

**PETRONAS**  
**Urania**<sup>®</sup>

**Stronger for longer**



Discover core strength. Visit [www.pli-petronas.com](http://www.pli-petronas.com)

# PETRONAS is ready for the world of tomorrow, today

**PETRONAS Lubricants International (PLI) is part of the PETRONAS Group. With 10 blending plants, over 30 sales offices and products distributed in more than 90 countries worldwide, PLI's global network of over 240 scientists, technical professionals and engineers anticipate future mobility challenges and opportunities, then research and develop advanced fluid technology solutions to meet tomorrow's challenges, today.**

We strive to deliver maximum value to our customers, the markets in which they compete and consumers – while minimising our impact on the environment, pioneering high performance fluids that are dedicated to emission reduction and manufactured in increasingly low CO<sub>2</sub> environments.

We're an ambitious business, driven by a relentless, restless energy.

**What's next? What if?  
How can we? Why don't we?**

**We're unstoppable.  
We are PETRONAS.**

## The world is changing and growing – fast

**It's tough out there – and it's getting tougher. The world is changing at breakneck speed, throwing an ever-growing, intense set of external challenges and pressures your way...**

As people are living longer, the **global population is growing** – significantly in the East, and with particular expansion among the middle classes. This **increase in middle class consumption** will place increased pressure on the supply chain, with **more food and goods** to be transported by **more trucks**, covering **more kilometres** – delivering to more people that don't want to wait.

And as the population rises, so too will **urbanisation** and the **growth of megacities**, creating even more challenges for **last mile deliveries** – and as more and more trucks enter densely populated areas, it's likely that they'll be required to meet the same emissions standards as light trucks and vans.

Finally, globalisation – the big trend of the last 20 years – is slowing down as trade is starting to become more regionalised, increasing the demand for trucks, light trucks and vans.

### Right now...

There are more than **90 million** new trucks and vans on the road each year\*

### By 2030...

The global population will increase by **1.3 billion**

**90% of this growth** will occur in developing countries

**59% of the global population** will live in cities

**90% of increased urbanisation** will occur in developing countries

\*Automotive World

# The business environment is getting tougher – fast

The relentless pace of global change means the operating environment is getting tougher, too. Demand is heavier, journeys are longer, timescales are shorter, competition is greater, customer expectations are higher, environmental regulations are tougher and vehicle technology is moving faster than it ever has before.

Increasing CO<sub>2</sub> emission and labour regulations means businesses need to seek **more sustainable solutions** – at a time when **rising operating costs** paired with **lower cost entrants** from developing economies place more **pressure on profit and margins**.

## The pressure's on: The drive to net zero CO<sub>2</sub> emissions

The move to net zero CO<sub>2</sub> emissions by 2050 means limits for CO<sub>2</sub>, NO<sub>x</sub> and PM are up to 98% lower. This, coupled with tighter labour regulations, means OEMs are forced to introduce major hardware design interventions – everywhere from the engines and pistons to the after treatment systems – with greater investment placed in hybrid engine technologies, biofuels and gas fuels, and new, more demanding fluid specifications.

**2013** - Euro VI



**Technological developments** designed to improve efficiency and productivity – such as connected vehicles allowing truck-to-HQ, truck-to-truck and driver-to-HQ communication – also bring with them **complexity** and the need for **hands-on, intelligent interpretation** of new data sets.

All at a time when we can expect more congestion and city traffic than ever. This means more **stop-start driving**, more engines running at **higher temperatures**, and **more stress for transmission systems and fluids** – all of which can lead to **rising maintenance costs** and **unscheduled downtime**.

