

Product Catalogue

IN EXTREME CONDITIONS WE GIVE OUR BEST



PETRONAS
Arbor

For Tireless Machinery



THE FLUID POWER OF OUR GLOBAL NETWORK



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 want to be the best ally for those looking for efficiency and performance during their daily life: from work to mobility, the Petronas world has always responded to every need.

10



Blending plants

30



Sales Offices

90



Countries Worldwide

240



Scientists
Professionals
Engineers

THE PERFECT SOLUTION FOR HARD DAILY WORK

There are more burdensome jobs than others, activities that require constant dedication and cause continual physical fatigue, work diluted over time but that needs to keep its high-quality.

Among these, jobs in agriculture and construction stand out, sectors where the only human strength is not enough. Agricultural machinery and construction equipment need to go hand-in-hand with the men's work, being tireless and guaranteeing the best performances. Machinery need the best fluid technology to last longer while working, especially when operating under severe conditions.



› CE SPECIFIC



› AG SPECIFIC



KEEP YOUR TIRELESS MACHINERY EFFICIENT

PETRONAS Arbor is the full range of lubricants tailored for agricultural and construction machinery able to keep their efficiency while guaranteeing a longer life-cycle.

Arbor is the perfect solution for high and long-lasting performances for hard daily work, protecting tireless machinery from oxidation, decomposition, wear, and keeping an optimal pistons' cleanliness and viscosity stability.



SLUDGE CONTROL

Sludge slows moving parts down, leading to excessive friction and to deposits on metallic engine parts. PETRONAS Arbor protects the engine from sludge and deposits that can affect the machinery's reliability and its durability.



SOOT HANDLING

Soot leads to a viscosity increase that can affect the engine performance. PETRONAS Arbor with its high resistance against soot can keep high the performance of your engine.



WEAR PROTECTION

Hard work take its toll on the machinery, putting extra loads throughout the engine. PETRONAS Arbor has been developed to deliver high levels of wear protection.



VISCOSITY STABILITY

Because of its soot handling and its resistance to oxidation, PETRONAS Arbor keeps an optimal viscosity avoiding filters' blockage and protecting the engine longer.

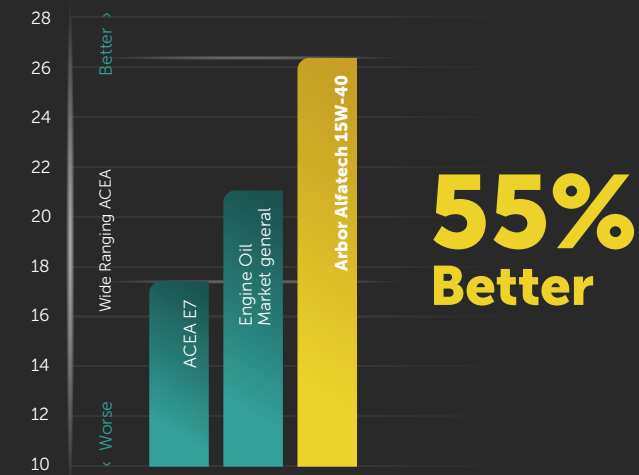


PISTONS' CLEANLINESS

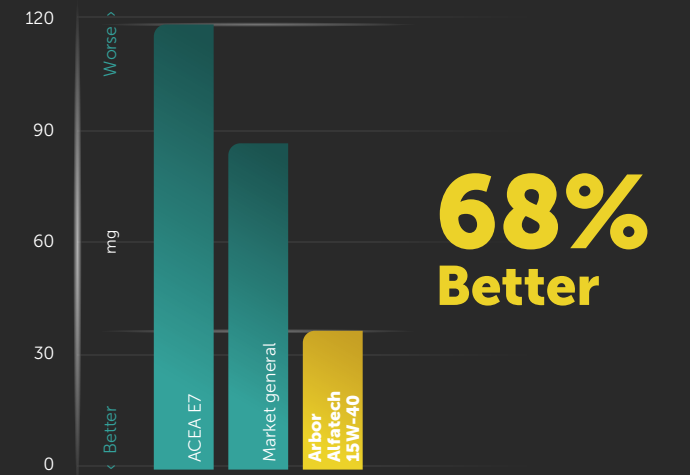
During the diesel engine combustion process, deposits accumulate in the engine, increasing engine wear. PETRONAS Arbor guarantees the operational life of engine components.

OUR LUBRICANTS ARE UNRIVALED

The several tests, that compare PETRONAS Arbor to ACEA industry, confirm the quality and efficiency of our range of lubricants for agricultural and construction machinery. It's important that each of their parts is protected; it is crucial that engine, their most valuable asset, is kept strong.

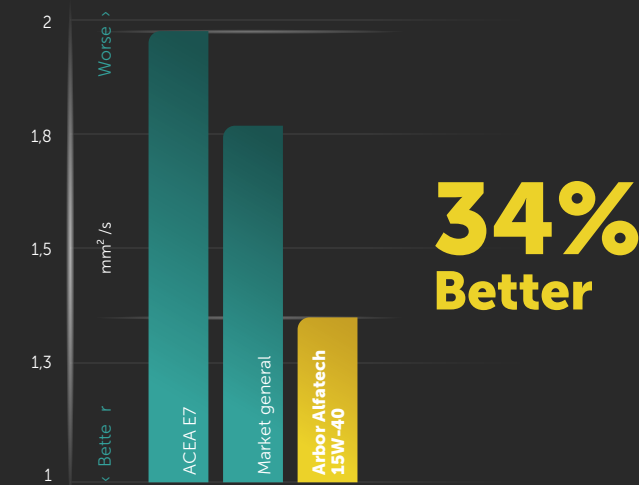


PISTONS' CLEANLINESS



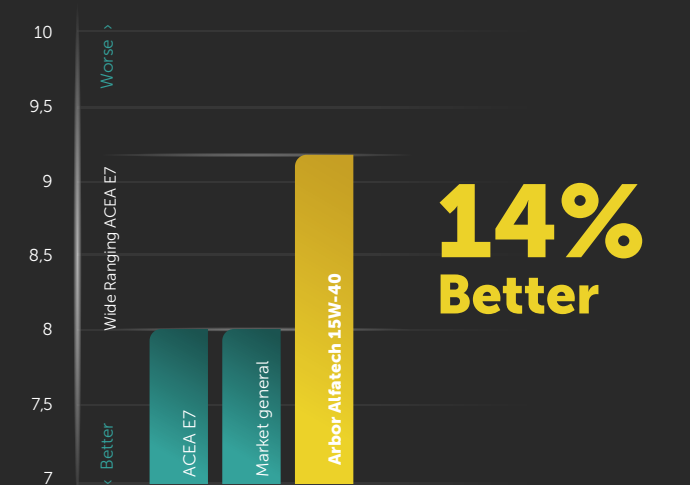
WEAR PROTECTION

Mack T-12 top ring weight loss



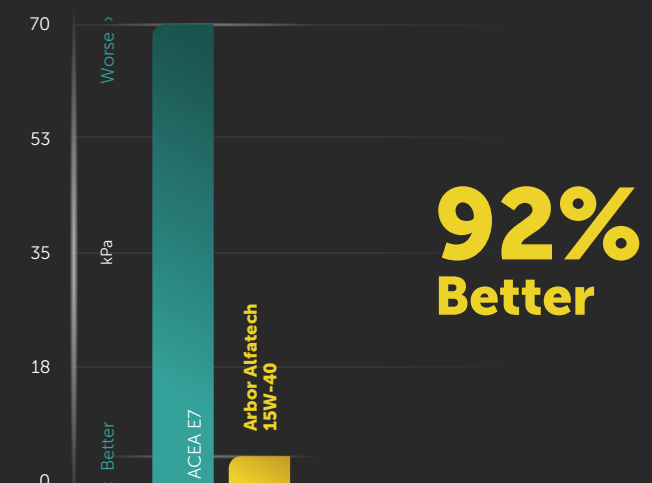
SOOT HANDLING

Mack T-8E soot handling capability



SLUDGE CONTROL

Cummins ISM sludge rating



VISCOSITY STABILITY

Cummins ISM - filter pressure drop

MAKE WORK FLUID WITH PETRONAS ARBOR FULL RANGE



Engine Oil

Low SAPS lubricant for the new generation low emission engines of tractors, other farming and earthmoving machines, including those equipped with exhaust gas re-circulation or after treatment systems (EGR; SCR; diesel particulate filter DPF). Also perfectly suitable for engines with traditional technology.

