

PRODUCT CATALOGUE

Automotive







Dear Customer,

At PALCO, we are engaged in continuously sharpening our competitive edge & in the rapidly changing landscape of technology and commerce in business it is essential to continuously fine tune our growth engine. We are laying renewed emphasis on bringing superior products, designing innovative processes and building customer confidence.

This catalogue provides a greater understanding of automotive & auto care products manufactured and marketed by PALCO and this information would serve as a reference material. However, for proper recommendation and application of these products, our customers are requested to avail the services of our experienced sales technical personnel's.

All of us at PALCO are passionate about work and excited about the road ahead. We remain fully committed to customer requirement and render services to uphold our own principles and have continual improvement.

We feel pleasure in presenting this catalogue on Automotive Lubricants to our valued customers, which we hope, would serve as ready-reckoner.

Warm regards
Sd/Paras Kumar Bansal
Managing Director

Dated: August, 2023

INTRODUCTION



We take this opportunity to introduce ourselves as one of the leading manufacturer of Automotive, Industrial & Specialty Lubricants. These products are manufactured by using a variety of high performance modern chemistry base oils with a combinations of Ash less/Metallic Additive packages, so as to meet the stringent requirements of Fuel Economy, Euro/Bharat Stage Norms, Environmental considerations, Energy efficiency etc. The products thus produced meets the requirements of National as well as International Specifications like API, ACEA, JASO, DIN, ISO etc. Based on our stringent quality control / testing, number of our products have received American Petroleum Institute (API) certification, Japanese Automotive Standards (JASO) etc. This have paved the way for us to supply our products to various Govt. departments & big industries.

In view of continuous R&D in the automobile industry, latest small and compact engines are being introduced by Automobile Manufacturers from time to time with lean oil to fuel ratio, concept of Bore Polishing in Diesel Engines, Turbo Charging etc. This put lot of stress on the performance of the oil. Team PALCO is always aware of this Global development, challenges and takes necessary steps to introduce these products tailor to the market needs and requirements. Further the technical service department of the company offers services in trouble shooting, problem solving, lube oil management & energy management.

Finally customer is our first priority and customer satisfaction is our motto. Zero defect in manufacturing and 100% customer's satisfaction, is our aim and objectives.

Sd/.-Dr.V.K. Chhatwal Executive Vice President



AUTOMOTIVE LUBRICANTS

PRODUCT NAME	PAGE NO.	
CAR ENGINE OILS		
GARNET 5W30 & 10W40	1	
LEOPARD 5W30	'	
ENERGY-20W50 & 20W40	2	
PHG 20W50	۷	
TWO WHEELERS OILS		
2T POWER, GOLD & SUPREME	3	
4T BOSS 20W40 & 20W50	J	
4T DART 20W40 & 10W30	4	
SOLITAIRE-20W40	7	
TRIDENT 20W40	5	
PANTHER 10W30	Ů	
TRAIO 10W30	6	
GAJRAJ 15W50	Ŭ	
GAJRAJ PLUS 15W50	7	
FRONT FORK OIL	,	
DIESEL ENGINE OILS		
PHD 10W	8	
PHD-30,40 (CAPTAIN) & PHD-50	, in the second	
PHD 15W40 & PHD 20W40 (COMMANDER)	9	
PMG 20W40 (SHAKTIMAN)		
PPG 4 15W40 & 20W40	10	
HITECH 15W40		
HITECH PLUS 15W40	11	
TRACTOR ENGINE OILS		
UNITRACK 20W	12	
TRACTOR SAMRAT 20W40 & 20W50	12	

PRODUCT NAME	PAGE NO.		
OTHER ENGINE OILS			
PHB 20W40 (BOUNCER)	13		
ENGINE OIL SAVER	10		
PUMP SET OIL			
PPS 2	14		
GEAR / TRANSMISSION OILS			
EP 90,140 & 80W	15		
HYPOID 90,140,75W90,80W90 & 85W140	10		
TRANSOL A	16		
TRANSFLUID C4 10W&30	10		
BRAKE FLUID & COOLANTS			
HAWK DOT 3 & DOT 4	17		
ICY KOOL & MINT KOOL	18		
ULTRA COOL	10		
GREASES			
AP 2 & AP 3 GREASES	19		
GP 3 GREASE	10		
MEGALIFE GREASE	20		
RUBY GEL			
WB GREASE	21		
CHASSIS GREASE	- '		
CHARACETRISTICS			
OIL & COOLANTS	22-24		
BRAKE FLUID & GREASES	25		



