



**PETRONAS**  
Fluid Technology  
Soluti▶ns™

TAKING YOU TO THE NEXT LEVEL  
IN METAL PROTECTION  
**GREASES**

# PETRONAS Fluid Technology Solutions™

## YOUR PARTNER FOR PROGRESS

PETRONAS Lubricants International (PLI) is the global lubricant division of PETRONAS, one of the most successful petrochemical companies in the world.

Our mission is to deliver you proven technology and business-enhancing services. We do this by utilising our 100 years of experience creating innovative products that maximise your productivity. With a presence in 128 countries, PETRONAS continues to push the boundaries of research and technology, in order to help you stay ahead of your competitors.

At PETRONAS, we know that efficient lubrication is only as good as the people, equipment and products who do the work. This certainly holds true for Industrial Greases.

Understanding the root causes of problems, deciding on solutions, then understanding the optimal products that deliver cost-effective outcomes is critical when it comes to grease applications. That's why PETRONAS has developed a strong but concise range of grease products. To help you deliver effective lubrication whatever the working conditions, while removing complexity from your daily operations by giving you fewer but better options.

Our range is created by experts that have walked in your shoes, who understand the challenges you face. With more and more experienced professionals retiring – and taking with them decades of experience – you can rely on our experts to deliver the right solution with the right product.







Greases	Description	NLGI Grade	Central Lubrication	Corrosion Protection	Extreme Pressure	Food Grade	Heavy Loads	High Speed	High Temperature	Multi-Purpose	Low Temperature	RockDrill Grease	Synthetic / Semi-Synthetic	Special Application	Water resistant
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### Lithium

<b>PETRONAS Grease Li EP 2</b>	PETRONAS Grease Li EP 2 is an extreme pressure Lithium grease specially developed for multipurpose applications, lubrication of both plain and anti-friction bearings even where severe or shock loads are experienced.	2			☹️					☹️					☹️
<b>PETRONAS Grease Li PT</b>	PETRONAS Grease Li PT is a Lithium grease specially developed as a post tensioning grease within the construction industry.	1.5												☹️	☹️
<b>PETRONAS Grease Tutela SP</b>	PETRONAS Grease Tutela SP is an extreme pressure Lithium grease specially developed for automotive applications.	2		☹️	☹️					☹️					☹️

### Lithium Calcium

<b>PETRONAS Grease LiCa GEP 0</b>	PETRONAS Grease LiCa GEP 0 is an extreme pressure Lithium Calcium grease with solid additives specially developed for lubrication of open gears, racks, chains, wire ropes, support rollers, slides and sprockets.	0			☹️		☹️								☹️
<b>PETRONAS Grease LiCa GEP 2.5</b>	PETRONAS Grease LiCa GEP 2.5 is an extreme pressure Lithium Calcium grease with solid additives specially developed for lubrication of open gears, racks, chains, wire ropes, support rollers, slides and sprockets.	2.5			☹️		☹️								☹️
<b>PETRONAS Grease LiCa MG HL</b>	PETRONAS Grease LiCa MG HL is an extreme pressure Lithium Calcium grease with dual solid additives and film thickening polymers to improve boundary lubrication.	2			☹️		☹️								☹️
<b>PETRONAS Grease LiCa MG XHL</b>	PETRONAS Grease LiCa MG XHL is an extreme pressure Lithium Calcium grease with dual solid friction reducing additives specially developed for applications requiring heavy duty grease for long-term of use.	2			☹️		☹️								☹️
<b>PETRONAS Grease LiCa TMG</b>	PETRONAS Grease LiCa TMG is a Lithium Calcium grease specially developed for lubricate the traction motor gear cases of all locomotives including the latest high horsepower units.	0.5			☹️		☹️								☹️

### Lithium Complex

<b>PETRONAS Grease LIX EP 2 / 170</b>	PETRONAS Grease LIX EP 2/170 is an extreme pressure Lithium complex grease specifically developed for commercial vehicle applications and a wide variety of industry applications.	2		☹️	☹️				☹️						
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Greases	Description	NLGI Grade	Central Lubrication	Corrosion Protection	Extreme Pressure	Food Grade	Heavy Loads	High Speed	High Temperature	Multi-Purpose	Low Temperature	RockDrill Grease	Synthetic / Semi-Synthetic	Special Application	Water resistant
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## Lithium Complex

<b>PETRONAS Grease LiX EP 2/380</b>	PETRONAS Grease LiX EP 2/380 is an extreme pressure Lithium complex grease specifically developed for high temperature general purpose industrial applications.	2		☹️	☹️		☹️		☹️						☹️
<b>PETRONAS Grease LiX MEP</b>	PETRONAS Grease LiX MEP is an extreme pressure Lithium complex grease with solid additives specially developed for lubrication of heavy duty applications where good adhesive properties are required.	2													
<b>PETRONAS Grease LiX Syn 1/1500</b>	PETRONAS Grease LiX SYN 1/1500 is a synthetic Lithium complex grease specially developed for heavily loaded bearings in low speed applications, at elevated temperatures, in wet and corrosive environments.	1		☹️	☹️		☹️		☹️				☹️		
<b>PETRONAS Grease LiX Syn 2/100</b>	PETRONAS Grease LiX SYN 2/100 is a synthetic Lithium complex grease specially developed for heavily loaded bearings at elevated temperatures, in wet and corrosive environments.	2		☹️	☹️			☹️	☹️		☹️		☹️		
<b>PETRONAS Grease LiX Syn 2/220</b>	PETRONAS Grease LiX SYN 2/220 is a synthetic Lithium complex grease specially developed for heavily loaded bearings at elevated temperatures, in wet and corrosive environments.	2		☹️	☹️				☹️	☹️	☹️		☹️		
<b>PETRONAS Grease LiX Syn 2/460</b>	PETRONAS Grease LiX SYN 2/460 is a synthetic Lithium complex grease specially developed for heavily loaded bearings at elevated temperatures, in wet and corrosive environments.	2		☹️	☹️		☹️		☹️				☹️		
<b>PETRONAS Grease Tutela WB</b>	PETRONAS Grease Tutela WB is a extreme pressure Lithium complex grease specially developed for the transport industry and its wheel bearing applications.	2.5		☹️	☹️				☹️						☹️

