

PRODUCT CATALOGUE
2016



MARINE LUBRICANTS

ID Lube[®] check

LPC's lubricants' business model is a blend of knowledgeable people, targeted products and customized services that can help lower operational costs while maximizing machinery up-time. LPC has developed the **ID Lube[®] Check** system that offers quality control of all in use lubricants upon request.

It's focused on what you need most: reliability. Predictive measures and analysis play an important role. Our **ID Lube[®] check** used oil analysis program can identify contamination or wear before it results in costly downtime.

ID Lube[®] check oil analysis enables you to track the performance of engines and equipment that is the lifeblood of marine business. By analyzing oil samples on a regular basis, you can optimize equipment life and oil replacement intervals, identify lubricant-related need and understand the changing environment within a piece of equipment. This knowledge helps in the precise scheduling of maintenance work that can reduce downtime or even eliminate the risk of catastrophic failure.



LOW SPEED 2-STROKE CROSSHEAD ENGINES

	Description	OEM Approval(s)	Specifications	Grade	Base No, mg/KOH	Flash Point (COC), °C	Pour Point, °C
CYLINDER LUBRICATION							
Cyclon NAUTILUS HEAVY XT	Top quality, highly alkaline cylinder oil for low-speed, 2-stroke crosshead diesel engines that run on residual fuel with sulphur >2,0%.	MDT (NOL)		SAE 50	100	>240	-15
Cyclon NAUTILUS HEAVY	Superior quality, very alkaline cylinder oil for low-speed crosshead diesel engines burning residual fuel with sulphur >1,5%.	MDT (NOL)			70	>240	-14
Cyclon NAUTILUS MEDIUM	High performance MCL for low-speed crosshead engines running on residual fuels with 1-3% sulphur content.	MDT (NOL)			55	>240	-14
Cyclon NAUTILUS LS	A high performance MCL designed for 2-stroke engines running on low sulphur (up to 1.5% weight) HFO.	MDT (NOL)			40	>240	-10
Cyclon NAUTILUS VLS/25	A low-alkalinity, high performance MCL designed for 2-stroke engines operating on environmentally-controlled areas (ECA) and running on ultra-low sulphur distillate fuels or/and LNG, methanol, ethane and LPG.				25	>240	-10

SYSTEM CRANKCASE LUBRICATION							
Cyclon ARMOR MEDIUM Series	High quality system oils for high-output marine crosshead diesel engines. Also, suitable for use in small trunk piston engines whose fuel contains <0.5% in sulphur.	MDT (NOL)		SAE 30	5	>240	-15
				SAE 40		>240	-15

TRUNK PISTON ENGINE LUBRICATION							
Cyclon POSEIDON DT Series	Advanced TPEO for medium-speed, 4-stroke engines running on light fuels (MDO) or gasoil.			SAE 30	12	>240	-16
				SAE 40		>240	-16
Cyclon POSEIDON SX Series	Advanced formulation TPEO for the cylinders and bearings of medium-speed, 4-stroke engines running on MDO and MGO distillate fuels.			SAE 30	16	>240	-18
Cyclon POSEIDON TN Series				SAE 40		>240	-15
					SAE 30	21	>240
SAE 40					>240		-15
Cyclon POSEIDON HT 3030	Advanced formulation TPEO of high detergent potential for the cylinders and bearings of medium-speed, 4-stroke engines running on residual fuels (HFO).	MDT (NOL)	API CF	SAE 30	30	>240	-18
Cyclon POSEIDON HT 4030				SAE 40		>240	-18
Cyclon POSEIDON HT 3040				SAE 30	40	>240	-16
Cyclon POSEIDON HT 4040				SAE 40		>240	-16
Cyclon POSEIDON HT 4050				SAE 40	50	>240	-15