Specifications and Approvals:
SAE 10W-30; API CJ-4; ACEA E7/E9; Caterpillar ECF-3 / ECF-2 / ECF-1a; DAF Euro VI; DETROIT DIESEL 93K218; MACK EO-O PREMIUM PLUS-07; MAN M3575; MB 228.31 Performance; RENAULT RVI RLD-3.



code 74607

Characteristics

- › Full compliance with Tier 4 standards that set highly stringent emission limits.
- › high protection, during their ageing, of exhaust systems fitted with DPF also due to the low ash content.
- › The use of specific additives allows excellent control of lubricant thickening caused by the soot generated by combustion.
- › Stay- in- grade in all operating conditions, even the harshest. This is the resistance of an oil to viscosity variations.
- › Excellent anti-wear and anti-corrosion properties.
- › High Oxydation Stability.
- › It enables quick lubrication in cold starts, which helps to improve engine protection.

Advice on use

- › The SAE 10W-30 viscosimetric grade allows the use of ARBOR ALFAPRIME for environment temperatures between - 25°C and + 25 °C
- › Oil drain interval (ODI) according to Manufacturer’s instructions.



Arbor Alfatech 15W40

Specifications and Approvals:
SAE 15W-40; ACEA E7/E5; API CI-4/CH-4; CAT ECF-1; CUMMINS CES 20071/72/76/77; MACK EO-N; MAN M327; MTU OIL TYPE 2; MB 228.3 Performance; SDFG OM-1991; VOLVO VDS-3; RENAULT RVI RLD Performance; NH 330H Performance; MS 1120 Performance; MAT 3507 Performance; MAT 3520 Performance.

74604



Arbor Alfaprim 15W40

Specifications and Approvals:
SAE 15W-40; API CJ-4; ACEA E7/E9; Caterpillar ECF-3 / ECF-2 / ECF-1a; CUMMINS CES 20081; DETROIT DIESEL 93K218 DEUTZ DQC III-10-LA; MACK EO-O PREMIUM PLUS-07; MAN M3575; MB 228.31 Performance; RENAULT RVI RLD-3.

74608



Arbor Alfatech Synth 10W40

Specifications and Approvals:
SAE 10W-40; API CI-4/CH-4; ACEA E7/E5; CUMMINS CES 20071/20072/20076/20077/20078; GLOBAL DHD-1; MACK EO-M Plus; MAN M3275; MB 228.3 Performance; MTU OIL TYPE 2; SDGF OM-1901A; VOLVO VDS-3; RENAULT VI RLD-2 Performance.

74609



Arbor Super 15W40

Specifications and Approvals:
SAE 15W-40; API CF-4/SG; MIL-L-2104 F Performance; NH 330 G Performance; MS-1121 Performance.

74610



Arbor Super 20W50

Specifications and Approvals:
SAE 20W-50; API CF-4/SG; MIL-L-2104 F Performance; NH 336 G Performance.

74611



Arbor Super 40

Specifications and Approvals:
SAE 40; API CE; SDFG OM-1991; MIL-L-2104 E Performance.

74612



Arbor Super 10

Specifications and Approvals:
SAE 10W; API CE; ZF TE-ML 03B; ZF TE-ML 05K; ZF TE-ML 21K; MB 227.0 Performance; MIL-L-2104 E Performance; NH 301C Performance; MS-1121 Performance.

