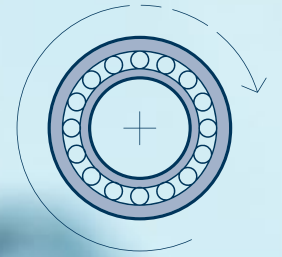


WOLF GREASES FULL RANGE

Discover our technology enhanced greases covering all segments and applications.



WOLF, THE VITAL LUBRICANT

Wolf Lubricants quite literally bring engines to life, delivering the highest levels of efficiency and performance, with products that set new standards of reliability and protection.

With the exponential speed at which new and cleaner engine technologies are being developed, Wolf continues to be at the forefront of these innovations with cutting-edge products that meet the latest standards and official OEM approvals.



A STRONG COMPANY BEHIND THE BRAND

**WE PRIDE OURSELVES ON
BEING A 'PURE PLAYER' IN OUR INDUSTRY.**

We are 100% dedicated to lubricants. We've been creating next-generation products since 1955 and have accumulated more than 65 years of knowledge and expertise. As one of Europe's leading independent lubricants blenders, we are specialists, focusing on meeting the diverse needs of our customers with high-quality, technology-enhanced lubricants.

We add value with a full-service approach that includes technical advice, fast supply and on-going training and support.



**WOLF OIL CORPORATION
BELGIAN COMPANY,
+65 YEARS OF EXPERIENCE**



**IN-HOUSE LABORATORY
R&D AND FULL CONTROL OVER QUALITY**



**ISO CERTIFIED
QUALITY & ENVIRONMENTAL
MANAGEMENT SYSTEMS**



**1 OF THE LARGEST
INDEPENDENT LUBRICANT
MANUFACTURERS IN EUROPE**



**OEM EXPERIENCE
FACTORY AND SERVICE FILL**



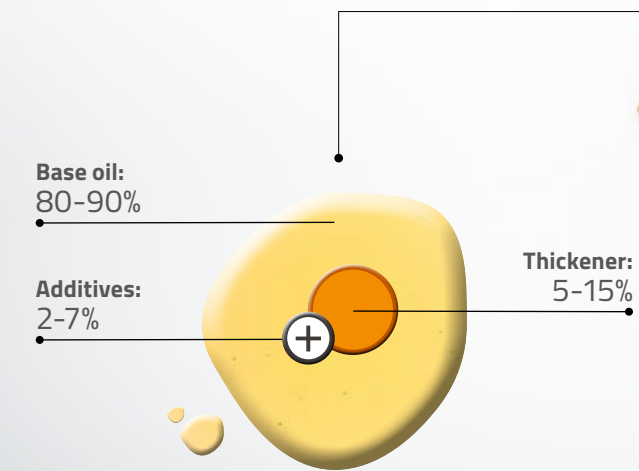
**MORE THAN 300 OEM APPROVALS
PROOF OF TOP QUALITY PRODUCTS**

WOLF GREASES FULL RANGE THE FUNDAMENTALS

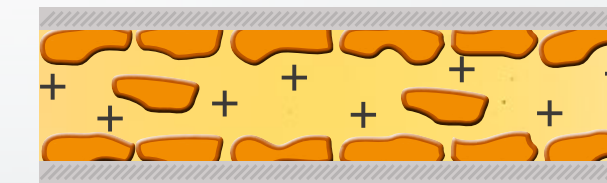
WHAT IS LUBRICATING GREASE?

**Greases are a combination of
BASE OIL + THICKENER + ADDITIVES.**

The combination of these ingredients will define the properties and type(s) of applications and industries they will be used in. The type of grease you use will depend on the type of component - machinery - environment and performance qualities required.



COMPOSITION OF GREASES

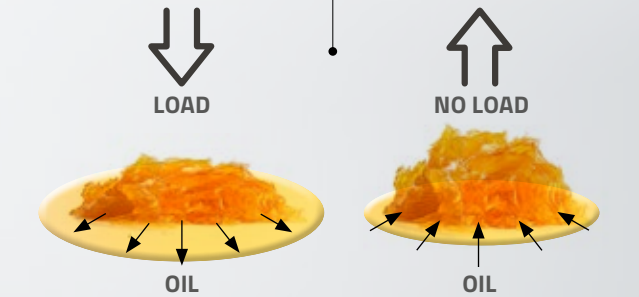


MATRIX THAT KEEPS OIL IN PLACE

A closer look into the composition of a lubricating grease.