AUTOMOTIVE LUBRICANTS





GARNET 5W30 & 10W40



GARNET 5W30 is a Synthetic Crank Case oil manufactured using high quality of base oils produced through isomerization & severe hydrogenation process. Fortified with combination of modern additives, which provides protection against deposits / sludge's rust & corrosion. Its highly stable molecular strength gives trouble free operation with lower maintenance cost and gives high fuel efficiency with longer engine life.

APPLICATIONS: Recommended for modern day high performance cars running on Petrol / Diesel / CNG like Tata Motors, Hyundai Motors, Maruti, Datsun, Toyata, BMW, GM, Chevrolet, Ford etc.

 $\textbf{PERFORMANCE LEVEL:} \ \textit{Meets API SN/ACEA-A5/B5 requirements}.$

PACKING: 5W30: 210L, 50L, 5L, 3.5L, 3L, 1L **10W40:** 210L, 50L

LEOPARD 5W30

LEOPARD 5W30 is a cost effective Semi-Synthetic Crank Case lubricant manufactured through oils produced by isomerization & hydro cracking process. It contains a balanced combinations of modern performance additives like antioxidants, VI Improvers, Anti-wear, Extreme Pressure (EP) & metal deactivators which protects the engine against sludge & deposits. Its high viscosity index & low pour point provides optimum viscosity & fluidity across a wide range of temperatures.

APPLICATIONS: Recommended for modern day high performance cars running on Petrol / Diesel / **CNG like Tata Motors, Hyundai Motors**, Maruti, Datsun, Toyata, BMW, GM, Chevrolet, Ford etc.

PERFORMANCE LEVEL: Meets API SM/CF Grade performance level requirements.

PACKING: 210L, 50L, 3.5L, 1L





ENERGY 20W50 & 20W40



ENERGY 20W50 & 20W40 are super-premium multigrade oils for gasoline / diesel engines, meeting API: SL/CF, performance requirements. They are made from highly refined Group II base oils and selected additives to keep the engine easy start in all weather conditions. Due to excellent oxidation and nitration resistance, it extends the oil drain interval reducing the operation cost.

APPLICATIONS: Recommended for the modern petrol engine passenger cars and can also be used in cars using CNG/LPG as fuel.

PERFORMANCE LEVEL: IS 13656 -2002 (E-PL4/E-DL3), API: SL/CF specifications.

PACKING: ENERGY 20W50: 210L, 50L, 3L, 1L **ENERGY 20W40:** 3L

PHG 20W50

PHG 20W50 is multigrade gas engine oil, meeting API: SF/CD performance requirements. It is specially developed for vehicles operating on CNG/LPG with dual fuel kit i.e. suitable for operating on petrol/diesel also. It is formulated with high viscosity index base oil and specially selected additives.

APPLICATIONS: Recommended for all cars, taxi, 3 wheelers and commercial vehicles, running on CNG/LPG. Also suitable for vehicles/engines running on petrol/diesel.

PERFORMANCE-LEVEL: IS 13656-2002 (E-DL2/E-PL2), US MILITARY, MIL-L-2104C, and API: SF/CD specifications.

PACKING: 2101, 501, 11, 500ml





2T POWER, 2T POWER GOLD & 2T SUPREME



2T POWER, 2T POWER GOLD & 2T SUPREME are superior products developed for two stroke petrol engines & are blended from highly refined base oils, additives & a diluent to provide easy mixing with fuel. These products minimize spark plug fouling & pre ignition, prevent rusting & provide protection against scuffing, seizure & wear.

APPLICATIONS: Recommended for 2 stroke air cooled gasoline engines used in scooters, motor cycles, mopeds, three wheelers etc. and small equipment such as sprayers, pumps, generators, agro-implements like pesticide blowers, tillers, chain saws etc.