**A perfect storm of tighter deadlines, harsher conditions, keener competition and tougher regulations means that now, more than ever, it takes core strength for fleets to minimise risk, maximise profit and uptime, go the distance and succeed.**

**We're here to help.**

**Right now...**

Demand for last mile deliveries is growing **8% per annum**

**By 2030...**

Road freight transport is expected to **increase by 40%**

Electric trucks could account for **15%** of global truck sales

# New PETRONAS Urania with StrongTech™ technology

## Engineered to stay stronger for longer

**To withstand the hostile environment deep inside the engine over long distances and in stop/start operating conditions, an oil needs to be incredibly resilient.**

It needs the durability to maintain its optimal viscosity in the face of high temperatures and harmful deposits. It needs core strength.

PETRONAS Urania with StrongTech™ technology is engineered to stay stronger for longer, forming a uniquely strong fluid film to extend drain intervals and engine life, maximise performance and profitability, and give you the core strength to keep moving.



### Stronger fluid

- › Reduces metal-to-metal contact even at extreme temperatures.
- › Controls harmful soot and deposits thanks to stronger cleaning properties.
- › Resists oxidation and viscosity loss caused by high temperatures or high shear.

### Stronger engine

- › Delivers more power and torque.
- › Offers longer engine life.
- › Reacts faster to prevent issues.
- › Extends DPF life.

### Stronger vehicle

- › Runs for longer even in harsh external conditions and under the stresses of different driving styles.
- › Delivers reduced emissions thanks to improved fuel efficiency.
- › Enables lower operating costs.

# Overview

**PETRONAS Urania with StrongTech™ technology delivers improved fluid strength for longer engine life. How? Because its incredibly strong molecule chains lock away harmful deposits to maintain optimal viscosity and defend against wear and oxidation.**

PETRONAS Urania with StrongTech™ technology delivers improved fluid strength for longer engine life. How? Because its incredibly strong molecule chains lock away harmful deposits to maintain optimal viscosity and defend against wear and oxidation.

Developed to overcome the challenges of today, while being equipped to meet the demands of tomorrow's engines, the new PETRONAS Urania range is ready for anything. Suitable for low emission engines, our products are designed to meet the Euro VI, emission standards that will be rolled out in key markets.

Additionally, our incredibly strong engine oil keeps vehicles on the road for longer – helping to achieve profitable growth. It enhances engine protection and extends engine life.



## Strong business growth

StrongTech™ technology maintains fuel efficiency for longer, contributing towards better overall engine strength. The oil meets the latest OEM requirements for extended drain intervals. And it's designed to help strengthen businesses by maximising profit and minimising downtime and running costs.



## Strong vehicle and engine performance

PETRONAS Urania is engineered to stay stronger for longer – its incredibly strong molecule chains help to achieve longer drain intervals with better soot handling, corrosion control and deposit control. It maintains engine power at the highest level, as the thin yet extremely strong oil film minimises friction and power losses.



## Strong environmental responsibility

75% of our R&T budget is dedicated to CO<sub>2</sub> reduction, helping you meet regulatory requirements and stay at the forefront of responsible fleet operation. That's why new Urania 5000 LS-FE 5W-30 has been developed to maintain a much thinner film compared to conventional 5W-30 oils, significantly reducing fuel consumption and harmful emissions.

# PETRONAS Urania full range



PETRONAS Urania

# URANIA 5000 ECO 5W-20



**Code 71833**

## Benefits

### **PETRONAS Urania 5000 ECO 5W-20**

enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Ultimate Fuel Economy thanks to its low viscosity.
- › Better fluid film resistance under severe mechanical stress to deliver enhanced engine durability.
- › Extended Drain Interval and Engine Life driven by:
  - Outstanding protection for emission after-treatment systems such as DPF and DOC with low ash additive system.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Exceptional thermal and oxidation stability under high temperature, providing viscosity stability and preventing formation of deposits and sludge to prolong oil life even under severe conditions.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Exceptional low temperature viscosity for improved lubrication during start-up.