THE ROLE OF A LUBRICATING GREASE

- Decrease the forces required for movement of components
- Create an active, protective barrier between moving surfaces
- Control friction whilst limiting its adverse effects on mechanical components



UNDER PRESSURE

The thickener absorbs base oils and additives like a sponge and releases the base oil when under load.

GREASES RANGE TECHNOLOGY ENHANCEMENT ANHYDROUS CALCIUM (ANH CA)

For over 60 years, multi-purpose greases based on lithium technology have dominated the market, accounting for more than 70 percent of the world's lubricating grease. Their well-balanced performance and attractive price have made them suitable for various applications. However, electric car manufacturers are driving demand and higher prices across multiple segments.

As a result, the market has been considering lithium base thickener alternatives such as **ANHYDROUS CALCIUM (ANH CA) greases**, which offer **improved environmental and commercial benefits** versus lithium greases:



SUSTAINABLE

Less environmental impact during extraction, transportation and production.



AVAILABILITY

Greater natural availability, reducing risk of supply issues.



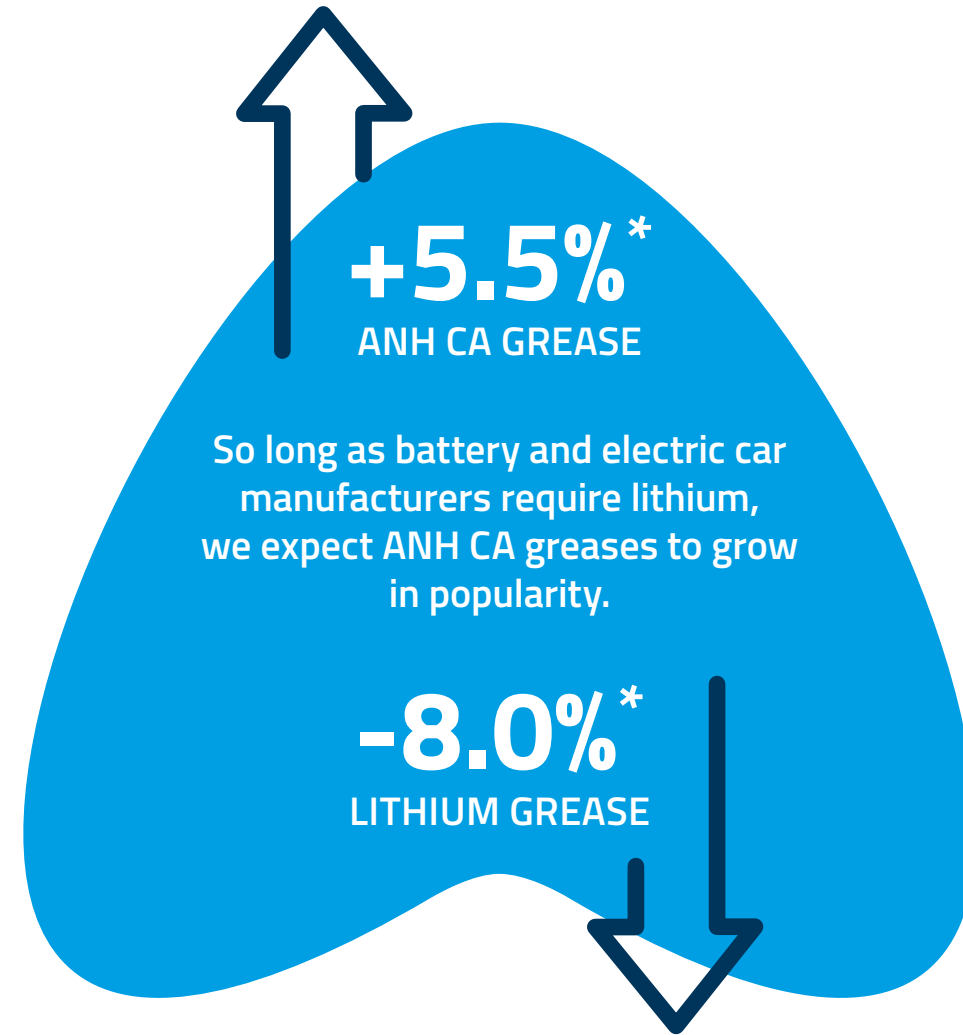
HIGHER BIODEGRADABILITY

Minimal impact in case of loss applications where the grease is consumed, expelled, or lost during the operation.