PERFORMANCE LEVEL: 2T POWER - EXCEEDS API: TC; 2T SUPREME - JASO: FC specifications.

PACKING: 2T POWER: 210L, 50L, 20L, 5L, 1L, 500ml; 2T POWER GOLD: 210L, 50L,

1L,500ml **2T SUPREME**: 210L, 40ml

4T BOSS 20W40, 20W40 (RED) & 20W50

4T BOSS 20W40, **20W40** (**RED**) & **4T BOSS 20W50** are premium quality multigrade engine oils are formulated to meet the special requirements of high performance 4 stroke, two and three wheelers. It provides total engine protection viz. protection from rust, corrosion, high temperature, wear & tear etc.

APPLICATIONS: Recommended for all new generation 4 stroke, two wheelers, plying under severe duty conditions like frequent stop & go, dusty environment, variable climatic conditions etc. viz. Hero Honda, Bajaja, Tys. Yamaha, Suzuki, LML, Kinetic etc. and three wheelers also.

PERFORMANCE LEVEL: IS 13656 - 2002 (E-PL4), JASO: MA/API: SJ specifications.

PACKING: 4T BOSS 20W40, 20W40 (RED): 210L, 50L, 1L, 900ml

4T BOSS 20W50: 210L, 1L





4T DART 20W40, 20W40 (RED) & 10W30



4T DART 20W40, **20W40 (RED) & 10W30** are formulated from high quality of base oils doped with additives which provides high level of oxidation & thermal stability. It protects the engine from high temperature wear & also from rust & corrosion.

APPLICATIONS: Recommended for new generation of 4-Stroke vehicles, two wheelers like Bajaj, TVS, Hero Honda, Yamaha, LML, Kinetic & Three wheelers also.

PERFORMANCE LEVEL: IS 13656 – 2002 (E-PL3), API: SG specifications.

PACKING: 210L, 1L, 900ml

SOLITAIRE 20W40

SOLITAIRE 20W40 is premium quality multi-grade engine oil (SAE 20W40), formulated with Solitaire Protective Synthetic Chemistry, specially developed to meet the requirements of high performance 4 stroke two and three wheelers. It provides strong oil film for lubrication and total protection to engine viz. protection from rust, corrosion, with reduced wear under a wide temperature range in air-cooled new generation 4 stroke motorcycles.

APPLICATIONS: Recommended for all new generation 4 stroke, two wheelers, plying under severe duty conditions like frequent stop & go, dusty environment, variable climatic conditions etc. viz. Honda, Hero Honda, Bajaj, TVS, Yamaha, Suzuki, LML, Kinetic etc. and three wheelers also.

PERFORMANCE LEVEL: API SN Grade performance level & exceeds the stringent requirements of JASO: MA-2.

PACKING: 210L, 50L, 1L, 900ml



Pileo

TRIDENT 20W40



TRIDENT 20W40 is premium quality multi-grade engine oil (SAE 20W40), formulated with Trident Protective Synthetic Chemistry, specially developed to meet the requirements of high performance 4 stroke two and three wheelers. The special synthetic chemistry protects the engine from rust, corrosion, with reduced wear under a wide temperature range in air-cooled new generation 4 stroke motorcycles.

APPLICATIONS: Recommended for all new generation 4 stroke, two wheelers, plying under severe duty conditions like frequent stop & go, dusty environment, variable climatic conditions etc. viz. Honda, Hero Honda, Bajaj, TVS, Yamaha, Suzuki, LML, Kinetic etc. and three wheelers also.

PERFORMANCE LEVEL: IS 13656 – 2002 (E-PL4), Exceeds most stringent performance requirements of JASO: MA-2 and API: SL specifications.

PACKING: 210L, 50L, 1L, 900ml

PANTHER 10W30

PANTHER 10W30 is premium quality multi-grade engine oil (SAE 10W30), specially developed to meet the requirements of high speed 4 stroke air cooled engines of new generation motorcycles. It is formulated with ECG Protective Synthetic Chemistry, to provide total protection to Engine components, Clutch and Gear box.

APPLICATIONS: Recommended for all new generation 4 stroke, two wheelers, plying under severe duty conditions like frequent stop & go, dusty environment, variable climatic conditions etc. viz. Honda, Hero Honda, Bajaj, TVS, Yamaha, Suzuki, LML, Kinetic etc. and three wheelers also.

PERFORMANCE LEVEL: 18, 13656-2002 (E-PL4), Exceeds most stringent performance requirements of JASO: MA-2 and APLSE specifications.

PACKING: 210L, 50L, 900ml



PL

TRAIO 10W30



TRAIO 10W30 is a low friction 4-stroke engine oil formulated from high quality hydrocracked base oils and advanced additive technology. TRAIO 4T provides triple protection to the engine from High heat, Friction and Less Sludge formation especially in dense congested traffic where stop-a-go movement of the vehicle is prevalent. Special additives not only provides the protection from valve train wear but also provides smooth and easy driving.

APPLICATIONS: Recommended for modern 4-Stroke generation gearless scooters using CVT transmission.

PERFORMANCE LEVEL: IS 13656 – 2002 (E-PL4), JASO: MB/API: SL specifications.

PACKING: 210L, 50L, 800ml

GAJRAJ 15W50

GAJRAJ 15W50 is high quality of motor cycle engine oil developed specifically to meet the special requirements of latest high

performance air-cooled 4-stroke motorcycles. It is blended from high quality of isomerized base oils and doped with combinations of antioxidants, detergent/dispersants, antiwear & rust corrosion inhibitors to exceed the most demanded lubrication requirement of modern 4- stroke motor cycles.

APPLICATIONS: Recommended for advanced 4-stroke bikes like Thunderbird 500, Thunderbird 350, Classic Desert Storm 500, Bullet 500 EFI, Bullet 350, M Classic Chrome, Classic 500, Bullet Electra Delux, Bullet Electra EFI etc.

PERFORMANCE LEVEL: Exceeds most stringent requirements of API SL, JASO MA2.

PACKING: 2.5L

PL

GAJRAJ PLUS 15W50



GAJRAJ PLUS 15W50 is a premium quality of motor cycle engine oil developed specifically to meet the special requirements of latest high performance air-cooled 4-stroke motorcycles. It is blended from high performance base stocks and advanced additive technology to exceed the most demanding lubrication requirements of modern 4-Stroke motorcycles.

APPLICATIONS: Recommended for advanced 4-stroke bikes like for various models of Royal Enfield vehicles like Bullet 500, 350 Twin Spark, Thunder Bird 500, Classic 500, Classis Chrome, Classic Desert Storm 500 and other vehicles like Yamaha FZ1 & FZ8, Yamaha MT 09, Suzuki GSX R750 etc.

PERFORMANCE LEVEL: Exceeds most stringent requirements of API SN, JASO MA2.

PACKING: 2.5 L

FRONT FORK OIL

FRONT FORK OIL is formulated using high performance base oils & combination of additives so as to provide excellent damping effect for shock absorbers used in motorcycles. This oil has excellent viscosity temperature control, high oxidation stability for longer oil life & antifoam properties. It has also very good seal compatibility.

APPLICATIONS: Recommended as hydraulic fluid for front fork of motorcycles & other shock absorbers mechanism.

PACKING: 210L, 20L, 350ml, 175ml





PHD 10W

PHD 10W is high quality of heavy duty diesel engine oil which meets API: CD, US Military MIL-L-45199B performance requirements. This oil is formulated using high quality of base oils & selected additives to suit severe duty diesel engine services.

APPLICATIONS: Recommended for use in naturally aspirated super charged and turbo charged diesel engines operating round the clock and under heavy loads in application such as stationary DG Sets, Off-highway, construction equipment, earthmoving equipment etc. Also recommended as hydraulic fluid for caterpillar transmission systems.

PERFORMANCE LEVEL: IS 13656-2002 (EDL2), MIL-L-45199B, API: CD & C2 Specifications of Detroit Diesel Allison Division of General Motors, USA.

PACKING: 210L, 50L, 20L

PHD-30, PHD-40 (CAPTAIN) & PHD-50

PHD-30, **PHD-40** (**CAPTAIN**) & **PHD-50** oils are high quality monograde engine oils, meeting API: CD performance requirements. Formulated from selected base oils and additives, to suit diesel engines requirement.

APPLICATIONS: Recommended for lubrication of all turbo-charged 4-stroke diesel engines, earth moving equipment/power generating sets operating under severe duty conditions.

PERFORMANCE LEVEL: IS 13656-2002(E-DL3), US MILITARY MIL-L-2104C, API: CF & MACK T-7 specifications.

PACKING: PHD 40 (CAPTAIN): 210L, 50L, 20L, 5L, 1L

PHD 30&50: 210L, 50L, 20L





PHD 15W40 & PHD 20W40 (COMMANDER)



PHD 15W40 & PHD 20W40 (COMMANDER) oils are high quality multigrade engine oils, meeting API:CF performance requirements & formulated from selected base oils and additives, to suit diesel engines requirements.

APPLICATIONS: Recommended for lubrication of all 4-stroke diesel engines / turbo charged engines of heavy vehicles and heavy earth moving machinery and power generating sets, operating under severe duty conditions.

PERFORMANCE LEVEL: IS13656-2002(E-DL3), API: CF and exceeds US MILITARY MIL-L-2104C, MACK T-7 specifications.

PACKING: PHD 15W40: 210L, 50L, 20L, 1L, 500ml

PHD 20W40 (COMMANDER): 210L, 50L, 20L, 10L, 7.5L, 6L, 5L,1L

PMG 20W40 (SHAKTIMAN)

PMG 20W40 (SHAKTIMAN) is premium quality, heavy duty multigrade engine oil, meeting API: CF/SF performance requirements. It is blended from selected highly refined base oils and contain an additive package with antioxidant, antiwear, anticorrosion, detergent, dispersant and antifoam agents, to suit petrol and diesel engines. It can combat corrosive wear that may result by using high sulphur fuels; due to its good built-in alkaline reserves.

APPLICATIONS: Recommended for Naturally aspirated / super charged, turbo charged, diesel engines & gasoline engines, operating with high ring zone temperatures, under severe duty conditions.

PERFORMANCE LEVEL: IS 13656-2002 (E-DL3 / E-PL2), MIL-L-2104D and API: CF/SF & MACK T-8A specifications.

PACKING: 210L, 50L, 20L, 10L, 5L, 1L





PPG 4 15W40 & 20W40



PPG4 15W40 & 20W40 are high quality multigrade engine oils, meeting API:CF-4/SJ & MB 228.1 performance requirements, formulated from selected high quality group III base oils and additives, to suit petrol and diesel engines requirements operating under severe duty conditions.

APPLICATIONS: Recommended for commercial road transport and off-highway vehicles applications, Power shift transmissions and mobile hydraulic systems, New generation automotive vehicles.

PERFORMANCE LEVEL: IS 13656-2002 (E-DL5/ E-PL4), CCMC D5, US MILITARY MIL-L-2104 E, API:CF-4/SJ & MB 228.1, ACEA E2/B3, VOLVO VDS & C4 of Detroit Allison specifications.

PACKING: PPG 415W40: 210L, 50L, 26L, 20L, 15L, 13L, 10L, 8.5L, 7.5L, 6L, 5L, 3L, 1L

PPG 4 20W40: 210L, 50L, 20L, 10L, 7.5L, 6L

HITECH 15W40

HITECH 15W40 is super premium multigrade engine oil, meeting API:CI -4/SL & MB 228.3 performance requirements; specially developed for new generation heavy duty super & turbocharged diesel engine driven HCVs. It is made from high quality Group II and Group III base oils and selected additives which ensures engine durability also under adverse conditions.

APPLICATIONS: Recommended for Mixed fleets of both new generation gasoline and diesel engines, Constructions, marine, mining and heavy duty stationary engines, Engines incorporating Exhaust Gas Recirculation (EGR), Turbo charged diesel engines.

PERFORMANCE LEVEL: API: CI-4/SL & MB 228.3, MAN3275, VOLVO VDS-3, ACEA E7/E5 specifications.

PACKING: 210L, 50L, 20L, 15L, 10L, 7.5L, 7L, 5L, 3.5, 1L



HITECH PLUS 15W40



HITECH PLUS 15W40 is Heavy Duty Diesel Engine Oil designed with dispersive polymers Technology (DPT) to meet the lubricating requirements of latest ultra-low emissions diesel engines. It is especially effective at sustaining engine durability where exhaust gas recirculation (EGR) is used & protecting after treatment exhaust devices. Formulated from premium quality base stocks & advanced additive technology.

APPLICATIONS: Recommended for mixed fleets of both new generation gasoline and diesel engines. Constructions, marine, mining and heavy duty stationery engines. Engines incorporating exhaust gas recirculation (EGR). Turbo charged diesel engines.

PERFORMANCE LEVEL: API: CI-4+/SL & MB 228.3, MAN3275, VOLVO VDS-3, ACEA E7/E5 specifications.

PACKING: 210L, 50L, 15L, 10L, 7.5L

UNITRACK 20W



UNITRACK 20W is a premium quality of multipurpose universal tractor transmission oil blended from high quality hydro cracked base oils. The product is doped with tailor made additives specifically used for wet brake, hydraulic, clutch & transmission system in today's farm tractors & construction machinery. The oil has high oxidation stability, good thermal stability, excellent seal compatibility & high protection against rust & corrosion.

APPLICATIONS: Recommended for use in transmission, hydraulic & wet brake systems of tractors & construction machinery suitable for new generation tractors having oil immersed brakes, Tractors of Mahindra & Mahindra, Eicher, TAFE, SAME having wet brake systems.

PERFORMANCE LEVEL: Meets John Deere J20C, J20D, Ford New Holland M2C 134D, Massey Ferguson M1110, 1127 (A&B), Allison C-4 & C-3, Caterpillar TO-2 specifications.

PACKING: 210L, 50L, 26L, 20L, 10L, 5L, 1L

TRACTOR SAMRAT 20W40 & 20W50

TRACTOR SAMRAT-20W40 & 20W50 are multigrade engine oils, meeting API: CF performance requirements; specially formulated after extensive research & development work for use in tractor engines, experiencing greater torque and load.

APPLICATIONS: Recommended for Diesel tractors from Escorts, FORD, HMT, Eicher, Swaraj, Mahindra, Massey Ferguson makes etc. and earth movers, operating under severe duty conditions in field and on roads with heat, dust, cold, heavy loading etc.

PERFORMANCE LEVEL: IS 13656-2002 (E-DL3), US MILITARY MIL-L-2104C, API: CF and exceeds MACK T-7 specifications:

PACKING: TRACTOR SAMRAT 20W40: 210L, 50L, 20L, 7.5L, 6L, 1L TRACTOR SAMRAT 20W50: 210L, 50L, 20L, 10L, 8L, 7.5L, 6L, 1L



PHB 20W40 (BOUNCER)



PHB-20W40 (BOUNCER) is high quality performance multigrade engine oil, meeting API:SC/CC performance requirements, formulated from selected base oils and additives, to suit petrol and diesel engines.

APPLICATIONS: Petrol engines, naturally aspirated and supercharged diesel engines, power generating sets etc. operating under moderate duty conditions.

PERFORMANCE LEVEL: IS 13656-2002 (E-PL1/E-DL1), US MILITARY MIL-L-2104B, API: SC/CC specifications.

PACKING: 210L, 50L, 20L, 5L, 1L, 1L Pouch, 500ml

ENGINE OIL SAVER

ENGINE OIL SAVER has been developed to improve viscosity and viscosity Index of engine oil, thus reducing oil consumption & smoke exhaust levels and improving engine compression. It is premium quality mineral oil base product, carefully blended from selected hermavis based additives. The product is most efficient and popular, particularly in extending the life of an old worn out engine and to plan for major overhaul of an engine of a vehicle.

APPLICATIONS: To be added in 5 to 10% by volume in engine oil, depending upon the condition of old engines of cars, commercial vehicles, stationery engine etc. or as recommend by service centers.

PACKING: 20L, 400ml



PPS 2



PPS 2 is a monograde engine oil, meeting API: SC/CC performance requirements. It is specially formulated from petroleum mineral oil, fortified with additives, to meet antiwear and foam inhibitor requirements of petrol/diesel pump sets used for agriculture applications.

APPLICATIONS: Recommended for stationary petrol/diesel engines, equipped with agriculture pump sets/power generator sets, operating under moderate duty condition.

