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Industrial Lubricants Product Catalogue



PETRONAS
Fluid Technology
Solutions™

PETRONAS Fluid Technology Solutions™



Intelligent approach to your fluid requirements that maximizes your business performance through tailor-made product offerings and expert services.

Fluids

Rely on us to design and deliver the highest quality products

Drawing on our deep and broad expertise in fuels, lubricants and functional fluids, we design, develop and deliver state-of-the-art product offerings. We work closely with you as your trusted partner to ensure we give you exactly the solution you need.

Technology

Choose technical and service excellence

We combine our successful track record in motor sports, our in-house R&D capabilities and our philosophy of continuous improvement to offer you first-class solutions and expertise – now and going forward.

Solutions

Maximizing your business success by partnering with us

We offer intellectual services, working hand-in-hand to ensure we develop the right products efficiently and provide solutions tailored to your own fluid requirements and business objectives.



Greases

	Description	NLGI grade	Operating temperatures	Thickener
PETRONAS GREASE LI SERIE	Smooth textured Lithium greases containing oxidation, rust, and corrosion inhibitors. Providing exceptional wear protection, good water resistance, low temperature dispensing and long life in bearings operating at elevated temperatures.	2-3	-12°C to +130°C	Lithium
PETRONAS GREASE LI EP SERIE	Premium quality multipurpose extreme pressure industrial greases fortified with additives to enhance oxidation stability, rust prevention and reduce wear.	00-0-1-2-3	-12°C to +130°C	Lithium
PETRONAS GREASE CA 00	A grease developed for the lubrication and corrosion protection of pneumatic percussion rock drills, as used in mining operations. Manufactured from specially selected materials to protect from corrosion caused by alkaline or acidic mine water, both in use and after extended periods of inactivity.	00	up to +60°C	Calcium
PETRONAS GREASE LIX MEP	Long life lithium complex grease providing exceptional wear protection, good wash-out resistance, and corrosion inhibition. Provides long life in applications operating at elevated temperatures.	2	-15°C to +160°C	Lithium Complex
PETRONAS GREASE FG	Leading technology, high quality Aluminium Complex, polymer thickened, multipurpose grease intended specifically for the lubrication of machinery used in the food industry.	2	-18°C to +150°C	Aluminium Complex
PETRONAS GREASE LICA GEP	Smooth-textured functional polymer based, dual thickened lithium-calcium greases combining performance advantages of greases fortified with dual solid friction reduction additives.	0-2.5	-15°C to +140°C	Lithium-Calcium

Marine oils

4-STROKES AUXILIARY ENGINE OILS

Description	SAE	Specs
PETRONAS DISROL 50	20-30-40	API CD.
PETRONAS DISROL 120	30-40	API CF; HHI-EMD HIMSEN Approved; Wartsila Approved; Heavy Fuel Caterpillar 1M-PC; Caterpillar Micro Oxidation Test Performance.
PETRONAS DISROL 300	30-40	
PETRONAS DISROL 400	30-40	
PETRONAS DISROL 500	40	
PETRONAS DISROL CI-4	40	API CI-4/CH-4/CG-4/CF-4; MAN 3275; ACEA E7; MTU type 2; Cat ECF-2; Deutz DQC-III; MB 228.3; DDC 93K215; Cummins CES 20078/77/76; Volvo VDS-3.

