTION MACHINES

TCTEK 16 PROFESSIONAL GREASE IS AN OUTSTANDING PROFESSIONAL LUBRICANT SPECIALLY DESIGNED FOR INDUSTRIAL USE. CHARACTERIZED WITH A SMOOTH TEXTURE, HIGH FALLING POINT, HIGH WATER RESISTANCE AND PERFECT SLIDGE.

THE FORMULA CONTAINED IN TCTEK 16 PROFESSIONAL GREASE LUBRICANT IS MOLECULARLY ATTACHED TO THE METAL, HEALING IT AND CREATING A SUPER-PERMANENT NETWORK. A MOLECULAR BOND RESISTANT TO HIGH TEMPERATURES AND HIGH MECHANICAL LOADS (EXCESSIVE FRICTION).

DUE TO IT'S EXTREMELY HIGH EFFICIENCY, TCTEK 16 PROFESSIONAL GREASE IS USED IN COMPETITION WITH MANY MACHINES AND EQUIPMENT OPERATED IN HARD CONDITIONS: LOADS OF DUST, WATER, HIGH TEMPERATURE, DYNAMIC AND HIGH FRICTION. MAINTENANCE WITHOUT ADDITIONAL "LUBRICATION" DURING NORMAL OPERATION CAN BE USED IN NEW BEARINGS.

OPERATING TEMPERATURE RANGE IS BETWEEN -50°C AND +150°C (SHORT TERM +160°C).

#### **FEATURES:**

- VERY GOOD CORROSION PROTECTION
- SIGNIFICANT DECREASE OF FRICTION COEFFICIENT
- REDUCING SYSTEM WEAR AND PROTECTION AGAINST SEIZURES
- NOISE REDUCTION BY COLLABORING COMPONENTS
- VERY GOOD WATER RESISTANCE
- BETTER ADHESION TO THE SUBSTRATE

**GREASE WITH ITS  
UNIQUENESS**

**THE PRODUCT IS NON  
EXPLOSION - CAN BE  
USED IN UNDERGROUND  
MINING**

NO.	SPECIFIC QUALITY, TESTING CONDITIONS	UNIT	MEASUREMENT RESULT
1.	COLOR	---	BROWN
2.	STRUCTURE	---	HOMOGENEOUS
3.	BASE OIL	---	ESTER OIL
4.	BASE OIL VISCOSITY DIN 51562	AT 40°C AT 100°C	70 MM <sup>2</sup> /S 10,7 MM <sup>2</sup> /S
5.	CONSISTENCY CLASS DIN 51818	NLGI	2
6.	DROPPING POINT DIN ISO 2137	°C	> 250°C
7.	PENETRATION AFTER KNEADING DIN ISO 2137	---	265 - 295
8.	TEMPERATURE RANGE OF USE IN THE SHORT TERM	°C	-50 °C +150 °C
9.	CORROSION PROTECTION (EMCOR) DIN 51802	---	0 - 0
10.	OIL SEPARABILITY DIN 51817      +40°C +100°C	%	0,53 % 5,01 %
11.	NOISE CLASS (MGG 11)	---	II/1
12.	LUBRICATION ACCORDING TO THE TEST ON THE FOUR-BALL DEVICE T02 (PN-76 / C-04147)		
	- LOAD CAUSING WELD - PZ	daN	450
	- WEAR LIMIT - GOZ	daN/mm <sup>2</sup>	352
	- SEIZURE LOAD - PT	daN (kg)	295
	- LOAD WEAR INDEX - LH	daN (kg)	64





TCTEK PROFESSIONAL 16 GREASE - LUBRICANT FOR HIGH SPEED ELECTRIC MOTOR BEARINGS - TECHNICAL SPECIFICATIONS

NO.	SPECIFIC QUALITY, TESTING CONDITIONS	UNIT	MEASUREMENT RESULT
13.	MAXIMUM LOAD WITHOUT SEIZURE (OK) - TIMKEN TEST (ACCORDING TO ASTM D 2509-03)	daN(lbf)	24,4 (55)
14.	OXIDATION RESISTANCE DIN 51808 99 ° C / 100 H	---	0,1 BAR
15.	STARTING / RUNNING TORQUE ASTM D 1478 AT - 30 °C STARTING / RUNNING TORQUE ASTM D 1478 AT - 40 °C	---	305 MNM/37 NMN 539 MNM/68 NMN
16.	SPEED COEFFICIENT (N X DM) FE 9-TEST DIN 51821 A/1,5/6000 -180°C F 10 FE 9-TEST DIN 51821 A/1,5/6000 -180°C F 50 FE 1-TEST B/1,2/12000 -160°C	---	1 300 000 746,15 H 816,67 H >450 H
17.	WATER RESISTANCE DIN 51807	---	0-90