PERFORMANCE LEVEL: IS 13656-2002 (E-PL1/E-DL1), US MILITARY MIL-L-2104B and API: SC/CC specifications.

PACKING: 210L, 5L, 4L, 3.5L, 1.5L, 1L

Piles

EP 90,140 & 80W



EP-90, 140 & 80W are premium quality extreme pressure gear oils blended from highly refined, high viscosity base oils with good oxidation stability. These oils are also fortified with combinations of additives which provides outstanding load carrying properties, good anti foaming / anti wear characteristics for long term performance.

EP 80W due to its low pour point (-27°C) can be used in vehicles operating at sub zero temperature.

APPLICATIONS: Recommended for use in hypoid and spiral bevel gears operating under high-speed, low torque & low speed, high torque, moderately severe load conditions. May also be used for service top up of many run in final drive units initially filled with GL-4 type products.

PERFORMANCE LEVEL: IS 1118-1992 (EP TYPE GL-4), US MILITARY MIL-L-2105, API: GL-4 specifications.

PACKING: EP 90: 210L, 50L, 20L, 10L, 5L, 1L, 500ml EP140:-210L, 50L, 20L, 8L,5L, 1L, 500ml

EP-80W: 210L, 50L, 20L, 5L

HYPOID 90,140, 75W90, 80W90 & 85W140

HYPOID 90, 140, 80W90 & 85W140 are premium quality heavy duty multipurpose extreme pressure GL-5 type gear oils, blended from highly refined group I group II base oils with good oxidation stability. These oils are also doped with combinations of EP, antiwear additives to provide long running performance under severe duty conditions.

APPLICATIONS: Hypoid, spiral bevel, spur and double reduction rear axles of trucks, buses, tractors and earthmoving equipment on or off highway; manual gear boxes, auxiliary gear boxes and transfer boxes operating under severe duty conditions.

PERFORMANCE LEVEL: IS 1118-1992 (EP TYPE GL-5), US MILITARY MIL-L-2105D, API: GL-5 specifications.

PACKING: HYPOID 90 & 140: 210L, 50L, 20L; HYPOID 80W90: 210L, 50L, 20L, 5L, 2.5L, 1L

85W140: 210L. 50L. 20L. 12L. 5L. 1L HYPOID 75W90: 2.5L





TRANSOL A



TRANSOL A is a premium quality transmission oil having a low coefficient of friction to meet General Motors Type A Suffix A Specifications. This is blended with highly refined base oils and doped with selected additives which improves the life of transmission and steering system.

APPLICATIONS: Recommended for Lubrication of synchromesh gears and automatic and power steering units of automobiles and LCVs requiring Type A Suffix A fluid.

PERFORMANCE LEVEL: TES 122 of Detroit Diesel Allison, General Motors Type A Suffix A specifications.

PACKING: 210L, 50L, 20L, 15L, 5L, 1L, 500ml

TRANSFLUID C4 10W & 30

TRANSFLUID C4 10W & 30 are premium quality transmission oils, blended from high quality solvent refined base stocks fortified with carefully selected additives, to give good detergent, thermal and oxidation stability, low temperature fluidity, seal compatibility, antifoam, anticorrosion and antiwear characteristics.

APPLICATIONS: Recommended for Power shift transmission in off highway & on highway of Allison heavy duty automatic transmission, industrial torque converter & automatic transmission manufactured by Detroit Diesel.

PERFORMANCE LEVEL: TES 228 Type C4 of Detroit Diesel Allison specifications.

PACKING: 210L, 20L



HAWK DOT 3



HAWK DOT 3 is a non-petroleum base, polyglycol type brake fluid meeting DOT-3 performance requirements. It is designed for use in brake and clutch system, fitted with rubber cups and seals made from Natural Rubber (NR), Styrene-Butadiene Rubber (SBR), or a terpolymer of ethylene, propylene, and a diene (EPDM).

APPLICATIONS: Recommended for Hydraulic braking system of modern fuel efficient motor vehicles such as passenger cars (Maruti, Hyundai, Fiat, Tata, etc.), trucks, buses, tractors, trailers, heavy earth moving machinery etc. operating under moderate duty service conditions.