2-STROKES MAIN ENGINE CYLINDER OILS

Description	SAE VG
PETRONAS SILUB 540	50
PETRONAS SILUB 570	50



Metalworking fluids

WATER SOLUBLE CUTTING FLUIDS

	Description	Application	Refractive index
PETRONAS MECAFLUID S 11 ECO	Synthetic soluble fluid, chlorine, boron and formaldehyde free.	Designed for grinding ferrous materials.	2,3
PETRONAS MECAFLUID S 2006	Synthetic soluble fluid with EP additives, free from chlorine, boron and formaldehyde.	Designed for heavy duty machining of ferrous materials. Suitable as a replacement for neat oil for polishing cylinder liners. Compatible with aluminium alloys.	1,6
PETRONAS MECAFLUID SS 42	Semi-synthetic emulsifiable fluid, containing boron and formaldehyde.	General machining of ferrous materials.	3,5
PETRONAS MECAFLUID SS 50	Semi-synthetic emulsifiable fluid with EP additives, containing boron and formaldehyde.	General machining, grinding and cutting of ferrous metals, aluminium and its alloys.	1,5
PETRONAS MECAFLUID SS 44 ECO	Semi-synthetic fluid, chlorine, boron and formaldehyde free.	Medium-heavy duty operations on ferrous metals, aluminium and its alloys.	2,3
PETRONAS MECAFLUID SS 46 NF	Semi-synthetic fluid, chlorine and formaldehyde free.	Heavy duty operations on ferrous metals, aluminium and its alloys.	1,4
PETRONAS MECAFLUID SS 37 ECO	Semi-synthetic fluid, chlorine, boron and formaldehyde free.	Suitable for turning, milling, tapping, and threading of ferrous metals and aluminium alloys.	1,8
PETRONAS MECAFLUID SM 59	Traditional emulsifiable oil, boron and chlorine free.	Cutting of ferrous metals, aluminium and copper alloys. Can be used neat or as an emulsion in moulding operations.	1
PETRONAS MECAFLUID SM 69 NF	Traditional emulsifiable oil with EP additives, chlorine, boron and formaldehyde free.	Cutting of ferrous metals, aluminium and copper alloys. Can be used neat or as an emulsion in moulding operations.	1

NEAT CUTTING OILS

	Description	Application	ISO VG
PETRONAS MECAFLUID N 32	Chlorine free, mineral oil based, ashless, neat cutting oil with EP additives.	Suitable for turning, cutting, milling, gear cutting and shaving of steel, aluminium and copper alloys.	32
PETRONAS MECAFLUID N 16	Chlorine free, mineral oil based, ashless, neat cutting oil with EP additives.	Broaching and deep drilling operations on iron and steel alloys.	15
PETRONAS MECAFLUID N 18	Chlorine free, mineral oil based, ashless, neat cutting oil with EP additives.	Heavy operations such as gear shaving, gear toothing, turning and milling of steel alloys.	22
PETRONAS MECAFLUID N 5	Chlorine free, mineral oil based, ashless, neat cutting oil with EP additives.	Grinding of ferrous and non-ferrous parts, and steel tool sharpening. Used for sanding with heavy stones - sulphuretted, diamond or CBN.	5
PETRONAS MECAFLUID N 68	Chlorine free, mineral oil based, ashless, neat cutting oil with EP additives.	Heavy operations such as gear shaving, gear toothing, turning and milling of steel alloys.	68
PETRONAS MECAFLUID N 10 SYN	PAO based, synthetic chlorine free neat cutting oil with EP additives.	Grinding steel threads and gears with sulphuretted, diamond or CBN wheels.	10

RUST PREVENTIVE FLUIDS

	Description	Vx @ 40°C
PETRONAS MECAFLUID P E	Biodegradable, propylene glycol based fluid for protection of cooling system.	-
PETRONAS MECAFLUID P 26	Solvent free, mineral oil based, oil film rust preventive.	26
PETRONAS MECAFLUID P 100	Mineral oil based rust preventive, providing intermediate to long-term corrosion protection. Easily removed with standard industrial cleaners.	100
PETRONAS MECAFLUID P 5	Solvent free, mineral oil based, dewatering corrosion preventive fluid. Particularly effective after synthetic water-based metalworking operations.	5

DRAWING FLUIDS

	Description
PETRONAS MECAFLUID D 128	Synthetic oil containing chlorinated extreme pressure additives and both natural and synthetic tackiness agents. PCB and PCT free.
PETRONAS MECAFLUID D 3210 CR	Mineral oil based product with excellent evaporation properties. Suitable for medium to heavy duty drawing operations of aluminium and copper alloys.
PETRONAS MECAFLUID D 50 WB	Propylene glycol based fluid with antirust and anti-wear additives. Compatible with a wide range of elastomers.