LOW TOXICITY

Low risk during handling and manufacturing.



* Source: NLGI Lubricating Grease Production Survey Report - 2022

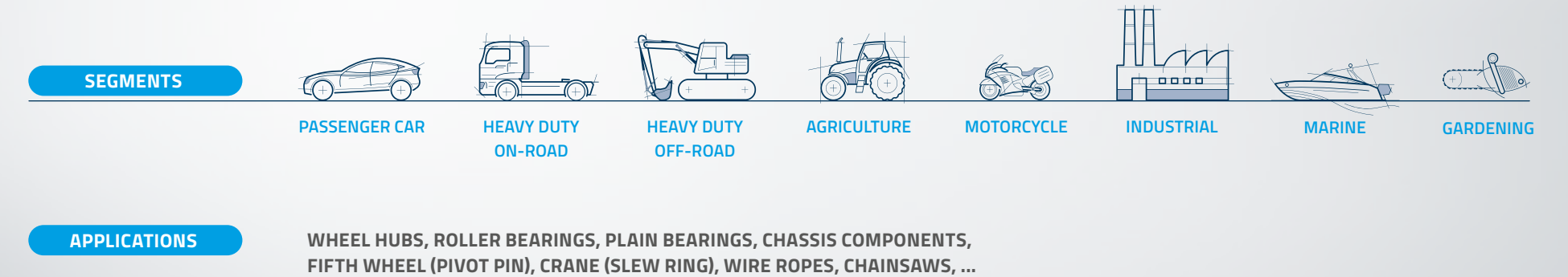
GREASES RANGE ANHYDROUS CALCIUM (ANH CA)

WHAT IS ANHYDROUS CALCIUM (ANH CA)?

ANH CA is a **multipurpose grease** which is particularly well suited to applications that are more exposed to the elements and the environment. Anhydrous calcium (ANH CA) has a water-free chemical structure which gives it good water resistance qualities. Originally developed for cold and wet applications, **ANH CA greases are the premium candidates to replace a lithium containing grease portfolio.**

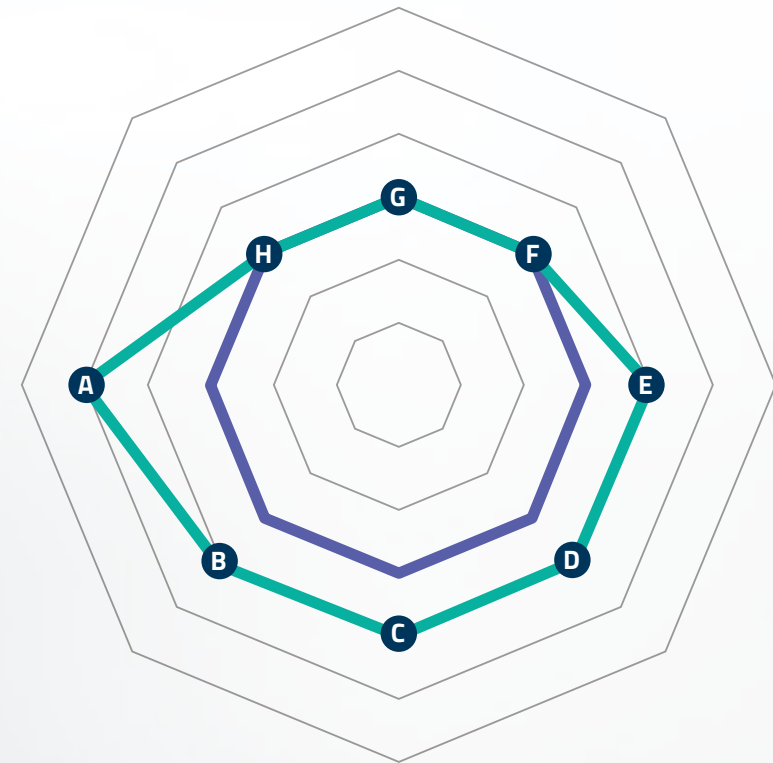
KEY HIGH-PERFORMANCE TECHNICAL FEATURES & BENEFITS

- **VERSATILITY:** suitable for a wide range of applications
- **WIDE TEMPERATURE RANGE:** maintains lubrication integrity at both low and high operating temperatures
- **ADHESIVE PROPERTIES:** stays in place and decreases need for regreasing intervals
- **WATER RESISTANCE:** performs well under wet conditions
- **SHEAR STABILITY:** resistance to shear and vibrational degradation, reducing need of relubrication