74614



Arbor Alfaprim Synth 10W40

Specifications and Approvals:
SAE 10W-40; ACEA E7/E9; API CJ-4; CAT ECF-3 Performance; CUMMINS CES 20086/CES 20081 Performance; DETROIT DIESEL 93K222/93K218 Performance; DEUTZ DQC III-10 LA Performance; MACK EO-P Plus Performance; MB 228.31 Performance; MTU OIL TYPE 2.1 Performance; RENAULT RVI RLD-3 Performance; VOLVO VDS-4 Performance; MAT 3521 Performance.

74638

Multifunctional lubricant for engines, transmissions, hydraulic systems and wet brakes of farm tractors and machinery.

Specifications and Approvals:
SAE 10W-30; API GL 4; SDFG OT-1891;
ZF TE-ML 03E; ZF TE-ML 05F;
ZF TE-ML 17E; ZF TE-ML 21F;
ALLISON C4 Performance;
CAT TO-2 Performance;
DENISON HF-0/HF-1/HF-2 Performance;
JD J20C Performance;
MF M1135; NH 410 B Performance;
FORD M2C 134D Performance;
MAT 3525 Performance.



code 76343

Characteristics

- › MTF allows high performance of all types of gearboxes, particularly automatic ones owing to its 10W-30 viscosity grade and special formulation.
- › MTF possesses high anti-wear properties of the gears and mechanical components of the transmission deriving from its operation especially under particularly tough operating conditions. The same protective function is also carried out on all the parts forming the hydraulic system.
- › MTF warrants high performance of the hydraulic system thanks to a high viscosity index which ensures the effectiveness of the servocontrols at all operating temperatures with a thermal stability that keeps the pressure in the lubricating circuit constant.

Advice on use

- › The SAE 10W-30 viscosity grade allows the use of MTF all year round. Replace according to the manufacturer's instructions.



76785

Arbor MTF Special 10W30

Specifications and Approvals:
SAE 10W-30; API GL 4; JD J20C;
MF M1135/M1143/M1145.



76346

Arbor Multi FX

Specifications and Approvals:
SAE 20W-30; API GL 4; SDFG OT-1891;
JD J20A Performance; NH 420 A Performance;
FORD M2C 86B Performance.



76788

Arbor MTA

Specifications and Approvals:
ATF DEXRON II D; FORD MERCON;
SDFG OF-1691; ZF TE-ML 04D; ZF TE-ML 05L;
ZF TE-ML 09; ZF TE-ML 14A; ZF TE-ML 21L;
ALLISON C4 Performance;
CAT TO-2 Performance;
VOITH 3/92-G607 Performance;
NH 530 A Performance.



76789

Arbor TRW 90

Specifications and Approvals:
SAE 80W-90; API GL 5; SDFG OP-1705;
ZF TE-ML 05A; ZF TE-ML 12E; ZF TE-ML 16B;
ZF TE-ML 17B; ZF TE-ML 19B; ZF TE-ML 21A;
MIL-L-2105 D Performance;
NH 520 A Performance; MS 1316 Performance.



76790

Arbor TRW 90 LS

Specifications and Approvals:
SAE 80W-90; API GL 5; SDFG OP-1705LS;
MIL-L-2105 D Performance;
NH 520 B Performance.



76795

Arbor TRW 140

Specifications and Approvals:
SAE 85W-140; API GL 5; ZF TE-ML 21A;
ZF TE-ML 05A; ZF TE-ML 12E; ZF TE-ML 16D;
MIL-L-2105 D Performance;
MS 1316 Performance; NH 524 A Performance.



76777

Arbor Multi FCT

Specifications and Approvals:
SAE 10W-30; SDFG OT-1891A; API GL 4.



76805

Arbor Multi VT

Specifications and Approvals:
SAE 10W-30; ISO VG 32/46; API GL 4;
SDFG OT-1801B; ZF TE-ML 06B; ZF TE-ML 06D;
ZF TE-ML 06N; ZF TE-ML 07B.

PETRONAS Arbor

Oil Universal STOU

Universal lubricant (S.T.O.U.) for engines, transmissions, hydraulic systems and wet brakes of farm tractors and machinery.