QUENCHING FLUIDS

	Description	Application	Vx @ 40°C
PETRONAS MECAFLUID Q 40	Paraffinic mineral oil based fluid containing, specialized detergent and dispersing agents, extreme condition improvers and antioxidant additives granting to give extended product lifetime. PCB & PCT free.	Quenching oil for use in applications where high cooling speed and minimum distortion are critical, along with easy removal/cleaning.	46
PETRONAS MECAFLUID Q 68	Paraffinic mineral oil based fluid containing, specialized detergent and dispersing agents, extreme condition improvers and antioxidant additives to give extended product life. PCB & PCT free.	Fluid formulated for martensite quenching of steel components.	68
PETRONAS MECAFLUID Q 120	Medium viscosity, solvent refined mineral quenching oil. Containing specialized detergent and dispersing agents, antioxidants and quenching speed improvers to extend product life and reduce "thermal shock".	Fluid formulated for martensite quenching of steel components.	120
PETRONAS MECAFLUID Q 20	Paraffinic mineral oil with selected detergents, dispersants, quenching speed improvers and emulsifiers.	Quenching oil for use in applications where high cooling speed and minimum distortion are critical, along with easy removal/cleaning.	22
PETRONAS MECAFLUID Q 500 WB	Semi-synthetic, water soluble polyglycol based fluid designed for induction hardening and quenching of steel and steel alloys.	Recommended for use at 5-20% concentration in water for induction steel hardening.	-

CLEANERS

	Description	Application	Alkalinity factor
MECACLEAN EXP	Water soluble inter-operational cleaner, boron and formaldehyde free.	For use in high pressure industrial washers, upto 300bar at 3-8% concentration, to clean ferrous and aluminium components.	0,2
MECACLEAN AL	Water soluble inter-operational cleaner, boron and formaldehyde free.	For use in high pressure industrial washers, upto 300bar at 3-8% concentration, to clean ferrous and aluminium components.	0,5
MECACLEAN NL	Water soluble inter-operational cleaner, boron and formaldehyde free. Non-labelled product.	For wash-down of multi-metal parts.	0,3



Industrial oils

HYDRAULIC FLUIDS

Description	ISO VG	Specs
PETRONAS HYDRAULIC SERIES Premium quality anti-wear hydraulic oils specially developed to provide multi-metal compatibility and improved wear protection in heavy-duty service hydraulic systems.	22-32-46-68-100-150	AFNOR NFE 48-690/1 (Dry & Wet); AFNOR NFE 48-603; ISO 11158 HM; GM LS-2; Eaton 03-401-2010 (supersedes Vickers I-286-S & M-2950-S); DIN 51524 Part 2; Sauer Danfoss 520L0463; US Steel 126, 127 and 136; JCMAS HK; MAG IAS (Cincinnati Milacron) P-68/P-69/P-70; Parker Denison HF0/HF1/HF2 T6C-020; ASTM D 6158 HM, Bosch Rexroth RDE90240.
PETRONAS HYDRAULIC HV SERIES Premium, very high VI, "super stabilised" anti-wear hydraulic oils, with carefully controlled low temperature flow properties.	15-32-46-68-100	AFNOR NFE 48-690/1 (Dry & Wet); AFNOR NFE 48-603; ISO 11158 HV; GM LS-2; Eaton 03-401-2010 (supersedes Vickers I-286-S & M-2950-S); DIN 51524 Part 3; Sauer Danfoss 520L0463; US Steel 126, 127 and 136; JCMAS HK; Parker Denison HF0/HF1/HF2; MAG IAS (Cincinnati Milacron) P-68/P-69/P-70; ASTM 6158 HV, Bosch Rexroth RDE90240.
PETRONAS HYDRAULIC HVZF SERIES Superior quality, ashless, high viscosity index, anti-wear hydraulic oil developed to meet the requirements of modern hydraulic systems.	32-46-68	DIN 51524, Part 3; Eaton Vickers I 286-S, M-2950-S; AFNOR NFE 48603 (HM); Denison HF-0, HF-1, HF-2; Eaton Brochure 03-401-2010; GM LS-2.
PETRONAS HYDRAULIC ZF SERIES Ashless, high quality, anti-wear hydraulic oils developed to meet the requirements of applications where filter blockage may occur in the presence of water.	32-46-68	DIN 51524, Part 1 & 2; Eaton Vickers I 286-S, M-2950-S; AFNOR NFE 48603 (HM); Denison HF-0, HF-1, HF-2.
PETRONAS HYDRAULIC ESF SERIES Ultra-high VI, "super-stabilised" anti-wear hydraulic fluids designed and formulated specifically to reduce energy consumption in hydraulic oil systems. Field trials proved direct energy savings in excess of 10%.	46-68	AFNOR NFE 48-690/1 (Dry & Wet); AFNOR NFE 48-603; ISO 11158 HV; GM LS-2; Eaton 03-401-2010 (supersedes Vickers I-286-S & M-2950-S); DIN 51524 Part 3; Sauer Danfoss 520L0463; US Steel 126, 127 and 136; JCMAS HK; Parker Denison HF0/HF1/HF2; MAG IAS (Cincinnati Milacron) P-68/P-69/P-70; ASTM D 6158 HV, Bosch Rexroth RDE90240.
PETRONAS HYDRAULIC HLPD SERIES Premium quality anti-wear hydraulic oils developed for systems where oil cleanliness and solvency properties are critical.	32-46-68	AFNOR NFE 48-690/1 (Dry & Wet); AFNOR NFE 48-603; ISO 11158 HG; GM LS-2; Eaton 03-401-2010 (supersedes Vickers I-286-S & M-2950-S); DIN 51524 Part 2; Sauer Danfoss 520L0463; US Steel 126, 127 and 136; JCMAS HK; MAG IAS (Cincinnati Milacron) P-68/P-69/P-70; Parker Denison HF0/HF1/HF2 T6C-020; ASTM D 6158 HM, Bosch Rexroth RDE90240.