**SAE grade**

5W-20

**Specifications**

**Approvals**

MAN M 3977

**Performance level**

PETRONAS Urania

# URANIA 5000 LS-FE 5W-30



Code 71706

## Benefits

**PETRONAS Urania 5000 LS-FE 5W-30** enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Outstanding Fuel Economy.
- › Better fluid film resistance under severe mechanical stress to deliver enhanced engine durability.
- › Extended Drain Interval and Engine Life driven by:
  - Outstanding protection for emission after-treatment systems such as DPF and DOC with low ash additive system.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Exceptional thermal and oxidation stability under high temperature, providing viscosity stability and preventing formation of deposits and sludge to prolong oil life even under severe conditions.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Exceptional low temperature viscosity for improved lubrication during start-up.

### SAE grade

5W-30

### Specifications

API FA-4  
JASO DH-2

### Approvals

MB-Approval 228.61

### Performance level

Cummins CES 20087  
Detroit Diesel DFS93K223



PETRONAS Urania

# URANIA 5000 LSF 5W-30



**Code 71707**

## Benefits

### PETRONAS Urania 5000 LSF 5W-30

enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Enhanced Fuel Economy.
- › Better fluid film resistance under severe mechanical stress to deliver enhanced engine durability.
- › Extended Drain Interval and Engine Life driven by:
  - Outstanding protection for emission after-treatment systems such as DPF and DOC with low ash additive system.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Exceptional thermal and oxidation stability under high temperature, providing viscosity stability and preventing formation of deposits and sludge to prolong oil life even under severe conditions.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Exceptional low temperature viscosity for improved lubrication during start-up.

#### SAE grade

5W-30

#### Specifications

API CK-4  
ACEA E6, E7, E9  
JASO DH-2

#### Approvals

Cummins CES 20086  
Deutz DQC IV-10 LA  
Mack EOS-4.5  
MB-Approval 228.51  
MTU CAT. 3.1  
Renault RLD-3  
Volvo VDS-4.5

#### Performance level

CAT ECF-3  
Detroit Diesel DFS93K222  
DAF Extended Drain\*

*\*DAF Rapido Service system required*

PETRONAS Urania

# URANIA 5000 E 5W-30



**Code 71810**

## Benefits

### PETRONAS Urania 5000 E 5W-30

enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Enhanced Fuel Economy.
- › Better fluid film resistance under severe mechanical stress to deliver enhanced engine durability.
- › Extended Drain Interval and Engine Life driven by:
  - Outstanding protection for emission after-treatment systems such as DPF and DOC with low ash additive system.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Exceptional thermal and oxidation stability under high temperature, providing viscosity stability and preventing formation of deposits and sludge to prolong oil life even under severe conditions.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Exceptional low temperature viscosity for improved lubrication during start-up.

#### SAE grade

5W-30

#### Specifications

API CJ-4  
ACEA E4, E6, E7, E9

#### Approvals

Cummins CES 20081  
Deutz DQC IV-10 LA  
Mack EO-O Premium Plus  
MAN M3677 / M3477  
MB-Approval 228.51  
MTU CAT. 3.1  
Renault RLD-3  
Scania LDF-4  
Volvo VDS-4

#### Performance level

CAT ECF-3  
Detroit Diesel DFS93K218  
DAF Extended Drain\*  
MAN M3575 / M3271-1

*\*DAF Rapido Service system required*

PETRONAS Urania

# URANIA 5000 F 5W-30



**Code 71501**

## Benefits

### PETRONAS Urania 5000 F 5W-30

enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Improved Fuel Economy.
- › Longer Drain Interval and Engine Life driven by:
  - Excellent control in deposit build ups, delivering optimum fleet's engine performance.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Outstanding protection with high anti-wear properties to protect engine in severe conditions.
  - Longer oil drain capability.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Exceptional low temperature viscosity for improved lubrication during start-up.