## **TCTEK PROFESSIONAL 16 ULTRA GREASE**

### *LUBRICANT FOR HIGH SPEED ELECTRIC MOTOR BEARINGS*

TCTEK 16 ULTRA PROFESSIONAL GREASE NOT ONLY LUBRICATES AREAS THAT ARE SUBJECT TO WEAR AND HEAT, BUT ALSO ADHERES TO THE METAL WHERE FRICTION OCCURS AND EFFECTIVELY PREVENTS CONTACT JOINTS FROM HEATING. TCTEK 16 ULTRA PROFESSIONAL GREASE IS AN EXCEPTIONAL PROFESSIONAL LUBRICANT SPECIALLY DESIGNED FOR INDUSTRIAL USE. A SMOOTH TEXTURE, HIGH DROP POINT, HIGH WATER RESISTANT AND IS THE MOLECULAR PROTECTION OF METAL. IT IS CHARACTERIZED BY IT'S RESISTANCE AND EXCELLENT LUBRICITY PROPERTIES.

- MINES
- POWER PLANTS - THERMAL POWER PLANTS
- MINING
- MACHINE FACTORIES (HARVESTERS)
- MANY OTHER FACILITIES AND WORK MACHINES

TCTEK 16 ULTRA PROFESSIONAL GREASE IS STABLE AGAINST CHEMICAL ENVIRONMENTS. THE LUBRICANT IS DESIGNED FOR WORKING BEARINGS, IT IS USED IN HIGH-SPEED PUMPS, FANS, ELECTRIC MOTORS, PULLEYS AND MANY OTHER DEVICES.

THE FORMULA CONTAINED IN THE TCTEK 16 ULTRA PROFESSIONAL GREASE LUBRICANT BINDS TO THE METAL MOLECULARLY, HEALS IT AND FORMS A SUPER PERMANENT NETWORK. A MOLECULAR BOND THAT IS RESISTANT TO HIGH TEMPERATURES AND HIGH MECHANICAL LOADS (EXCESSIVE FRICTION).

DUE TO IT'S EXTREMELY HIGH EFFICIENCY, TCTEK 16 PROFESSIONAL GREASE IS USED IN RACING WITH A LOT OF MACHINES AND EQUIPMENT OPERATED IN HARD CONDITIONS: HIGH DUST, WATER, HIGH TEMPERATURES, DYNAMIC AND EXTREME FRICTION. IT CAN ALSO BE USED IN MAINTENANCE-FREE BEARINGS WITHOUT THE NEED FOR "LUBRICATION" DURING NORMAL OPERATION.

THE OPERATING TEMPERATURE RANGE IS BETWEEN -40°C AND +180°C (SHORT TERM +220°C).

#### **FEATURES:**

- VERY GOOD CORROSION PROTECTION
- SIGNIFICANT DECREASE OF FRICTION COEFFICIENT
- REDUCING SYSTEM WEAR AND PROTECTION AGAINST SEIZURES
- NOISE REDUCTION BY COLLABORING COMPONENTS
- VERY GOOD WATER RESISTANCE
- BETTER ADHESION TO THE SUBSTRATE