GEAR OILS

Description	ISO VG	Specs
PETRONAS GEAR MEP SERIES High quality paraffinic mineral oils, incorporating unleaded additives to provide extreme pressure and anti-wear characteristics, rust and corrosion protection, enhanced oxidation stability and resistance to foaming.	68-100-150-220-320-460-680	DIN 51517 Part 3 CLP; AISE 224, David Brown S1.53.101(E); AGMA 9005-E02; strong FAG FE-8 performance.
PETRONAS GEAR SYN PAO SERIES Compounded gear lubricants comprised of; synthetic base stocks that afford exceptional oxidation and thermal properties and an advanced additive system to impart the performance properties required for gearing operations under severe conditions.	150-220-320-460-680	US Steel 224, AGMA 250.04.
PETRONAS GEAR SYN PAG SERIES Polyalkylene Glycol based synthetic lubricants providing outstanding load carrying properties and excellent thermal stability. Designed to provide excellent corrosion protection and demulsibility characteristics.	150-220-320-460-680-1000	DIN 51517-3, David Brown Typ G lubricant, Defence standard 05 - 50.1, No. 29 for 150, 220 and 460.
PETRONAS GEAR FL SERIES Top tier Extreme Pressure lubricants for Flender helical gears, bevelhelical gears and planetary gear units.	150-220	DIN 51517 Part 3 CLP, AIST 224, AGMA 9005-E02, SEB 181226 and Flender Revision 13.

CIRCULATING OILS

Description	ISO VG	Specs
PETRONAS CIRCULA SERIES High quality Rust & Oxidation inhibited (R&O) lubricants with the ability to rapidly separate from water, prevent rust, and protect against the formation of emulsions and sludge's.	150-220-320	DIN 51515 part 1 and 2, US Steel TSR, Agma, R&O oil; ISO 11158 HM.
PETRONAS CIRCULA SYN SERIES Synthetic Polyalphaolefin based Rust & Oxidation inhibited (R&O) oils that afford exceptional oxidation, thermal properties and use an advanced additive system to impart the performance properties required for gearing operations under severe conditions.	150-220-320-460-680	DIN 51517 Part 3 CLP; AISE 224, David Brown S1.53.101(E); AGMA 9005-E02; strong FAG FE-8 performance.
PETRONAS MILL SERIES Heavy duty circulating oils formulated to meet the critical requirements of Morgan No-Twist Rod Mills.	100-460	
PETRONAS CIRCULA PM SERIES Modern, high quality, high performance lubricant specifically formulated to meet the latest OEM requirements for demanding paper machine circulation systems.	150-220-320	Voith VN 108 Wet End - April 2012, Voith VN 108 Dry End - April 2012, Voith VN 108 Press Rolls - April 2012, SKF Dry End - 2006/11/10 (version 2), Metso RAU4L00659 Wet End 29/11/2012 (revision 7), Metso RAU4L00659 Dry End 29/11/2012 (revision 7).
PETRONAS CIRCULA SPO Low viscosity oil specifically formulated for the lubrication of high speed spindle bearings on grinders and other machine tools.	10	

DIATHERMIC OILS

Description	ISO VG
PETRONAS HTO SERIES Carefully selected mineral oils used for process, lubrication, heat transfer and quenching type applications.	22-32