#### SAE grade

5W-30

#### Specifications

ACEA E4, E7

#### Approvals

Cummins CES 20077  
Deutz DQC IV-10  
Mack EO-N  
MAN M3277  
MB-Approval 228.5  
MTU Type 3  
Renault RLD-2  
Scania LDF-3  
Volvo VDS-3

#### Performance level

Cummins CES 20076  
DAF Extended drain\*  
Iveco 18-1804 Class TFE

\*DAF Rapido Service system required

PETRONAS Urania

# URANIA 5000 LCV 5W-30



## Benefits

### PETRONAS Urania 5000 LCV 5W-30

enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Improved Fuel Economy.
- › Longer Drain Interval and Engine Life driven by:
  - Excellent control in deposit build ups, delivering optimum fleet's engine performance.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Outstanding protection with high anti-wear properties to protect engine in severe conditions.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Exceptional low temperature viscosity for improved lubrication during start-up.

#### SAE grade

5W-30

#### Specifications

ACEA A5/B5

#### Approvals

#### Performance level

Iveco 18-1811 Class S1  
Ford WSS-M2C-913C, 913-D  
Renault RN0700

Code 71712

PETRONAS Urania

# URANIA 5000 LSE 10W-40



Code 71711

## Benefits

**PETRONAS Urania 5000 LSE 10W-40** enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Longer Drain Interval and Engine Life driven by:
  - Excellent control in deposit build ups, delivering optimum fleet's engine performance.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Longer oil drain capability, especially on low emission engines.
  - Outstanding protection for emission after-treatment systems such as DPF and DOC with low ash formulation.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.

### SAE grade

10W-40

### Specifications

API CI-4  
ACEA E6, E7  
JASO DH-2

### Approvals

MB-Approval 228.51  
MAN M3477, M3271-1  
Mack EO-N  
Renault RLD-2  
Volvo VDS-3

### Performance level

Cummins CES 20077/20076  
Deutz DQC IV-10 LA  
MTU Type 3.1

PETRONAS Urania

# URANIA 5000 LS 10W40



Code 71710

## Benefits

### PETRONAS Urania 5000 LS 10W-40

enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Better fluid film resistance under severe mechanical stress to deliver enhanced engine durability.
- › Extended Drain Interval and Engine Life driven by:
  - Outstanding protection for emission after-treatment systems such as DPF and DOC with low ash additive system.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Exceptional thermal and oxidation stability under high temperature, providing viscosity stability and preventing formation of deposits and sludge to prolong oil life even under severe conditions.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Exceptional low temperature viscosity for improved lubrication during start-up.

#### SAE grade

10W-40

#### Specifications

API CK-4  
ACEA E6, E7, E9

#### Approvals

CUMMINS CES 20086  
Deutz DQC IV-18 LA  
Mack EOS-4.5  
MAN M3477  
MB-Approval 228.51  
MTU CAT. 3.1  
Renault RLD-3  
Volvo VDS-4.5

#### Performance level

CAT ECF-3  
DAF Extended Drain\*  
Detroit Diesel DFS93K222  
Iveco 18-1804 Classe TLS E9  
JASO DH-2  
Scania Low Ash

\*DAF Rapido Service system required

PETRONAS Urania

# URANIA 5000 10W-40



**Code 71500**

## Benefits

### PETRONAS Urania 5000 10W-40

enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Longer Drain Interval and Engine Life driven by:
  - Excellent control in deposit build ups, delivering optimum fleet's engine performance.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Outstanding protection with high anti-wear properties to protect engine in severe conditions.
  - Longer oil drain capability, especially on low emission engines.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Exceptional low temperature viscosity for improved lubrication during start-up.

#### SAE grade

10W-40

#### Specifications

API CI-4  
ACEA E4, E7

#### Approvals

MB-Approval 228.5  
Volvo VDS-3  
MAN M3277 / M3277  
Renault RLD-2  
Cummins CES 20078  
Mack EO-N  
MTU Type 3

#### Performance level

Iveco 18-1804 Classe T3 E4

PETRONAS Urania

# URANIA 3000 LS 10W-30



Code 71708

## Benefits

### PETRONAS Urania 3000 LS 10W-30

enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Improved Fuel Economy.
- › Better fluid film resistance under severe mechanical stress to deliver enhanced engine durability.
- › Longer Drain Interval and Engine Life driven by:
  - Optimal protection for emission after-treatment systems such as DPF and DOC with low ash additive system.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Enhanced thermal and oxidation stability under high temperature, providing viscosity stability and preventing formation of deposits and sludge to prolong oil life even under severe conditions.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Excellent low temperature viscosity for improved lubrication during start-up.

#### SAE grade

10W-30

#### Specifications

API CK-4, ACEA E7, E9

#### Approvals

Cummins CES 20086  
Deutz DQC III-10 LA  
Mack EOS-4.5  
MB-Approval 228.31  
MTU CAT. 2.1  
Renault RLD-3  
Volvo VDS-4.5

#### Performance level

CAT ECF-3  
DAF  
Detroit Diesel DFS93K222  
Ford WSS M2C171-F1  
MAN M 3775



PETRONAS Urania

# URANIA 3000 10W-40



Code 71609

## Benefits

### PETRONAS Urania 3000 10W-40

enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Longer Drain Interval and Engine Life driven by:
  - Excellent control in deposit build ups, delivering optimum fleet's engine performance.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Longer oil drain capability, especially on low emission engines.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Excellent low temperature viscosity for improved lubrication during start-up.

#### SAE grade

10W-40

#### Specifications

API CI-4  
ACEA E7  
Global DHD-1  
JASO DH-1

#### Approvals

#### Performance level

CAT ECF-2, ECF-1a  
Cummins CES 20078/20077  
Detroit Diesel DSF 93K215  
Deutz DQC III  
MAN M3275  
Mack EO-N  
MB 228.3  
MB 229.1  
MTU Type 2  
Renault VI RLD-2  
Volvo VDS-3

PETRONAS Urania

# URANIA 3000 15W-40



Code 71599

## Benefits

### PETRONAS Urania 3000 15W-40

enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Longer Drain Interval and Engine Life driven by:
  - Excellent control in deposit build ups, delivering optimum fleet's engine performance.
  - Reduces acidic levels that lead to corrosion, making your fleet engines more durable and longer life.
  - Longer oil drain capability, especially on low emission engines.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Good low temperature viscosity for improved lubrication during start-up.

#### SAE grade

15W-40

#### Specifications

API CI-4  
ACEA E7  
Global DHD-1  
JASO DH-1

#### Approvals

MB-Approval 228.3  
Cummins CES 20078  
Detroit Diesel DSF 93K215  
Deutz DQC III  
Mack EO-N  
MTU Type 2  
Renault VI RLD-2  
Volvo VDS-3

#### Performance level

CAT ECF-2, ECF-1a  
Cummins CES 20077  
Iveco 18-1804 Class T2 E7  
MAN M3275

PETRONAS Urania

# URANIA 3000 LS 15W-40



Code 71568

## Benefits

### PETRONAS Urania 3000 LS 15W-40

enhances your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Better fluid film resistance under severe mechanical stress to deliver enhanced engine durability.
- › Longer Drain Interval and Engine Life driven by:
  - Optimal protection for emission after-treatment systems such as DPF and DOC with low ash additive system.
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.
  - Enhanced thermal and oxidation stability under high temperature, providing viscosity stability and preventing formation of deposits and sludge to prolong oil life even under severe conditions.

Provides outstanding Driving Experience through:

- › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.
- › Good low temperature viscosity for improved lubrication during start-up.