Specifications and Approvals:

SAE 15W-40; API CE; API GL 4; CAT TO-2; SDFG OU-1391; ZF TE-ML 06B; ZF TE-ML 07B; MIL-L-2104 E Performance; MIL-L-2105 Performance; NH 030 C Performance



Arbor Universal 10W-40

Specifications and Approvals:

SAE 10W-40; SAE 75W-90; API GL 4; ACEA E7/E4 Performance; ZF TE-ML 06B; ZF TE-ML 06F; ZF TE-ML 07B; MIL-L-2105 Performance; NH 026 C Performance.

76782



code 76784



code 76798

PETRONAS Arbor

Brake Fluid

Synthetic brake fluid for the braking systems of farm machines and earthmoving machinery.

Specifications and Approvals:

SAE J1704; FMVSS 116 - DOT4; ISO 4925 Class 4; ENSAYOS INTA - UNE 26-109-88; NH 800 A Performance; MAT 3632 Performance.



BF-LHM

Specifications and Approvals:

ISO 7308; ENSAYOS INTA - UNE 26-109-88; NH 610 A Performance; FORD ESN-M-6-C59A Performance; MAT 3630 Performance.

76800



Characteristics

- › Its special formulation together with the fact that it belongs to the category of S.T.O.U. oils give Universal 15W40 a whole host of features as mentioned below.
- › High anti-wear properties of the mechanical components of the engine and transmissions.
- › Excellent capability of ensuring cleansing against the formation of deposits in the engine, transmissions and in the hydraulic circuit.
- › High braking efficiency deriving from the presence of friction modifier additives in the formulation.
- › Prompt response of the servcontrols of the hydraulic circuit is ensured by the viscosimetric stability to changes in temperature that determines a high and constant pressure in the system.



Characteristics

- › Being a synthetic brake fluid, Brake D4 features a high boiling point which prevents vapour lock that consists in the formation vapour bubbles in the circuit.
- › It also possesses a low yield value that makes it suitable for use at low temperatures.
- › It protects the metal components of the circuit from corrosion and oxidation, ensuring perfect compatibility with the rubbers and seals.



Advice on use

- › Its SAE 15W-40 viscosity grade allows use for temperatures between -15°C and $+40^{\circ}\text{C}$.
- Replace according to the manufacturer's instructions.



Advice on use

- › Its formulation allows it to be used in all weather conditions, even the harshest.
- Replace according to the manufacturer's instructions and in any case once a year.

PETRONAS Arbor

Hydraulic Oil

This is a hydraulic fluid, with high viscosity index, specifically for high pressure hydraulic systems of farm machines, particularly combine harvesters, and of earthmoving machinery.

Specifications and Approvals:

ISO VG 46; DIN 51524 HVLP;
SDFG OI-1446HV; NH 646 H Performance.



code 76786



Characteristics

- › The high viscosity index of Hydraulic 46 HV derived from its special formulation makes it possible to obtain perfect operation of the servocontrols under all operating temperature conditions of the machine. This is because the viscosimetric profile is kept constant within a broad range of temperatures ensuring a prompt response of the hydraulic system and high output rate of the pumps, at both low and high temperatures, with consequent fuel saving.
- › Special additives protect the components of the hydraulic system against wear and corrosion.
- › The demulsive and antifoam properties warrant lubricating continuity preventing cavitation and removing the heat.



Advice on use

- › Its formulation allows it to be used all year round, with outside temperatures between – 20°C and + 40 °C.
- › Replace according to the manufacturer's instructions.



76787

Arbor Hydraulic 68

Specifications and Approvals:

ISO VG 68; DENISON HF-0/HF-1/HF-2;
DIN 51524 HLP; SDFG OI-1468; NH 668
Performance; MS-1216 Performance;
MAT 3508 Performance.



76793

Arbor HTC 46

Specifications and Approvals:

ISO VG 46; DIN 51524 HVLP 46.



76797

Arbor Hydraulic 46 Bio-V

Specifications and Approvals:

ISO VG 46; DIN 51524 HVLP 46
(except ASTM D 943); NH 646 BV Performance.