GENERATOR & MEDIUM SPEED 4-STROKE TRUNK PISTON ENGINES

	Description	OEM Approval(s)	Specifications	Grade	Base No, mg/KOH	Flash Point (COC), °C	Pour Point, °C
HEAVY DUTY DIESEL ENGINE LUBRICATION							
Cyclon D SUPER Monograde	Premium, super high performance diesel (SHPD) monograde engine oil for high-speed marine and stationary engines.	MTU Cat. 2		SAE 40	14	>240	-21
Cyclon D SUPER Multigrade	High quality, heavy duty, SHPD multi-grade engine oil.	"MTU Cat. 2 MAN 3275 Cummins CES 20078 Mack EO-N Volvo VDS-3 Daimler MB-Approval 228.3 Renault Trucks RLD-2"	Deutz DQC III-10; Detroit Diesel DDC 93K215; Caterpillar ECF-2, ECF-1a; ZF TE-ML 07C; MAN M3275; MTU Cat. 2; Volvo VDS-3; Renault Trucks RLD-2; Mack EO-M Plus, EO-N; Allison C4; Daimler MB-Approval 228.3; Global DHD-1; DAF SHPD; ZF TE-ML 07C; ACEA E7, E5, E3; API CI-4, CH-4, CG-4, SL	SAE 15W40	10,6	>220	-30
Cyclon D1 SHPD Series	Synthetic, heavy duty, SHPD engine oil series.	MAN 3275 Mack EO-N Volvo VDS-3 Renault Trucks RLD-2 Daimler MB-Approval 228.3	Deutz DQC III-10; Detroit Diesel DDC 93K215; Caterpillar ECF-2, ECF-1a; ZF TE-ML 07C; MAN M3275; MTU Cat. 2; Volvo VDS-3; Renault Trucks RLD-2; Mack EO-M Plus, EO-N; Cummins CES 20076, 20077, 20078; Allison C4; Daimler MB-Approval 228.3, MB-Approval 229.1; Global DHD-1; DAF SHPD; ACEA E7, E5, E3, B3, B4, A3; API CI-4, CH-4, CG-4, SL	SAE 10W40	10,4	>220	-33
		MAN 3275 Mack EO-N Volvo VDS-3 Renault Trucks RLD-2 Daimler MB-Approval 228.3	Deutz DQC III-10; Detroit Diesel DDC 93K215; Caterpillar ECF-2, ECF-1a; Cummins CES 20076, 20077, 20078; MAN M3275; MTU Cat. 2; Volvo VDS-3; Renault Trucks RLD-2; Mack EO-M Plus, EO-N; Allison C4; Daimler MB-Approval 228.3; Global DHD-1; DAF SHPD; ZF TE-ML 07C; ACEA E7, E5, E3, B3, B4, A3; API CI-4, CH-4, CG-4, SL	SAE 15W40		>220	-30

HIGH SPEED & OTHER ENGINES

	Description	OEM Approval(s)	Specifications	Grade	Base No, mg/KOH	Flash Point (COC), °C	Pour Point, °C
Cyclon D PRIME Series	Heavy duty, mono-grade engine oils.	MTU Cat. 1 MAN 270	Caterpillar TO-2; MTU Cat. 1; Allison C-4; MAN 270; Daimler MB 228.0, MB 227.0; API CF, CF-2, SJ; ACEA E2	SAE 30	8,0	>240	-24
		MTU Cat. 1 MAN 270 MB-Approval 228.0	Caterpillar TO-2; MAN 270; MTU Cat. 1; Allison C-4; Daimler MB-Approval 228.0, MB 227.0; API CF, CF-2, SJ; ACEA E2	SAE 40		>240	-24
OUTBOARD ENGINES							
Cyclon OUTBOARD 4T	Premium quality, 4-stroke outboard engine oil.		NMMA FC-W	--	--	>215	-30
Cyclon OUTBOARD 2T ECO FORMULA	Premium quality, 2-stroke outboard engine oil.		NMMA TC-W3	--	--	>75	<-33
Cyclon CYBIO-OB 2T NEW!	Rapidly biodegradable 2-stroke oil for water/air-cooled, premix or direct fuel injection outboards meeting EU Ecolabel criteria.		NMMA TC-W3; Ecolabel-compliant	--	--	>215	<-30