#### SAE grade

15W-40

#### Specifications

API CK-4, ACEA E9  
ACEA E7, E9

#### Approvals

Cummins CES 20086  
Deutz DQC III-10 LA  
Mack EOS-4.5  
MB-Approval 228.31  
MTU CAT. 2.1  
Renault RLD-3  
Volvo VDS-4.5

#### Performance level

CAT ECF-3  
DAF  
Detroit Diesel DFS93K222  
Ford WSS M2C171-F1  
MAN M 3775

PETRONAS Urania

# URANIA 800 20W-50

## Benefits

**PETRONAS Urania 800 20W-50** protects your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Longer Engine Life driven by:
  - Reduces acidic levels leads to corrosion, making your fleet engines more durable and longer life.



**Code 71509**

PETRONAS Urania

# URANIA 800 15W-40

## Benefits

**PETRONAS Urania 800 15W-40** protects your Business Profits and your vehicle availability while significantly reducing your operating costs through:

- › Maintains oil at optimal viscosity levels, delivering optimal lubrication to prevent unplanned breakdowns.
- › Improve Driving Experience through:
  - › Effectively combats high concentration of soot build ups, critical to prevent loss of vehicle horsepower.



**Code 71508**

### SAE grade

20W-50

### Specifications

API CF-4

### Approvals

### Performance level

MAN 271  
MB 228.1  
Volvo VDS

### SAE grade

15W-40

### Specifications

API CF-4

### Approvals

### Performance level

MAN 271  
MB 228.1  
MTU Type 1  
Volvo VDS

PETRONAS Urania  
**URANIA 500 10W**

### Benefits

**PETRONAS Urania 500 SAE 10W** delivers:

- › Piston cleanliness & minimizing deposits build ups, protects engine from wear.
- › Helps dispersing soot, hence reduces soot induced oil thickening.



**Code 71627**

PETRONAS Urania  
**URANIA 500 30**

### Benefits

**PETRONAS Urania 500 SAE 30** delivers:

- › Piston cleanliness & minimizing deposits build ups, protects engine from wear.
- › Good TBN retention effectively neutralizing the acidic by-products from combustion.



**Code 71628**

**SAE grade**

10W

**Specifications**

API CF

**Approvals**

**Performance level**

**SAE grade**

30

**Specifications**

API CF

**Approvals**

**Performance level**

PETRONAS Urania  
**URANIA 500 40**

### Benefits

**PETRONAS Urania 500 SAE 40** delivers:

- › Piston cleanliness & minimizing deposits build ups, protects engine from wear.
- › Helps dispersing soot, hence reduces soot induced oil thickening.



**Code 71629**

PETRONAS Urania  
**URANIA 500 50**

### Benefits

**PETRONAS Urania 500 SAE 50** delivers:

- › Piston cleanliness & minimizing deposits build ups, protects engine from wear.
- › Good TBN retention effectively neutralizing the acidic by-products from combustion.