## Polyethelene

<b>PETRONAS Grease PE HS</b>	PETRONAS Grease PE HS is a Polyethylene grease specially developed to withstand the high centrifugal forces created by rotating couplings.	1			☹️		☹️								☹️
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## Polyurea

<b>PETRONAS Grease PU</b>	PETRONAS Grease PU is a Polyurea grease specially developed for lubrication of electric motor bearings, and high-speed pumps.	2						☹️	☹️						☹️
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# Grease Compatibility Charts



With the great variety of greases found on the market, it is important to know whether or not there may be a compatibility issue before a new grease is introduced in the application. Compatibility depends on whether or not the thickener systems and/or base oils are compatible. In rare cases there can be problems between different additives, but it seldom destroys the thickener matrix.

When mixing two incompatible greases, two things can occur:

- Softening. The components are incompatible and the soap structures break down. The result is a high degree of leakage which can lead to starvation in the bearing and failure.
- Stiffening. This is a rare reaction but can ultimately lead to equipment failure

The most common way of testing compatibility is to run the prolonged penetration test (10.000 strokes). The difference in penetration is then measured. The penetration test results will indicate the cleaning procedure that needs to take place.

△ Penetration	Compatibility	Cleaning
0-10	Totally Compatible	No Cleaning
10-30	Compatible	Swift Cleaning
30-50	Limited Compatibility	Normal Cleaning
>50	Not Compatible	Total Cleaning

The compatibility overview should be considered as a guideline.

THICKENER	Aluminium Complex	Barium Complex	Hydrated Calcium	Anhydrous Calcium	Calcium Complex	Calcium Sulphonate Complex	Clay	Lithium	Lithium Complex	Polyurea	Sodium
Aluminium Complex	Compatible	Requires Testing	Incompatible	Compatible	Requires Testing	Incompatible	Incompatible	Incompatible	Compatible	Requires Testing	Incompatible
Barium Complex	Requires Testing	Compatible	Requires Testing	Requires Testing	Incompatible	Requires Testing	Requires Testing	Requires Testing	Requires Testing	Requires Testing	Compatible
Hydrated Calcium	Incompatible	Requires Testing	Compatible	Compatible	Compatible	Compatible	Requires Testing	Requires Testing	Compatible	Requires Testing	Requires Testing
Anhydrous Calcium	Compatible	Requires Testing	Compatible	Compatible	Requires Testing	Requires Testing	Compatible	Compatible	Compatible	Incompatible	Incompatible
Calcium Complex	Requires Testing	Incompatible	Compatible	Requires Testing	Compatible	Compatible	Requires Testing	Requires Testing	Requires Testing	Compatible	Requires Testing
Calcium Sulphonate Complex	Incompatible	Requires Testing	Compatible	Requires Testing	Compatible	Compatible	Incompatible	Compatible	Compatible	Compatible	Incompatible
Clay	Incompatible	Requires Testing	Requires Testing	Compatible	Requires Testing	Incompatible	Compatible	Requires Testing	Incompatible	Requires Testing	Requires Testing
Lithium	Incompatible	Requires Testing	Requires Testing	Compatible	Requires Testing	Compatible	Requires Testing	Compatible	Compatible	Requires Testing	Incompatible
Lithium Complex	Compatible	Requires Testing	Compatible	Compatible	Requires Testing	Compatible	Incompatible	Compatible	Compatible	Requires Testing	Requires Testing
Polyurea	Requires Testing	Requires Testing	Requires Testing	Incompatible	Compatible	Compatible	Requires Testing	Requires Testing	Requires Testing	Compatible	Requires Testing
Sodium	Incompatible	Compatible	Requires Testing	Incompatible	Requires Testing	Incompatible	Requires Testing	Incompatible	Requires Testing	Requires Testing	Compatible

BASE OIL	Ester	Mineral Oil	Polyalpha-olefin	Polyglycol	PFPE	Polyphenyl-ether	Silicone: Methyl	Silicone: Phenyl
Ester	Compatible	Compatible	Compatible	Compatible	Incompatible	Requires Testing	Incompatible	Compatible
Mineral Oil	Compatible	Compatible	Compatible	Incompatible	Incompatible	Requires Testing	Incompatible	Requires Testing
Polyalphaolefin	Compatible	Compatible	Compatible	Incompatible	Incompatible	Requires Testing	Incompatible	Requires Testing
Polyglycol	Compatible	Incompatible	Incompatible	Compatible	Incompatible	Incompatible	Incompatible	Incompatible
PFPE	Incompatible	Incompatible	Incompatible	Incompatible	Compatible	Incompatible	Incompatible	Incompatible
Polyphenylether	Requires Testing	Requires Testing	Requires Testing	Incompatible	Incompatible	Compatible	Incompatible	Compatible
Silicone: Methyl	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Compatible	Requires Testing
Silicone: Phenyl	Compatible	Requires Testing	Requires Testing	Incompatible	Incompatible	Compatible	Requires Testing	Compatible

**KEY:**

- Compatible
- Requires Testing
- Incompatible



**PROVEN EXPERTS,  
ALWAYS READY TO HELP!**

At the heart of our services,  
our experts strive to give you the  
peace-of-mind you're looking for.

Partner with us and take your  
business to the next level.

For more information, please contact:

