



APAR

Tomorrow's solutions today

POWEROIL®

Powering Ahead



POWEROIL

MINING & CONSTRUCTION

HIGH PERFORMANCE MINING LUBRICANTS FOR TOUGHER OPERATING CONDITIONS

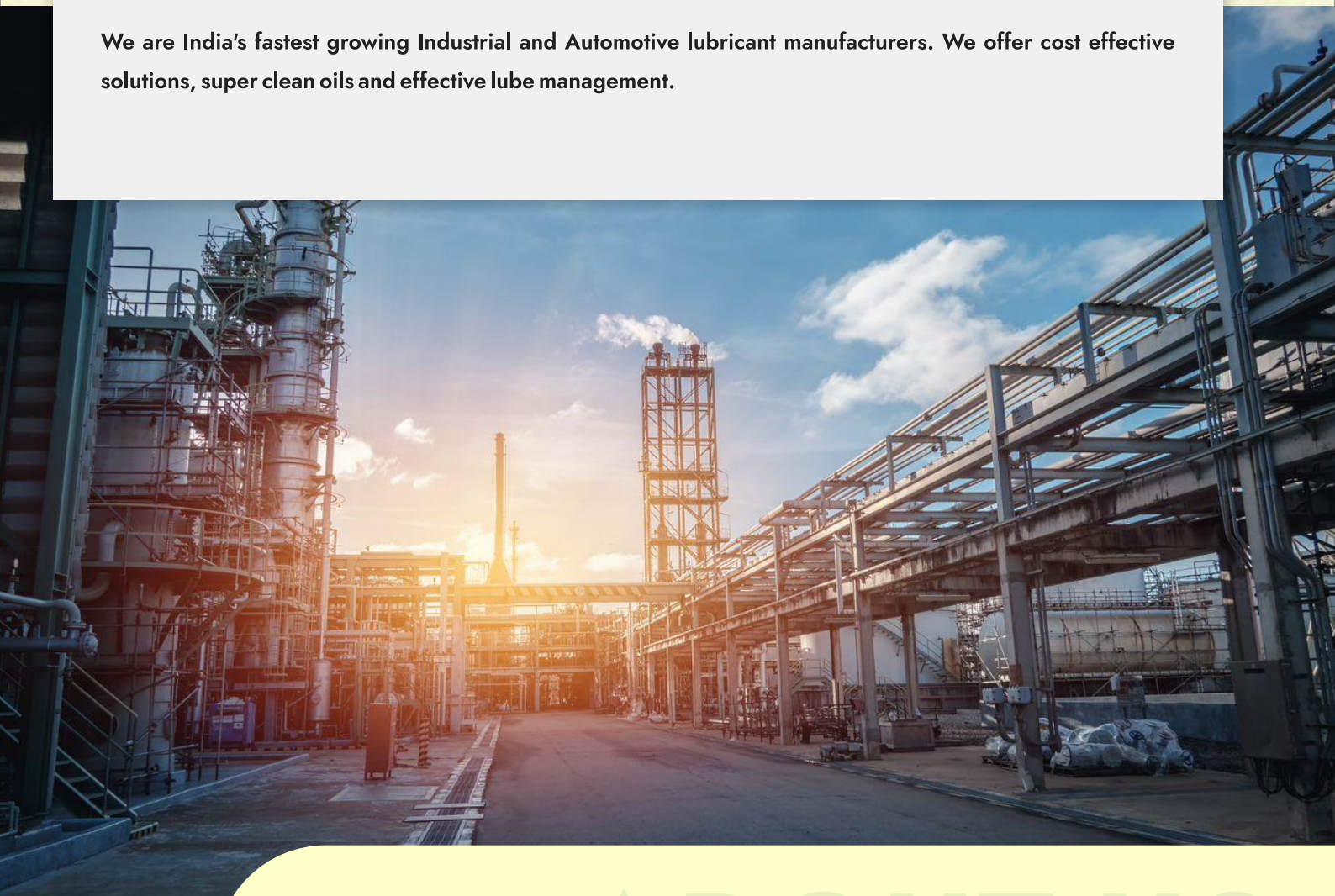


APAR Industries Limited is a multi-national manufacturing company, holding a leadership position in its three core business segments of speciality oils, conductors and cables, with a billion-dollar turnover. Our other businesses include industrial & automotive lubricants, speciality automotive and polymers. Our products have a significant market share in India and are sold in over 125 countries.

Our POWEROIL range of speciality oils encompasses 350+ grades of Transformer Oils, White Oils, Petroleum Jellies, Process Oils, Industrial and Automotive Lubricants. Out of our seven 100% owned manufacturing facilities in India, two facilities are dedicated to our speciality oils business (Rabale, Maharashtra and Silvassa, Gujarat). Our third speciality oils factory is in Hamariyah free zone (Sharjah, UAE), catering to the Middle East and North African markets. All three facilities' annual production capacity adds up to over 5,20,000 KL, (among the largest in the world). In addition to these, we have blending units in Turkey and Australia.

For over five decades, POWEROIL has been leading the industry curve with proactive product development, timely delivery and superior product attributes by reinforcing innovation, cost leadership and premium quality and living its vision 'Tomorrow's Solutions Today' resulting in reliability, respect, reputation and customer loyalty.

We are India's fastest growing Industrial and Automotive lubricant manufacturers. We offer cost effective solutions, super clean oils and effective lube management.



ABOUT US

ABOUT APAR GROUP



POWEROIL

CONSTRUCTION & MINING LUBRICANTS

APAR's POWEROIL® range of next generation high performance lubricants designed and validated for heavy duty construction & mining equipment guarantees a major technology advantage by providing extended drain intervals without compromising durability.

Our entire range of lubricants for construction and Mining comprise of

Heavy Duty Engine oils	Long life Engine coolants	Automotive Gear & Transmission oils
UTTO – Universal transmission oils	Hydraulic oils	ATF Transmission oils
Multipurpose and specialty greases	Brake fluids	Thermic Fluids



Our entire ranges of Heavy duty diesel engine oils (HDDEO) are certified by API, VOLVO & BEML. We blend our entire range of engine oils with group II+ and group III base stocks. Few advantages of our Engine oils: Extended drain interval/ Enhanced equipment life/ Lower piston deposits/ better fuel economy/ excellent friction characteristics/ better soot handling capability/ excellent shear stability (we use better base oils with higher inherent VI)/ Lower traction coefficient.



Our transmission fluid range is approved by Allison & BEML; being designed and developed in line with current rigid requirements for off-highway applications. We have unique technology driven UTTO products which surpasses the latest OEM requirements.

Our hydraulic fluids are approved by latest stringent requirement laid down by Rexroth Bosch under RDE 90245. Our entire range of hydraulic fluids are blended with a unique proprietary Additive technology and high performance base stocks to meet stringent thermal stability & oxidation requirements and also Meets improved and latest filterability/ Pump Wear requirements as specified by various equipment manufacturers for modern hydraulic systems.

We manufacture multipurpose grease like EP2 from high viscosity base-stocks and fortified with well-designed additive package, which provides excellent properties like better weld load, enhanced service interval, better wear control etc. We also have high-end greases in our product portfolio for high temperature and high load applications like Excavator bush pin, main bearing cone crushers. Increased re-greasing intervals to the tune of 7 to 10 times as compared to conventional EP2 greases.



POWEROIL Engine Super Maxima XP

SAE GRADE	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	TBN	CCS # -20°C
15W40	104.50	14.7	145	230	9.7	5152
QUALITY LEVEL	API CK-4/ CJ4/C14+/CI/CH4/ SN, ACEA E7-08, CUMMINS CES 20086, MACK EO-S 4.5, DEUTZ DDC93K222, MB 228.31, Cat ECF-3, VOLVO VDS-4.5, MAN M 3575, Renault RLD-3, Global DHD-1 HD, MTU 2.1					
PERFORMANCE BENEFITS	High Quality Ultra High-performance lubricant technology meets low SAPS requirement of modern engines fitted with EGR/SCR and DPF. Excellent compatibility with all after treatment devices to enhance their life expectancy. Its excellent composition makes it a long-life lubricant with enhanced engine protection. It is specifically developed for BS VI compliant engines and backward compatible for older versions.					



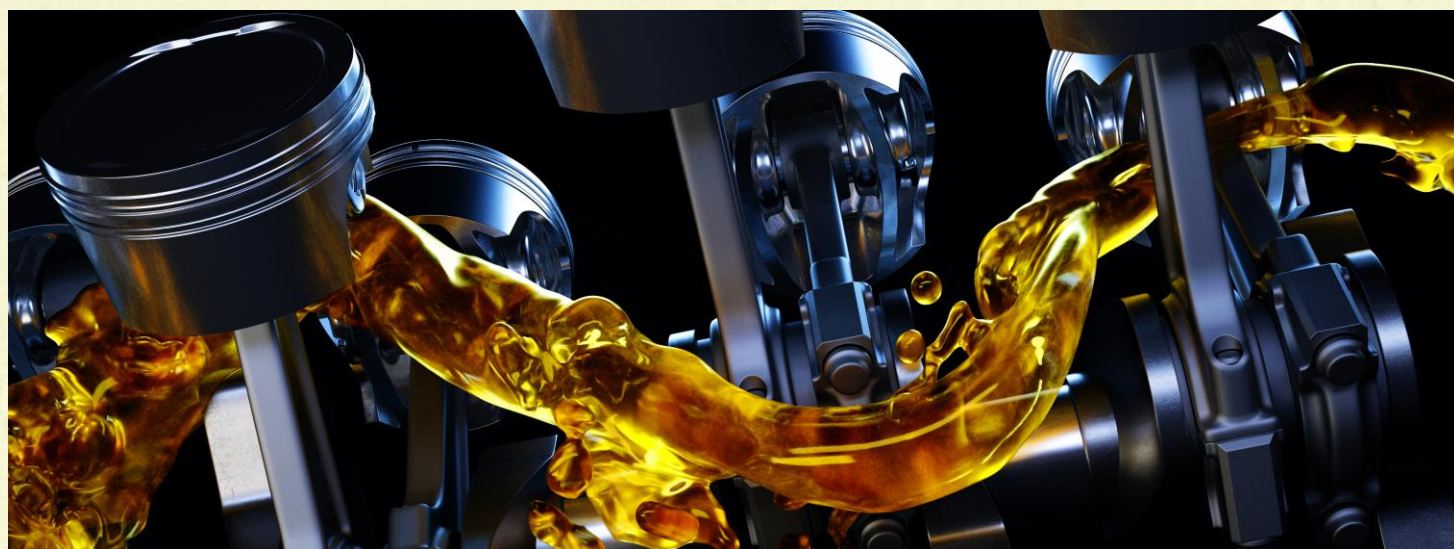
POWEROIL Engine Super Maxima Plus

SAE GRADE	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	TBN	CCS
15W40	106	14.6	141	230	10.5	5764@-20°C
10W40	97.4	13.9	145	228	10.5	6100@-25°C
QUALITY LEVEL	API CI4+/CI/CH4/ SM, ACEA E7-08, CUMMINS CES 20076/78, MB 228.3, Cat-ECF-1a/2, VOLVO VDS-3, MAN M 3575, Global DHD-1 Plus, Mack EO-N Premium, Renault RLD- 2					
PERFORMANCE BENEFITS	High Quality Ultra High-performance lubricant technology meets Mid SAPS requirement of modern engines fitted with EGR/SCR. Excellent Soot handling capabilities and shear stability makes it first choice for engines running at higher EGR levels. Its excellent composition makes it a long-life lubricant with enhanced change intervals. It is specifically developed for BS III & BS IV compliant engines and backward compatible for older versions.					



POWEROIL Engine Super Maxima

SAE GRADE	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	TBN	CCS # -20°C
15W 40	109	14.8	140	230	10	5764
QUALITY LEVEL	API CI4/CH4/ SJ, ACEA E7-08, CUMMINS CES 20075/20076, MB 228.3. Cat ECF-1a/2, VOLVO VDS-3, MAN M 3575, Renault RLD-2. Mack EO-M Plus.					
PERFORMANCE BENEFITS	Specially developed for modern engines meeting BS III emission norms fitted with EGA under Mid SAPS category. Better Soot handling capabilities as compared to earlier CH4 category. Advanced additive technology to boost the TBN retention properties and helps in reduction of piston deposits.					



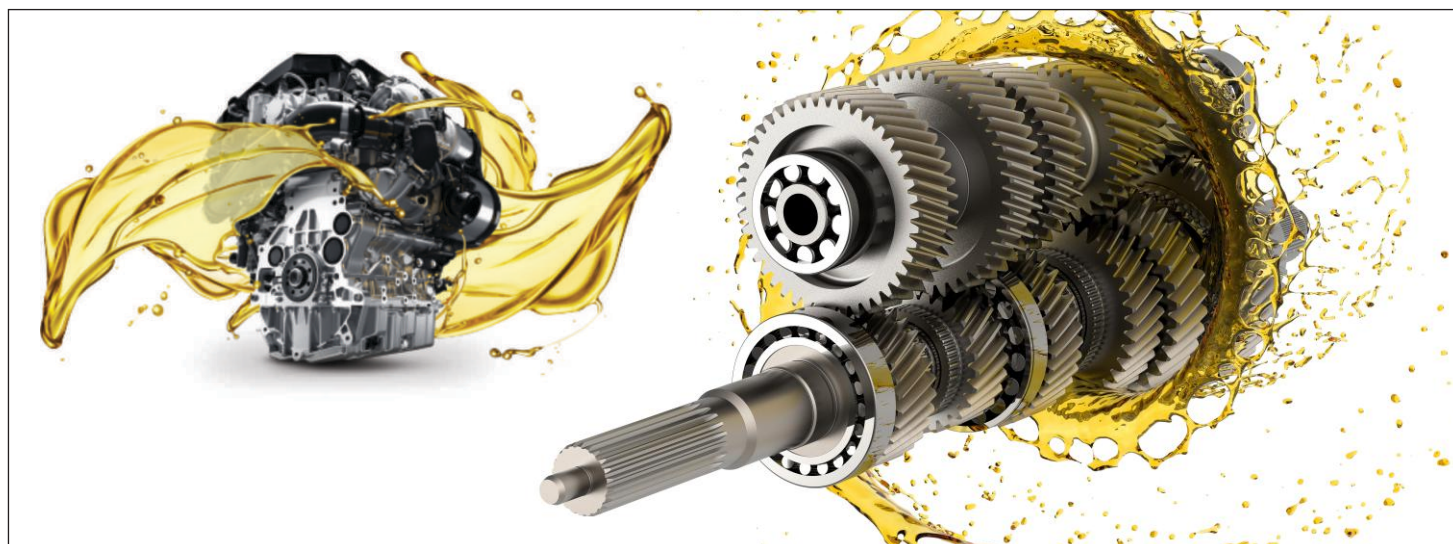
POWEROIL Engine Super Champ

SAE GRADE	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	TBN	CCS # -20°C
15W 40	111	14.5	138	230	10.2	5764
QUALITY LEVEL	API CH4/CF4 /CF/ SJ, ACEA E3-96, CUMMINS CES 20071/72/76, MB 228.3, Cat ECF-1a, VOLVO VDS-2, MAN 271. Mack EO-M					
PERFORMANCE BENEFITS	Specially developed for modern engines meeting BS II & BS III emission norms for Non EGR engines. Better seal Compatibility as compared to previous API grades. Better Soot handling capabilities as compared to earlier CH4 category. Advanced. additive technology to boost the retention properties and helps in reduction of piston deposits.					



POWEROIL Engine Super CF4 15W40

SAE GRADE	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	TBN	CCS
15W 40	112	14.7	135	228	9.5	6200@-2o c
QUALITY LEVEL	API CF4/SF, MB 228.1, MAN 271, Mack EO-K2, Alison C4					
PERFORMANCE BENEFITS	Formulated for engines operating under a wide range of service conditions. Controls high temperature deposits, Low temperature sludge protection. Excellent Oxidation/ corrosion and rust inhibition.					



POWEROIL Pride

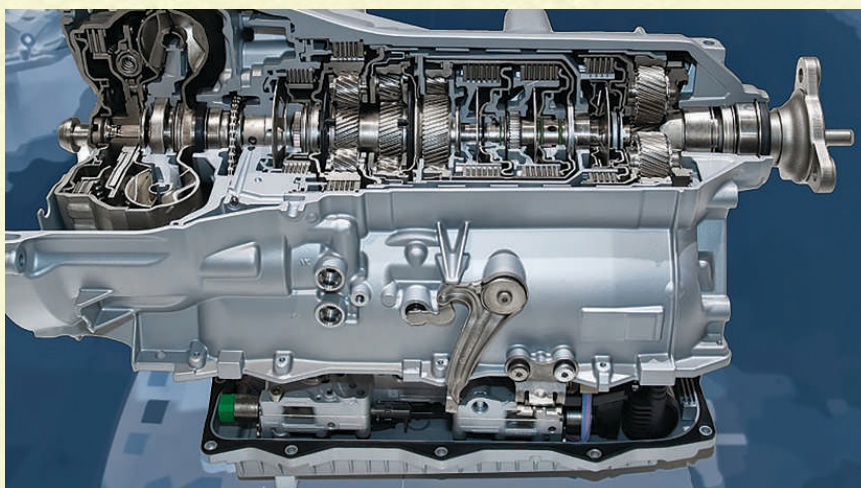
SAE GRADE	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	TBN	POUR POINT °C
20W40	140.5	15.1	110	230	9.5	-21
30	95	11	100	230	9.5	-15
40	148	14.9	100	233	9.5	-12
50	199	18.1	100	240	9.5	-12
QUALITY LEVEL	API CF4/CF/CD/CC/ SF, Mack T7/T8A, EDL-3 /EDL-4 (BIS:13656-2014), MIL-L-2104C, Cat 1K					

ENGINE COOLANTS



POWEROIL HD ZX Coolant

VISUAL	BOILING POINT	FREEZING POINT	GLYCOL %	INHIBITOR TECHNOLOGY	SPECIFIC GRAVITY	PROTECTION
Pink	129 °C *	-37 °C	50-51	Long Life OAT	1.068 -1.078	5 Years on Initial fill
QUALITY LEVEL	JIS-K-2234 Class 2, AST M D 6210, ASTM D 3306, ASTM D 1384					
PERFORMANCE BENEFITS	Universal long life engine coolants compatible with all six standard metals -brass, copper, Steel, solder, cast iron and aluminum. Provides improved Cylinder Liner pitting protection. Provides improved Aluminum and Solder protection. Negligible tendencies to form Gel in Cooling System.					



TRANSMISSION OIL

POWEROIL Transmission C4

SAE GRADE	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	TBN	POUR POINT °C
10W	38	6.2	110	180	8.5	-30
30	95	11.28	105	210	8.5	-18
QUALITY LEVEL	TES 228 of DDA G.M, U.S.A, C4 Alison Transmission, API CD+/CF, Approved by BEML & Alison transmission					
PERFORMANCE BENEFITS	Approved by Allison under C4 category and meets latest EDL-3 of IS 13656 specifications. Latest additive technology to reduce losses in transmission thus improves fuel economy. Also meets the requirements as laid by Komatsu for transmission oils. The best quality friction modifiers for smooth gear shifting.					



POWEROIL Auto Transmission Fluid A

GRADE	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	POUR POINT °C
ATF	39.5	7.5	160	180	-39
QUALITY LEVEL	GM Type A Suffix A, TES-122 Of Detroit, TEMPL03 ZF				
PERFORMANCE BENEFITS	POWEROIL Auto transmission Fluid A is recommended for use in Automatic transmission and powersteering units of Earthmoving machineries / trucks and buses. Latest additive technology to provide excellent friction characteristics for smooth and noiseless working. Excellent oxidation, thermal stability, and detergency to prevent formation of Varnish, sludge, and other deposits. Excellent seal compatibility and does not have any adverse impact on non-ferrous alloys.				



HYDRAULIC OIL



POWEROIL Ultimo (HVI / HVLP Hydraulic Oil)

ISO VG GRADE	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	FZG PASS LOAD TEST	POUR POINT °C
32	32.5	6.47	155	210	12th	-39
46	45.3	8.0	150	220	12th	-30
68	67.4	10.8	150	230	12th	-30
QUALITY LEVEL	BIS: 10522, DIN 51524 PART II/III, MILACRON P-68/69/70, ISO 1158, IS 11656 Latest, AFNOR NF E 48-603. Bosch Rexroth RE90220/					
PERFORMANCE BENEFITS	This product meets super HVI category having VI more than 150. Because of its unique additive package, it is also suitable for use in surface miners. Excellent thermal, oxidation, and shear stability. Excellent air release and demulsibility properties. We use high standard hydrocracked group III base oils with higher inherent VI to be more stable at varied and frequent changes in operating conditions.					



POWEROIL Hydrol HLP

ISO VG GRADE	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	CORROSION TEST- DIN 51585	POUR POINT °C
32	32	5.5	>110	210	1a	-15
46	46	7.15	>105	230	1a	-15
68	68	9.35	>105	230	1a	-15
QUALITY LEVEL	IS: 10522, DIN 51524 PART-II, MILACRON P-68/69/70, ISO 1158, IS 11656 Latest, Bosch Rexroth RE 90220/90245, Denison HF-0					
PERFORMANCE BENEFITS	Product approved by Rexroth Bosch / Cincinatti Milacron and Various OEM's. Hydrocracked base oils with higher VI. Excellent thermal and oxidation stability almost double as compared to market trend. Very low air release value to the tune of 64% lesser as compared to market trend. 75% more wear protection as compared to market trend. 25% Better demulsibility as compared to best product in market.					



AdBlue® (Diesel Exhaust Fluid)

POWEROIL AdBlue® (Diesel Exhaust Fluid)

Guidelines to store AdBlue:

- Store in well ventilated indoor room.
- Don't store in direct sunlight
- Protect against any contamination of fuel, oil, water, dust, metals, detergent etc.
- Mentioned below storage temperature and shelf life as per ISO 22241.

Average Product Temperature °C	Minimum Shelf-Life Months
<10	36
<25	12
<30	18

PNEUMATIC OIL

POWEROIL Pneumatic 100						
ISO VG GRADE	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	RUST TEST	POUR POINT °C
100	98.99	11.32	100	228	Pass	-15
QUALITY LEVEL	BIS: 10522, DIN 51524 PART II/III, MILACRON P-68/69/70, ISO 1158, IS 11656 Latest, AFNOR NF E 48-603. Bosch Rexroth RE90220/					
PERFORMANCE BENEFITS	Excellent Extreme pressure properties. Excellent Tackiness and adhesive quality. Excellent rust/oxidation and corrosion protection. Excellent demulsibility properties.					



GREASES



POWEROIL Heavy Duty LC2M Grease

NLGI Grade	VISCOSITY @40°C	Weld Load, Kg	Oil Separation %	DROP POINT	Soap Type	MOS2
2	460	>720	0	>260	Lithium Complex	> 3%
PERFORMANCE BENEFITS	This product is a premium grease blended with base oil viscosity of VG 460. Enhanced service life to the tune of 10 times as compared to conventional products. Recommended for high load high temperature applications. Excellent mechanical stability even under high vibrating shock loads. Fortified with MoS2 additives to ensure wear protection at high loads and in boundary lubrications regimes.					



POWEROIL Gem Ep2

NLGI Grade	VISCOSITY @40°C	Weld Load, Kg	Timken Ok Load,Kg	Soap Type	Drop Point
2	VG 150	250	30	Lithium	>180
PERFORMANCE BENEFITS	This product is a premium grease blended with base oil viscosity of 145-150 cSt. Enhanced service life to the tune of 30% as compared to conventional products. Excellent wear protection, 20% better than conventional products. 15% better load carrying capacity as compared to market trend.				

MP2/ MP3 /EP1/ EP0/ EP00 & LC2 are also available



POWEROIL Gear EP

SAE Grade	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	POUR POINT °C
90	196	17.46	96	238	-12
80W90	151	14.75	97	220	-27
140	471	29.08	96	230	-12
85W140	399	28.28	97	230	-15
QUALITY LEVEL	API GL-5, BIS:1118 EP Type (Latest), MIL-L-2015D, CS 3000A, MAN 342, SCANIA STO 1:0, Volvo 1273.10, ZF TE-ML				
PERFORMANCE BENEFITS	Latest technology additives to reduce losses in transmission. Excellent low temperature characteristics. Excellent wear control. Excellent shock load dissipation capacity. Excellent Rust /oxidation and foaming protection.				



POWEROIL Gear HP

SAE Grade	VISCOSITY @40°C	VISCOSITY @ 100°C	VISCOSITY INDEX	FLASH POINT	POUR POINT °C
90	196	17.46	96	238	-12
80W90	151	14.75	97	220	-27
140	430	29.04	96	230	-12
QUALITY LEVEL	API GL-4, BIS:1118 EP Type (Latest), MIL-L-2015,CS 3000A				
PERFORMANCE BENEFITS	Latest technology additives to reduce losses in transmission. Excellent low temperature characteristics. Excellent wear control. Excellent shock load dissipation capacity. Excellent Rust and oxidation and foaming protection.				

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