GREASES RANGE PERFORMANCE

ANH CA GREASES vs. LITHIUM GREASES



ANH CA LITHIUM

ANH CA PERFORMS BETTER vs. LITHIUM

- A WATER RESISTANCE**
Superior ability to lubricate in the presence of water.
- B LOAD CAPACITY**
Standard grease technologies rely on additives to resist high loads. Increased performance can be obtained by inclusion of extreme pressure additives and/or solid lubricants.
- C MULTI-PURPOSE**
Broad applicability across all segments.
- D THERMAL STABILITY**
The upper temperature limit for ANH CA greases is 120 degrees C. Which is equivalent to a high-quality lithium-based grease.
- E ISOLATION**
Well-suited to sealing off fluids, dust and debris from the application due to its ability to handle ingress of moderate amounts of water without losing its consistency or ability to lubricate.

ANH CA PERFORMS EQUAL vs. LITHIUM

- F LOW TEMPERATURES**
Exceptionally low temperature properties especially in combination with polymer-enhanced base oils. Compared to lithium greases at lower temperatures, ANH CA greases are less elastic and have a shorter relaxation period, making it easier to pump.
- G SHEAR STABILITY**
The structural strength of ANH CA thickener displays better resistance to shear and mechanical degradation more generally when compared to lithium.
- H ADHESION**
ANH CA greases generally offer better adhesion, particularly in challenging conditions involving moisture. This makes them particularly suitable for applications where strong adhesion and water resistance are essential.

LITHIUM IS EITHER EQUAL OR LESS PERFORMANT VERSUS ANH CA

ANH CA GREASE EP 2

PRODUCT CODE
9230



PURPOSE
A multipurpose grease offering several improved performance properties compared to Lithium-based alternatives.

KEY APPLICATIONS
Ideal for medium loaded ball bearings in wet and corrosive environments.

PROPERTIES

- Very good corrosion protection
- Excellent water resistance

NAMING

- ANH CA: Anhydrous Calcium
- EP 2 : Extreme Pressure

CORE STANDARDS & SPECIFICATIONS

DIN 51502 KPSK-30	ISO 12924 L-XC(F) CIB2
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PACKAGING AND PART NUMBERS

400GR	1053374	50KG	1053285
18KG	1053284	180KG	1053286

GREASE THICKENER COMPATIBILITY CHART

COMPATIBILITY	ANH CA	Clay (Bentonite)	Lithium (Li)	Lithium Complex (Li Com)
ANH CA	●	●	●	●
Clay (Bentonite)	●	●	●	●
Lithium (Li)	●	●	●	●
Lithium Complex (Li Com)	●	●	●	●

● = COMPATIBLE / ● = NOT COMPATIBLE

KEY SELLING POINTS

- Performant multi-purpose, cross-segment grease
- Several Improved performance properties compared to Lithium based alternatives
- Environmentally friendly, low toxicity and high level of biodegradability
- More sustainable compared to Lithium based alternatives

DID YOU KNOW?

- ANH CA greases perform as well as, or in some case outperform lithium greases
- Water resistance, isolation (sealing off contaminants), low temperature lubricity, shear stability, and adhesion are all performance metrics where ANH CA outperforms lithium greases
- ANH CA greases have a lower environmental impact versus lithium greases:

















- During raw material extraction**
- 10 times less CO₂ released into the atmosphere
- 100 times less water used
- 20 times less energy used

- During manufacturing process**
- 14% lower carbon footprint
- ANH CA has a water-free chemical structure which gives it excellent water resistance qualities. This is one of the reasons why it is so effective in cold and wet applications

* This chart is meant only to serve as a guidance for determining compatibility. For the purposes of changing greases in the field, the compatibility of the greases in question should be determined by laboratory testing.

Wolf reserves the right to alter the general characteristics of our products in order to let our customers benefit from the latest technical evolutions.