**Code 71630**

**SAE grade**

40

**Specifications**

API CF

**Approvals**

**Performance level**

**SAE grade**

50

**Specifications**

API CF

**Approvals**

**Performance level**

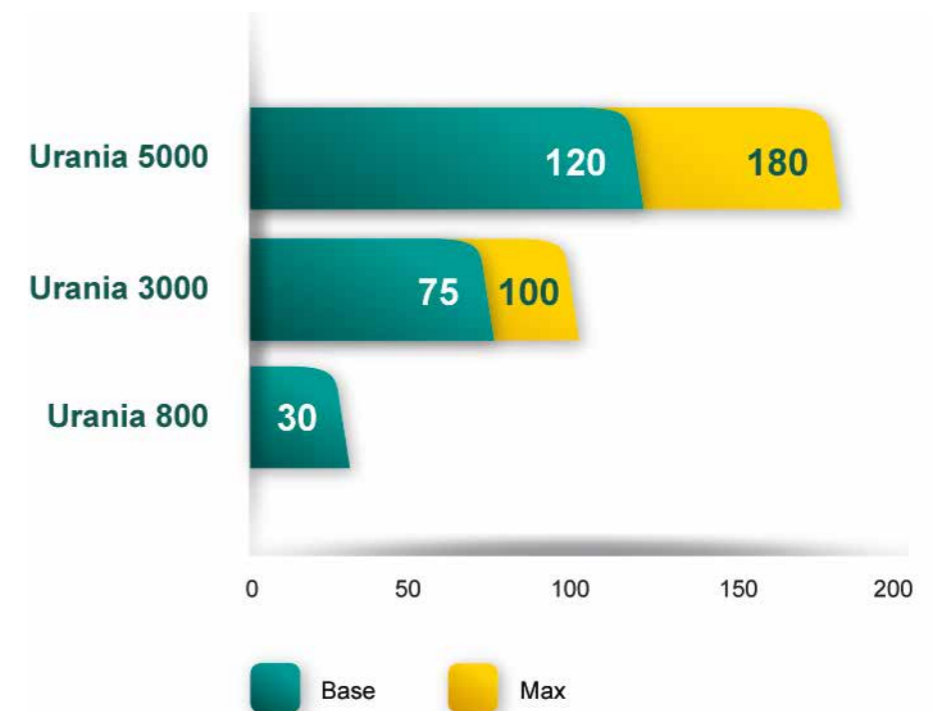
# Oil Drain Intervals

**Oil Drain Intervals (ODI) are set by OEMs and are designed to protect the engine following a defined period of usage and exposure to a wide variety of conditions.**

Today, many OEMs are striving towards an extended ODI. It is a major selling point because longer intervals can provide truck owners and operators with cost and time savings thanks to reduced downtime and less business disruption – with vehicles staying out on the road for longer. However, it's important to remember that oil drain intervals are set for a reason, so extending them must be done safely. It means that the engine's lubrication must provide the strength to stay stronger for longer, while providing truck owners and operators with the confidence to keep going.

As the table on the right shows, PETRONAS Urania delivers impressive ODIs across the entire product range. The table refers to all products belonging to the Urania 5000, 3000, and 800 series, and the ODIs are based on the relevant OEM approvals and specifications. Please refer to the specific product design specifications for specific ODIs, and refer to the vehicle handbook for specific cases.

Urania Oil Drain Interval ('000 km)



## Urania Oil Drain Interval

- Urania 5000's base ODI of 120,000 km is based on Mercedes-Benz 228.51 and Mercedes-Benz 228.61 approvals
- Extended ODIs up to 180,000km are based on OEM specific approvals and/or hardware and software requirements
- Urania 3000's ODI of 100,000 km refers to Volvo VDS-3 and VDS-4.5 approval.
- Urania 3000's ODI of 75,000 km refers to the Mercedes-Benz 228.3 specification performance level.

# Technical Summary

Product	Benefit	Tests
<b>Urania 5000 LS-FE 5W-30</b>	Fuel Efficiency	Daimler In-House Fuel Efficiency Test
<b>Urania 5000 LSF 5W-30</b>	Wear protection	OM 646 LA
		OM 646 LA
<b>Urania 5000 LS 10W-40</b>	Wear protection	Mack T-12
		Mack T-13
		Caterpillar 1N
		Caterpillar 1N
<b>Urania 3000 LS 10W-30 \ 15W-40</b>	Wear protection	Cummins ISB
	Viscosity Retention	Volvo T-13
<b>Urania 3000 15W-40</b>	Engine Cleanliness	MB OM 501 LA test
	Viscosity retention	Sequence IIIF
		Mack T-8E

Measure	Benchmark	Improvement
Fuel Efficiency	MB Reference Oil	0.5%
Cam Wear Outlet (µm)	ACEA E6	75%
OM 646 LA Cylinder Wear (µm)	MB 228 51	60%
Top Ring mass loss (mg)	API CK-4	38%
Top Ring mass loss (mg)	ACEA E6	44%
Oil Consumption (g/kWh)	API CK-4	74%
Deposits (merit)	API CK-4	47%
Slider Tappet Mass Loss (merit)	API CK-4	56%
% Increase Viscosity at 40°C	API CK-4	76%
Piston Cleanliness (merit)	MB 228.3	32%
Piston Cleanliness (merit)	ACEA E7	55%
Relative viscosity	API CI-4	68%
Relative viscosity	ACEA E7	34%



