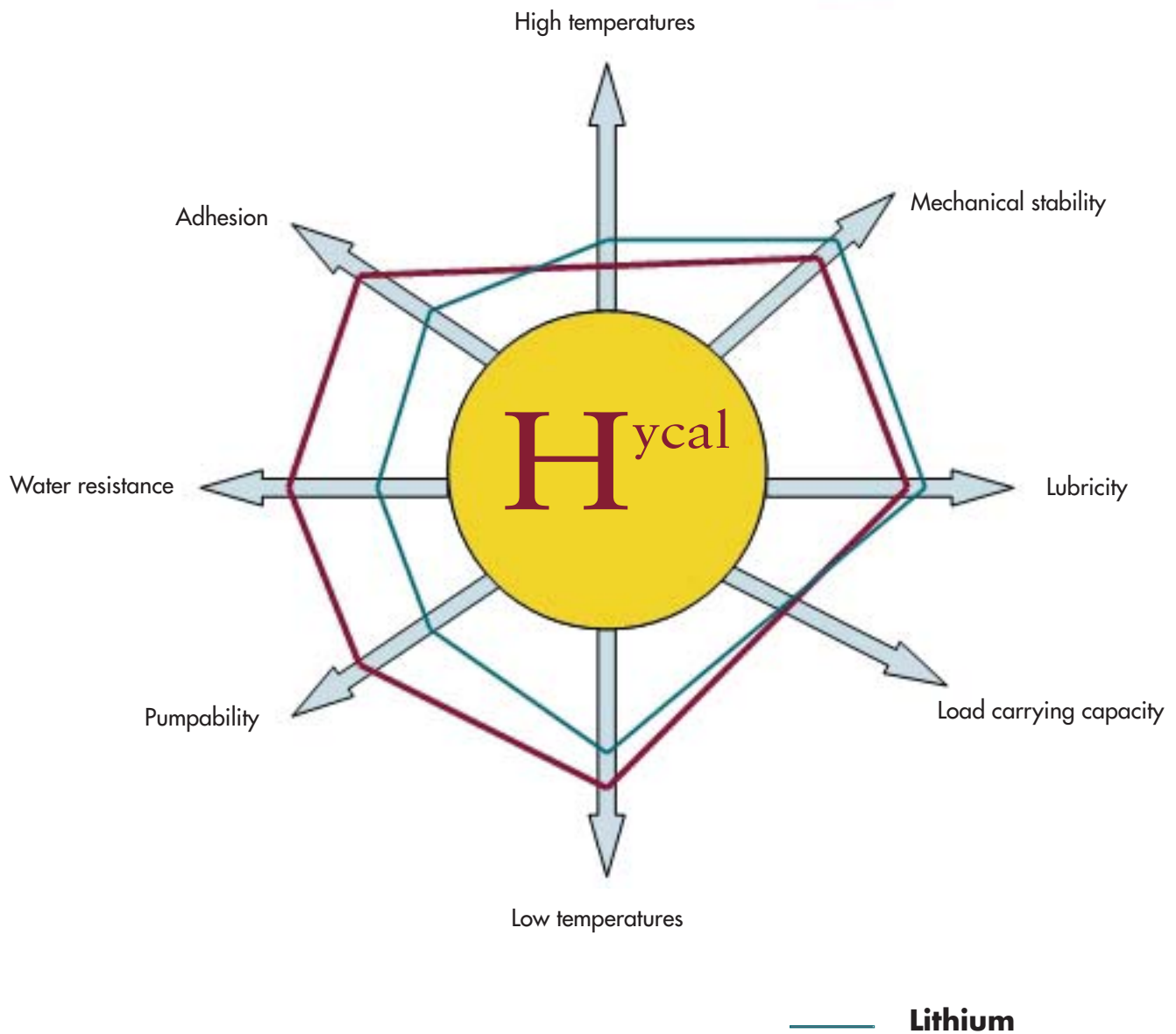


WhyCal ??



Simply better than Lithium !!



Relative to lithium based multipurpose greases, anhydrous calcium equivalents in the AXEL “Hycal” range compare very favourably indeed.