AUXILIARY APPLICATIONS

	Description	Grade	Performance Level, Specifications
HYDRAULIC SYSTEMS			
Cyclon HYDRAULIC SPECIAL Series	Premium antiwear, high VI oils with EP properties for the lubrication of hydraulic systems and equipment in severe working environments. They are to be used in hydraulic and fluid power transmission systems subjected to wide variations in temperature or where a low viscosity change with fluctuating temperatures is required.	ISO 15; ISO 32-100	DIN 51524 Part 3 HVLP, ISO 6743-4 (ISO-L-HV), Parker (Denison) HF-0/HF-2, AFNOR NFE 48-603 HV, Vickers M-2950-S / I-286-S, Case IH Poclair
Cyclon HYDRAULIC Series	High quality, EP- & antiwear-enhanced hydraulic oils. Suitable for industrial & marine hydraulic systems, especially those with increased wear protection requirements, such as pumps, machine tools, forklift truck hydraulic presses and rams, earthmoving equipment, etc. NOT suitable for equipment with silver bearing surfaces.	ISO 22-150	DIN 51524 Part 2 HLP, Parker (Denison) HF-0/HF-2/ HF-1, AFNOR NFE 48-603 HM, Vickers M-2950-S/I-286-S, Eaton 35VQ25, Fives (Cincinnati Milacron) P68 (ISO 32), P69 (ISO 68), P70 (ISO 46), ISO 11158 HM (CETOP RP 91 H), ISO 6743-4 (ISO-L-HLP), Bosch Rexroth RE 90220, SAE MS 1004 (HM), JCMAS P041 HK, ANSI/AGMA 9005-E02-RO, GM LS-2, AIST (U.S. Steel) 126/127, SEB 181222
Cyclon HYDRAULIC ZF Series	Advanced technology, high purity, AW-enhanced, hydraulic oils. Being free of zinc, they are suitable for equipment with silver-plated bearings.	ISO 32-68	DIN 51524 Part 2 HLP, Parker (Denison) HF-0/HF-2, AFNOR NFE 48-603 HM, Vickers M-2950-S / I-286-S, Fives (Cincinnati Milacron) P68 (ISO 32), P69 (ISO 68), P70 (ISO 46), AIST (U.S. Steel) 126/127
Cyclon CYBIO-HFE Series NEW!	Readily biodegradable lubricant for hydraulic and power transmission systems in applications where an overall decreased environmental impact is demanded.	ISO 46-68	"ISO 15380 (HEES); Ecolabel-compliant
BEARING & CIRCULATING SYSTEMS			
Cyclon LEDA Series	Premium quality circulating oils ideal for applications that do not require anti-wear protection. Appropriate for the lubrication of bearings, vacuum pumps and lightly-loaded spur, bevel, helical and worm gears, where the highest thermal stability is required.	ISO 32-460	DIN 51524 Part 1 HL, DIN 51517 Part 1 CL, ISO 6743-5 (ISO-L-CKB)
GEAR SYSTEMS			
Cyclon TITANUS EP Series	High quality, heavy duty, lead-free gear lubricants with EP additives. Recommended for all types of enclosed gear drives, both circulation and splash lubrication systems and particularly recommended for gear sets operating under heavy or shock loads.	ISO 68-1000	ISO 6743-6 (ISO-L-CKC/-CKD/-CKG), AIST (U.S. Steel) 224, David Brown S1.53.101, DIN 51517 PART 3 CLP, AGMA 9005-E02
Cyclon TITANUS EP SYNPAO Series NEW!	Next-generation, synthetic (poly- α -olefin-based) lubricant for enclosed industrial gear and bearing systems operating at extreme (loads/temperatures) conditions.	ISO 150-220	DIN 51517-3 (2008/11), AGMA 9005-E02 (2002) EP Oils, ISO 12925-1 CKC/CKD (2002), AIST US Steel 224 (updated), Fives (Cincinnati Milacron) EP Gear Oils, Siemens MD (Flender) Revision 14, Schuler Pressen, Brugger Test (>65 N/mm ²)
Cyclon CYBIO-GEAR Series NEW!	High performance, synthetic lubricant for enclosed industrial gears and bearings in environmentally sensitive applications.	ISO 220-320	"ISO 15380 (HEES); Ecolabel-compliant
STERN TUBE & THRUSTER			
Cyclon CYBIO-STETUB Series NEW!	Premium biodegradable/non-bioaccumulative lubricant intended for the lubrication of stern tubes, complying with US EPA's 2013 VGP.	ISO 100-150	Ecolabel-compliant; US EPA VGP-compliant