# OEM Fit Table

Product	CAT	Cummins	DAF	Daimler-Mercedes	Deutz	Detroit Diesel
5000 ECO 5W-20						
5000 LS-FE 5W-30		🚰		🚰		🚰
5000 LSF 5W-30	🚰	🚰	🚰	🚰	🚰	🚰
5000 E 5W-30	🚰	🚰	🚰	🚰	🚰	🚰
5000 F 5W-30		🚰	🚰	🚰	🚰	
5000 LS 10W-40	🚰	🚰	🚰	🚰	🚰	🚰
5000 10W-40		🚰		🚰		
5000 LSE 10W-40		🚰		🚰	🚰	
5000 LCV 5W-30						
3000 LS 10W-30	🚰	🚰	🚰	🚰	🚰	🚰
3000 LS 15W-40	🚰	🚰	🚰	🚰	🚰	🚰
3000 10W-40	🚰	🚰		🚰	🚰	🚰
3000 15W-40	🚰	🚰		🚰	🚰	🚰
800 15W-40				🚰	🚰	
800 20W-50				🚰	🚰	
500 10W						
500 30						
500 40						
500 50						

Ford	Iveco	MAN	Mack	MTU	Renault	Scania	Volvo
		🚰					
			🚰	🚰	🚰		🚰
		🚰	🚰	🚰	🚰	🚰	🚰
	🚰	🚰	🚰	🚰	🚰	🚰	🚰
	🚰	🚰	🚰	🚰	🚰	🚰	🚰
	🚰	🚰	🚰	🚰	🚰		🚰
		🚰	🚰	🚰	🚰		🚰
🚰	🚰				🚰		
🚰		🚰	🚰	🚰	🚰		🚰
🚰		🚰	🚰	🚰	🚰		🚰
		🚰	🚰	🚰	🚰		🚰
	🚰	🚰	🚰	🚰	🚰		🚰
		🚰		🚰			🚰
		🚰					🚰

🚰 Approved      🚰 Suitable for use



# Tutela Transmission Open Market Specs finder for CV

	Product Name	SAE grade	API	MIL	JASO	GM	SAE	Allison
Axle Fluids	Axle 700 EHD 75W-90	75W-90	⦿	⦿			⦿	
	Axle 300 80W-90	80W-90	⦿	⦿				
	Axle 300 LS 80W-90	80W-90	⦿					
	Axle 300 85W-140	85W-140	⦿	⦿				
ATF	ATF 900 HD	n.a.	n.a.	n.a.				
	ATF 700 HD	n.a.	n.a.	n.a.		⦿		⦿
	ATF 500 HD	n.a.	n.a.	n.a.		⦿		⦿
	ATF D3	n.a.	n.a.	n.a.	⦿	⦿		
	ATF D2	n.a.	n.a.	n.a.		⦿		⦿
	ATF TASA	n.a.	n.a.	n.a.		⦿		
MTF	MTF 700 HD 75W-80	75W-80	⦿					
	MTF 300 80W-90	80W-90	⦿					

MB	MAN	Scania	Volvo	Renault	DAF	Mack	ZF	Eaton	Voith	Arvin Meritor	NATO
⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿			⦿	
	⦿						⦿				⦿
							⦿				
							⦿				
	⦿		⦿				⦿		⦿		
⦿	⦿		⦿				⦿		⦿		
⦿	⦿		⦿				⦿		⦿		
	⦿		⦿	⦿	⦿		⦿	⦿			

⦿ Approved

⦿ Suitable for use