**GREASE WITH IT'S ULTRA POWER**

**THE PRODUCT IS NON EXPLOSION - CAN BE USED IN UNDERGROUND MINING**

**16** **ULTRA**  
**MOLECULAR PROTECTION OF METAL**



**-40°C +180°C**  
**(SHORT TERM +220°C)**





TCTEK PROFESSIONAL 16 ULTRA GREASE - LUBRICANT FOR HIGH SPEED ELECTRIC MOTOR BEARINGS  
TECHNICAL SPECIFICATIONS

NO.	SPECIFIC QUALITY, TESTING CONDITIONS	UNIT	MEASUREMENT RESULT
1.	COLOR	---	CANARY
2.	STRUCTURE	---	HOMOGENEOUS
3.	CONSISTENCY CLASS	NLGI	2
4.	PENETRATION OF KNEADED LUBRICANT AT 25 °C, 60 STROKES (PN-ISO 2137: 2011)	mm/10	300 ± 14
5.	DROPPING POINT (PN-ISO 2176: 2011)	°C	180 ± 9
6.	THICKENER TYPE	---	COMPLEX LITHIUM
7.	OPERATING TEMPERATURE RANGE	°C	-40 +180
8.	MINERAL OIL L-AN 150 - BASE OIL VISCOSITY AT 40 °C	---	61,2-74,8 MM²/S
9.	LUBRICANT OIL SEPARABILITY AT 100 °C IN 24 HOURS (PN-V-04047: 2002)	%(m/m)	7,9 ± 1,1
10.	LUBRICATION ACCORDING TO THE TEST ON A FOUR-BALL DEVICE T02 (PN-C-04147: 1976)-LOAD CAUSING WEL-PZ	KG	400 ± 1 DEGREE OF LOAD
11.	LUBRICANT RESISTANCE TO DYNAMIC WATER WASHOUT (PN-ISO 11009: 2011)	%(m/m)	1 ± 2
12.	MAXIMUM LOAD WITHOUT SEIZURE (OK) - TEST BY TIMKEN INSTRUMENT (ACCORDING TO ASTM D 2509-03)	daN(lbf)	22,2 (50)
13.	LOWEST LOAD WITH SEIZURE (SC) - TIMKEN TEST (ACCORDING TO ASTM D 2509-03)	daN(lbf)	24,4 (55)
14.	MOLECULAR - BASED METAL REFINING FORMULAS	---	ACCORDING TO TECHNOLOGY

## TCTEK PROFESSIONAL GREASES

### VERSATILITY

TCTEK PROFESSIONAL GREASE IS EXTREMELY VERSATILE. IT CAN BE USED IN AN UNUSUALLY WIDE RANGE OF APPLICATIONS. TCTEK PROFESSIONAL GREASE IS ALSO USED IN LOW LOAD, LOW TEMPERATURE OPERATIONS SUCH AS VEHICLE JOINTS, OR AT HIGH LOADS AND HIGH TEMPERATURES TYPICALLY FOUND IN LARGE INDUSTRIAL GEAR AND BEARING SYSTEMS.

### EXTENDED GREASE RANGE

WITH TCTEK PROFESSIONAL GREASE, RE-LUBRICATION FREQUENCY CAN BE REDUCED IN MOST APPLICATIONS. TCTEK PROFESSIONAL GREASE CONTAINED IN TCTEK PROFESSIONAL GREASE, AS IT PROVIDES MOST OF THE LUBRICATION, THE GREASE ITSELF DOES LESS ACTUAL WORK. GREAT REDUCTION IN INTERNAL FRICTION, HEAT AND WEAR. IT MEANS THAT THE GREASE KEEPS IT'S ORIGINAL CHEMICAL AND PHYSICAL PROPERTIES FOR LONGER. GREASE DOESN'T NEED TO BE CHANGED FREQUENTLY BECAUSE IT DOESN'T DEPOSE QUICKLY. AS A RESULT, TCTEK PROFESSIONAL GREASE LASTS LONGER THAN OTHER GREASES AND EXTENDS ROUTINE MAINTENANCE INTERVALS.

THE BENEFITS OF TCTEK'S LONG-TERM LUBRICATION POTENTIAL ARE CLEAR IN REGULAR MAINTENANCE CYCLES. OUR CUSTOMERS TELL US THAT ON THERE PRODUCTS REDUCE THE EXPENDITURE OF NOT ONLY TIME AND EFFORTS, BUT THEY ALSO REDUCE THE EXPENDITURE OF THE UNPLANNED TIME. (ACCORDING TO THE COMPANIES WE HAVE CONTRACTED WITH).



### EFFECTIVENESS

TCTEK PROFESSIONAL GREASE IS EFFECTIVE IN A UNIQUE STRUCTURE. TCTEK PROFESSIONAL GREASE PROVIDES LUBRICATION DURING EXTREME OUT OF PARAMETER CONDITIONS THAT CAN CAUSE OTHER GREASES TO FAIL. WHEN TCTEK PROFESSIONAL GREASE IN BASE, GREASE IS EXPOSED TO THE METAL SURFACE, IT BECOMES PART OF THE CHEMICAL REACTION IN THE METAL AS A RESULT, THE ENTIRE LUBRICATED MECHANICAL COMPONENT LUBRICATES THROUGHOUT THE FIXED MOLECULE BINDED GREASE.

### SUMMARY

TCTEK PROFESSIONAL GREASE INCREASES EFFICIENCY, EXTENDS EQUIPMENT LIFE, REDUCES DOWNTIME AND HELPS PROTECT AGAINST UNPLANNED MAINTENANCE. TCTEK PROFESSIONAL GREASE WILL IMPROVE BY REDUCING ENERGY USE, REDUCE MAINTENANCE COSTS AND REDUCE CAPITAL EQUIPMENT REPLACEMENTS.





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