	Description	Grade	Performance Level, Specifications
TURBOCHARGER SYSTEMS			
Cyclon TURBINE Series	Premium R&O turbocharger oils based on an advanced additive system. Suitable for steam, water and hydraulic turbines in industrial and marine environments. Also recommended for circulating systems requiring R&O oils, as well as hydraulic systems requiring an R&O type oil (low pressure).	ISO 32-150	DIN 51515 LTD, ISO 6743-5 (ISO-L-TGA/-TSA), AGMA R&O, B.S. 489, U.S. MIL-L-17672D, Siemens/KWV TLV 9013 04/01
AIR COMPRESSOR SYSTEMS			
Cyclon HERCULES Series	High quality, VDL-type lubricants with low evaporation losses for rotary screw and vane (ISO 32-68) and reciprocating air compressors (ISO 100-150). Exceed the requirements of top manufacturers such as Atlas Copco, Ingersoll Rand, etc.	ISO 32-150	DIN 51506 VDL (air exhaust 220°C), ISO 6743-3 (ISO-L-DAA/-DAB/-DAG/-DAH)
Cyclon HERCULES SYNPAO Series (previously HERCULES SYNTHETIC)	High performance synthetic air compressor lubricants of poly-alpha-olefin (PAO) base, suitable for reciprocating and rotary, stationary and mobile air compressors. Exceed the requirements of all major air compressor OEM's such as Atlas Copco, Bauer, Ingersoll Rand, etc.	ISO 46-68	DIN 51506 VDL, ISO 6743-3 (ISO-L-DAG/-DAH/-DAJ)
Cyclon HERCULES LPG NEW!	Synthetic (polyalkylene glycol-based) gas compressor lubricant for enclosed pattern compressors in chemical gas or LPG, LNG, HC chemical gas-filled environments.	ISO 150	ISO 6743-3 (ISO-L-DAA/-DAB/-DAC) Meets: Linde, Sulzer Burckhardt
Cyclon HERCULES SYNPOE (previously HERCULES SYNTHETIC)	High performance compressor lubricant based on synthetic ester fluids and incorporating the latest additive technology to provide outstanding performance in the most demanding applications. Specially recommended for reciprocating compressors operating at continuously high pressures and high discharge temperatures.	ISO 100	DIN 51506 VDL, ISO 6743-3 (ISO-L-DAG/-DAH/-DAJ)
REFRIGERATION COMPRESSOR SYSTEMS			
Cyclon COMET Series	Mineral naphthenic-based mineral oils with very high thermal stability, very good low temperature viscosity and low pour point. Suitable for the lubrication of refrigeration compressors operating on all types of NH3 (ammonia) and HCFC-based refrigerants, such as R12, R22, R502.	ISO 32-68	DIN 51503 KAA/KC/KA, ISO 6743-3 (ISO-L-DRA), BS 2626/75 Meets: Bock, Howden, York, Grasson, Carrier, Sabroe
Cyclon COMET SYNALB NEW!	Synthetic (alkyl benzene-based) refrigeration compressor lubricant, providing for superior miscibility with ammonia (R717), CO2 (R744), propane (R290) as well as with HCFC (R22) and CFC (R12) refrigerants, and for uses in extremely low temperatures.	ISO 68	DIN 51503 KC/KE, ISO 6743-3 (ISO-L-DRE) Meets: Bitzer, Bock, York, Sabroe, Bauer, Sauer & Sohn
Cyclon COMET SYNPOE (previously COMET SYNTHETIC)	Fully synthetic refrigeration compressor oil of poly-oleo-ester base. With low pour point, it is suitable for compressors operating with new type hydrofluorocarbon refrigerants, such as R134a, R404a, R407c, R410a/b, etc. Compatible with obsolete CFC and HCFC refrigerants.	ISO 68	DIN 51503 KD, ISO 6743-3 (ISO-L-DRD) Meets: Bock, Howden, York, Grasson
OTHER APPLICATIONS			
Cyclon FLUSHING OIL	A low viscosity oil for the flushing/cleaning of any equipment's components/internal parts.		
Cyclon AXEL Series	Highly refined, heavy duty lubricants with tackiness and antiwear additives. Specially designed for the lubrication of machine tool slides.	ISO 68; ISO 220	DIN 51524 Part 2 HLP, ISO 6743-13
Cyclon HTO THERMO	A high quality, low viscosity fluid of exceptional thermal conductivity, suitable for heat transfer systems operating between 10° and 320°C.	ISO 32	
GREASES			
Cyclon GREASE CA	Premium quality and excellent water-repellant calcium-based grease.	NLGI 2-3	DIN 51825 K2E-20; DIN 51825 K3E-20
Cyclon GREASE LI	High quality, lithium soap grease.	NLGI 2-3	DIN 51825 KP2K-25; DIN 51825 KP3K-25
Cyclon GREASE LI EP	High quality, lithium-based grease with EP additives.	NLGI 2-3	DIN 51825 KP2K-25; DIN 51825 KP3K-25
Cyclon GREASE LI COMPLEX	Multi-purpose grease of lithium complex soap and a extreme pressure additive agent, suitable for applications in an operating temperature range between -30oC and 180oC.	NLGI 2	DIN 51825 KP2R-30
Cyclon CY-WR/OG NEW!	Premium quality, lead- and solvent-free, full EP, specially thickened grease developed for the lubrication and protection of open gears, wire ropes/cables and hooks or joints that are exposed to extremes of ambient temperature and operating conditions.	NLGI 2	
Cyclon GREASE COMPLEX WTR NEW!	Advanced formulation grease based on a calcium sulphate soap and a high quality EP/AW system for superior water resistance, antiwear performance and thermal stability in harsh, demanding (temperature- & load-wise) marine and industrial applications.	NLGI 2	DIN 51825 KP2R-20
Cyclon CYBIO-GREASE NEW!	Fully biodegradable, lead- and sodium nitrite-free grease, fortified with extreme pressure, anti-oxidant, anti-wear and anti-rust additives intended for the lubrication of heavy duty bearings and couplings in US EPA VGP-compliant marine, foodgrade and other environmentally sensitive areas.	NLGI 2	Ecolabel-compliant; US EPA VGP-compliant



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