CHAINSAW OILS

Description	Vx @ 40°C
PETRONAS CHAINSAW MF Specially formulated mineral oil for cutting chain, cutter bar and drive gear lubrication of industrial and light duty chain saws, containing tackiness additives to ensure adequate adhesion.	120

COMPRESSOR OILS

Description	ISO VG	Specs
PETRONAS COMPRESSOR A SERIES For crankcase and cylinder lubrication of reciprocating air compressors. These oils are also suitable for rotary vane and screw compressors.	32-46-68-100	DIN 51506 VDL; ISO DP6521.
PETRONAS COMPRESSOR A SYN EST SERIES Ester-based synthetic air compressor lubricants formulated with the latest additive technology to meet the demanding requirements of rotary, reciprocating and centrifugal air compressors.	32-46-68-100	DIN 51506 VDL; ISO DP6521.
PETRONAS COMPRESSOR A SYN PAO SERIES Polyalphaolefin based synthetic compressor lubricants, featuring superior thermal and oxidation stability enabling them to operate over a wide range of temperatures without coking, deposit formation, or corrosion.	32-46-68	ISO 6743-3A-DAJ, DIN 51506 VDL.
PETRONAS COMPRESSOR A SYN PAG SERIES Compressor lubricants formulated using premium PAG and POE synthetic base fluids, specifically advantageous in high temperature applications where any degradation will not result in detrimental varnishes or deposits.	32-46	

TURBINE OILS

Description	ISO VG	Specs
PETRONAS JENTERAM SERIES Modern high quality, chemically stable steam turbine oils designed for superior performance where zinc based turbine oils are recommended.	32-46-68	DIN 51515 part 1 and 2, US Steel TSR, Agma, R&O oil Siemens; GEK; US Military; Solar; Alstom.

SLIDEWAY OILS

Description	ISO VG	Specs
PETRONAS SLIDEWAY SERIES Special premium lubricants developed for machine- tool ways and slides, where precision or slow speeds make it necessary that the "Stick-Slip" of tables and slides is eliminated.	68-220	Cincinnati Lamb P-47, P-50.
PETRONAS SLIDEWAY HG SERIES Suitable for machine tools with joint lubrication systems - hydraulic, transmission and slideways. The oils have excellent anti "Stick-Slip" and adhesive properties.	32-68-220	Cincinnati Lamb P-47, P-50, P-53, DIN 51524 part 2 - HLP, ISO 11158 HM, DIN51517 part3 (ISO 220), US Steel 224.

TRANSFORMER OILS

Description	ISO VG	Specs
PETRONAS TRANOL Un-inhibited insulating oil for industrial transformers and switch-gears with excellent oxidation stability, high flash point, very good low temperature and dielectric properties.	10	IEC 60296 ed. 4 (2012) (Un-inhibited oil).
PETRONAS TRANOL X Inhibited insulating oil for industrial transformers and switch-gears with excellent oxidation stability, high flash point, very good low temperature and dielectric properties.	10	IEC 60296 ed. 4 (2012) (Inhibited oil).

AIR TOOL LUBRICANTS

Description	ISO VG
PETRONAS ATO SERIES Pneumatic rock drill and air tool lubricants, providing preferential metal wetting, excellent fog control and effectively prevents tool stoppage caused by icing.	68-100-220

PROCESS OILS

Description	ISO VG	Specs
PETRONAS PROCESS OIL N SERIES Genuine naphthenic oils produced with low pour points, good solvency power, low odour levels, excellent colour and colour stability characteristics.	10-22-100	
PETRONAS PROCESS OIL P SERIES Highly saturated paraffinic process oils with very good color and low aromatic content.	32-100-460-850	
PETRONAS WHITE OIL P SERIES Pharmaceutical grade white oil.	15-22-68	FDA 21 CFR 172.878 and FDA 21 CFR 178.3620(a) for direct and indirect food contact. Eu Pharmacopoeia 8TH edition.

REFRIGERATION COMPRESSOR OILS

Description	Vx @ 40°C
PETRONAS COMPRESSOR R SERIES Premium quality oils designed for use as refrigeration compressor lubricants, with traditional refrigerants. They are highly stable and are essentially wax free.	32-46-68-100
PETRONAS COMPRESSOR R SYN SERIES Synthetic based refrigeration compressor lubricants, formulated using selected polyolester base stocks and additives, providing outstanding lubricity, stability and corrosion protection.	22-32-46-68-100-170-220