CHOOSE THE RIGHT GREASE

PRODUCT NAME	PRODUCT CODE	THICKENER	CORE STANDARDS			TYPICAL CHARACTERISTICS					PACKAGING*			
			TEMP RANGE (°C)	DIN	ISO	BASE OIL AT 40 (°C)	BASE OIL AT 100 (°C)	DROP POINT (°C)	FOUR BALL WELD TEST (N)	COLOUR	400GR	18KG	50KG	180KG
ANH CA GREASE EP 00	9280	Anhydrous Calcium	Minus 40 to 120	51502 KP00M-40	12924 L-XD(F)CIB00	220	15	>140	3000		-	1053299	1053300	1053301
ANH CA GREASE EP 0	9282	Anhydrous Calcium	Minus 30 to 120	51502 KP0K-30	12924 L-XC(F)CCB0	220	15	>140	3000		-	1053307	1053308	-
ANH CA GREASE EP 1	9226	Anhydrous Calcium	Minus 30 to 120	51502 KP1K-30	12924 L-XC(F)CIB1	220	15	>140	3000		-	1053280	-	-
MOLY ANH CA GREASE EP 2	9220	Anhydrous Calcium	Minus 30 to 120	51502 KPF2K-30	12924 L-XC(F)CIB2	110	9	>140	3000		1053372	1053269	1053270	1053271
ANH CA GREASE EP 2	9230	Anhydrous Calcium	Minus 30 to 120	51502 KP2K-30	12924 L-XC(F)CIB2	110	9	>140	3000		1053374	1053284	1053285	1053286
ANH CA GREASE EP 2 GREEN	9284	Anhydrous Calcium	Minus 30 to 130	51502 KP2K-30	12924 L-XC(F)CIB2	320	19	>140	3200		1053378	1053312	1053313	1053314
ANH CA GREASE EP 3	9215	Anhydrous Calcium	Minus 20 to 120	51502 KP3K-20	12924 L-XB(F)CIB3	110	9	>140	3000		1053370	1053262	-	1053263
MULTI MOLY GREASE 2	9120	Lithium	Minus 30 to 120 (+130 MAX)	51502 KPF2K-30	6743 L-XCCIB2	110	12	>180	3200		8321092	8321191	8321290	8321399
LITHIUM GREASE EP 2	9130	Lithium	Minus 30 to 120 (+130 MAX)	51502 KP2K-30	6743 L-XCCIB2	110	12	>180	2600		8321498	8321696	8321795	8321894
LITHIUM GREASE EP 3	9115	Lithium	Minus 30 (+130 MAX)	51502 KP3K-30	6743 L-XCCFB3	120	10	>180	2400		8330407	8330506		8330605
MULTI MOLY EP 0 ARCTIC	9185	Lithium Calcium	Minus 50 to 90 (+110 MAX)	51502 OGFPOG-50	12924 L-XE(F)BIB0	45	6	>260	6500		-	1042137	1053143	1042138
CALCIUM LITHIUM EP2 HEAVY	9183	Lithium Calcium	Minus 20 to 120 (+130 MAX)	51502 KP2K-20	12924 L-XB(F)CHB2	1100	48	>180	5500		1053382	8331701	8331800	1052885
ELECTRUM E-MOTOR GREASE	65320	Lithium Complex	Minus 55 to 140 (+180 MAX)	51502 KPHC2N-55	12924 L-XE(F)DIB2	44	8	>260	3600		1050873	-	-	-
ELECTRUM HUB GREASE	65321	Lithium Complex	Minus 40 to 150 (+220 MAX)	51502 KPHC2N-40	12924 L-XD(F)DIB2	220	27	>260	3600		1050874	-	-	-
LITHIUM COMPLEX EP 2	9141	Lithium Complex	Minus 30 to 140 (+180 MAX)	51502 KP2,5N-30	12924	210	18	>260	2800		1053380	8322099	8322198	8322297
HIGH TEMPERATURE GREASE 2	9150	Clay	Minus 30 to 150 (+200 MAX)	51502 KP2N-30	6743 L-XCDAB2	475	31	Not applicable	Not applicable		-	8330902	8331008	-

* ALL PACKAGING SIZES MAY NOT BE AVAILABLE IN ALL MARKETS.
 * ALL THE GREASES ARE MULTI-SEGMENT EXCEPT FOR 2 EV GREASES (65320, 65321) WHICH ARE DEDICATED FOR BATTERY ELECTRIC PASSENGER CARS.



Download the **Wolf Lubricant Finder** application and always find the right lubricant for any vehicle.



wolflubes.com