H_{ycal} Smooth transparent soap with an attractive appearance. Can be supplied in many different colours. Can be used in a wide variety of different applications as a truly **multi-purpose** grease. *Compared to lithium? Just as good*

H_{ycal} Fantastic **adhesion and water resistance** keeps the grease in place under severe conditions, including water wash out. Especially suitable for marine, agriculture, construction, off-road and heavy duty industrial applications. *Compared to lithium? Superior*

H_{ycal} Dropping point is 150°C which is somewhat lower than the lithium equivalents. This is, however, quite irrelevant since the **upper temperature limit** for the multi-purpose versions is still 120°C which is equivalent to a high quality lithium based product. *Compared to lithium? Just as good*

H_{ycal} Exceptional **low temperature properties** especially in combination with polymer enhanced base oils. The colder the better! Less elastic than lithium greases at lower temperatures and with a shorter relaxation period, making them much more easily pumpable. *Compared to lithium? Much better*

H_{ycal} Approved for use as **foodgrade** quality. In combination with medicinal white oil, PAO, etc., these products can be formulated to meet the technical, medicinal and even religious requirements for such applications. *Compared to lithium? No comparison (lithium not approved)*

H_{ycal} The recently published criteria for a European Eco-label exclude the use of metals with a few exceptions (calcium being one of them), so an anhydrous calcium soap is the premium choice for a new generation of so-called “**bio-greases**” conforming to the given criteria. These can be made using both natural fatty materials and synthetic base fluids. *Compared to lithium? Preferable*

HYCAL 272 WR



EXTREME
PRESSURE



HEAVY
LOADS



CORROSION
PROTECTION



WATER
RESISTANCE

CLASSIFICATION

DIN 51502

ISO 6743

KP2K-20

ISO-L-XBCIB2

PRODUCT DESCRIPTION

HYCAL 272 WR is an anhydrous calcium thickened lubricating grease based on a mixture of mineral oil and polymer. The grease contains antioxidants, corrosion inhibitors and EP/AW additives.

The thickener, together with the special base oil blend, makes the product suitable for the lubrication of heavily loaded bearings and in wet and corrosive environments. The lubricating grease has excellent adhesion and water resistance.

- Extremely water resistant
- Excellent corrosion protection
- Endures high shock loads
- Excellent adhesion

HYCAL 272 WR is especially developed for marine applications and as an universal grease for forestry, agricultural and construction vehicles. The product is also suitable in industrial applications where water washout and corrosion are problematic. The grease is easily pumpable in most of the modern centralised lubrication systems despite of its high base oil viscosity.

At low temperatures, HYCAL 270 WR is recommended instead.

TYPICAL TECHNICAL DATA

Thickener	Anhydrous Calcium	
Base oil	Mineral Oil/Polymer	
Colour	Visual	Light yellow
NLGI Grade	ASTM D217	2
Dropping point	IP 396	>140°C
Base oil viscosity at 40°C	ISO 12058	1300 mm ² /s
Base oil viscosity at 100°C	ISO 12058	106 mm ² /s
4-Ball weld load	DIN 51350:4	2800 N
Temperature range	-20°C to +120°C, Max +130°C	

Whycal ??

*Multipurpose greases based on lithium technology have been state-of the art for more than 60 years and the question seldom asked is **the reason why**. In the late 1940's, lithium products were seen as a revolution in lubricating grease since it became possible, for the very first time, to use one and the same grease for a whole multitude of applications. Since then developments have been focussed on polishing yesterday's paradigm by using different types of additive systems to improve the properties of the original invention.*

On the fringe of this mainstream process, some interesting developments took place using other different and specialised technologies. One such side-stream led to an invention related to formulations and production methods



for lubricating greases based on an **anhydrous calcium** soap instead of their more conventional lithium counterparts. These greases are characterised by their

exceptional water resistance, good adhesive qualities and improved low temperature properties. This technology has been further modified and improved throughout the years using more qualified production methods and by incorporating modern polymers into the grease formulations. In addition, by varying the type of base fluid used, many different versions are now available including synthetic products for extremely low temperatures, super



water resistant greases based on polymer dispersions, foodgrade qualities and even readily biodegradable greases for sensitive environments.

So why use lithium grease? Why indeed? In contrast, there are many good reasons for choosing anhydrous calcium instead. And these "Hycal" grades are available today in YOUR BRAND using the integrity of the Axel Christiernsson Customised Label™ concept.

Hycal

AXEL CHRISTIERNSSON AB
P O BOX 2100
SE 449 11 NOL
SWEDEN
TEL +46 (0) 303 33 25 00
FAX +46 (0) 303 33 25 90

AXEL CHRISTIERNSSON BV
1 FEBRUARIWEG 13
4794 SM HEIJNINGEN
THE NETHERLANDS
TEL +31 (0) 167 52 29 80
FAX +31 (0) 167 52 22 71

INFO@AXELCH.COM
WWW.AXELCH.COM

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AXEL
AXEL CHRISTIERNSSON