76806

Arbor Hydraulic 46

Specifications and Approvals:

ISO VG 46; DIN 51524 HLP; DIN 51525;
CINCINNATI MILACRON P-70; DENISON
HF-0/HF-1/HF-2; NH 646 Performance;
MS-1216 Performance; MAT 3508
Performance.



76807

Arbor Hydraulic 68 HV

Specifications and Approvals:

ISO VG 68; DIN 51524-3 HVLP 68;
DENISON HF-0; CINCINNATI MILACRON P-69;
NH 668 HV Performance.



76801

Arbor Hydraulic 32

Specifications and Approvals:

ISO VG 32; DIN 51525; DIN 51524;
DENISON HF-0/HF-1/HF-2; SDFG OI-1432.

PETRONAS Arbor

Gardening

Biodegradable lubricant specifically for saw chains.

Specifications and Approvals:

Biodegradability > 90% (CEC-L-33-A-93).



code 76780



Arbor Power

Specifications and Approvals:

SAE 30; API SG/CD; CCMC G4/PD2.

74605



Arbor Power Mix

Specifications and Approvals:

API TC; JASO FC; ISO-L-EGC.

73087



Arbor Power Cut

Specifications and Approvals:

76781



Characteristics

- › With its special bio-vegetable formulation Power Cut Bio can boast over 90% biodegradability which means high protection of the environment in which it is used preventing contamination. This level of biodegradability has been certified through the CEC-L-33-A-93 method.
- › Besides its biodegradable features Power Cut Bio also possesses the following high performance characteristics as chainsaw oil. Excellent adherence capability on the blade and chain which helps to prevent dripping and seizing.
- › High thermal stability that makes it suitable for all environmental and operating conditions (even the toughest).
- › Outstanding cooling capability to prevent overheating the chain.
- › Power Cut offers total antirust protection of the blade and chain against the action of the weather and antiwear properties to ensure longer life of blade sharpness and of the chain itself.



PETRONAS Arbor

Antifreeze

Concentrated, protective antifreeze and coolant fluid, for the engines of tractors, farm machines and earthmoving machinery.

Specifications and Approvals:

ASTM D 6210 Type 1-FF;
NH 900 B Performance;
MS-1710 Performance;
MAT 3620 Performance.



code 76799



76792

Arbor Freeze -38°C

Specifications and Approvals:

ASTM D 6210 Type 3-FF; SDFG EC-1599A;
NH 900 B Performance; MS-1710 Performance;
MAT 3620 Performance.



76783

Arbor Farmflu

Specifications and Approvals:

ASTM D 3306 Type 1; SDFG EC-1548G; MS 9769;
MB 325.0; -38°C +110 °C.

Characteristics

- › Fluid to be mixed 50% with water with a formulation that warrants the utmost performance in terms of antifreeze protection and cooling.
- › It prevents the formation of scaling in the circuit, particularly lime, maintaining its own functional properties unchanged over time.
- › It warrants the utmost removal of the heat generated by combustion and, if mixed 50% with water, protection against freezing down to temperatures of -38°C.
- › Its composition allows perfect compatibility with all the parts of the circuit, metal and non metal alike (seals for example).

Advice on use

- › To be replaced according to the manufacturer's instructions and in any case every two years.

Always top up using the same product and mixing 50% with water. Never use concentrated.



PETRONAS Arbor

Grease

This is an Extreme Pressure Lithium and Calcium soap-based multipurpose grease for tractors, farm machines and earthmoving machinery.

Specifications and Approvals:

NLGI 2; SDFG GR-1202L;
NH 710 A Performance;
MAT 3550 Performance;



code 76791



Characteristics

- › Its composition is particularly suitable for pressure grease nipples and wheel hub bearings of tractors, farm machines and earthmoving machinery.
- › It possesses high adherence capability which, combined with exceptional mechanical stability and a high drip point allows perfect lubrication eliminating any phenomena that might reduce it:
 - high temperatures;
 - centrifuging due to the movement of the operating mechanical part;
 - the washing action of water.
- › The above are joined by high antiwear properties which protect the lubricated mechanical parts in the best way possible.



Advice on use

- › NLGI 2 grade allows it to be used all year round. Replace according to the manufacturer's instructions