PERFORMANCE LEVEL: SAE J 1703 F, IS 8654-2001 and FMVSS No. 116 DOT -3 specifications.

PACKING: 210L, 20L, 500ml, 250ml, 100ml

DOT 4

DOT 4 It is a high boiling Synthetic Brake fluid which is made from mixed Polyalkylene Glycol ethers and Borate esters and doped with various high performance additives and inhibitors which give ultimate system protection against the effects of rust and corrosion and high temperature vapour lock. The Formulations are balanced so that the Vapour lock point is able to sustain at higher level than the conventional glycol ether based fluids during the service life of the product

APPLICATIONS: Recommended for Hydraulic system for Modern fuel efficient motor vehicles such as passenger cars (Maruti, Hyundai, General Motors, BMW, Diamler Benz, Tata etc.), Trucks, Buses, Tractors, Heavy Earth Moving Equipment's etc. operating under moderate to severe duty Conditions.

PERFORMANCE LEVEL SAE J1703, BIS 8654-2001, US Dept. of Transport 116 DOT-4, FMVSS 116 Specifications.

PACKING: 250ml, 100ml





ICY KOOL, ICY KOOL (RED) & MINT KOOL



ICY KOOL, **ICY KOOL** (**RED**) & **MINT KOOL** are Radiator coolant concentrate. Free from nitrite borates, silicates, phosphates & amines. Formulated using ethylene glycols with improved heat transfer stability.

APPLICATIONS: Recommended for all kinds of petrol/diesel engine driven passenger cars, jeeps, vans, commercial vehicles and stationery engines operating with water as a cooling medium.

DILUTION RECOMMENDED

ICY KOOL: For Severe applications: 1 part of ICY KOOL with 3 parts of distilled water.

For General applications: 1 part of ICY KOOL with 9 parts of distilled water.

MINT KOOL: Ready to use.

PERFORMANCE LEVEL: ASTM 3306, ASTM 1384 & ASTM 4340 specifications.

PACKING: 210L, 20L, 5L, 3L, 1L

ULTRA COOL

ULTRA COOL is Non petroleum base engine antifreeze coolant concentrate, formulated using advanced organic acid technology (OAT) and works over wide operating temperature range for effective engine cooling in all climates. It is used in all types of automotive vehicles/industrial engines' radiators, for protection against winter freezing and summer boil out.

APPLICATIONS: Recommended for all kinds of petrol/diesel engine driven passenger cars, jeeps, vans, commercial vehicles and stationery engines operating with water as a cooling medium.

DILUTION RECOMMENDED 1/3rd parts of coolant with 2/3rd parts of distilled water.

PERFORMANCE LEVEL: JIS-K-2234 Class II, BS 6580:2010 & BS 5117 specifications

PACKING: 210L, 50L, 3L, 1L





AP 2, AP 3 & AP 3 (RED) GREASES



AP 2, AP 3 & AP 3 (RED) GREASES are multifunctional all-purpose lithium based greases. These greases possess excellent shear stability, high load carrying properties & prevent welding & seizure of moving parts under shock loading conditions. These greases are recommended for industrial & automotive, earth moving equipment, gear couplings, electric motors, ball & roller bearings etc.

APPLICATIONS: Recommended for Plain and anti-friction bearings of cars, commercial Vehicles etc., Heavy duty ball and roller bearings of steel rolling mills, textile mills, papers mills, sugar mills etc., Universal joints and spline shafts, Suitable for bearings operating at temperature up to 130°C.

PERFORMANCE LEVEL: IS 7623-1993 (Reaffirmed 2006), AP2: NLGI -2 & AP3: NLGI -3 specifications.

PACKING: AP-2: 180kg, 18kg

AP-3: 180kg,18kg,10kg, 5kg, 3kg, 2kg, 1kg, 500g, 200g,100g, 50g

GP 3 & GP 3 (GREEN) GREASES

GP 3 & GP 3 (GREEN) GREASES are calcium-based general purpose NLGI-3 type grease containing highly-refined mineral oils

and suitable tackifier. It is smooth, homogeneous, and free from objectionable odor, visible impurities and abrasive or deleterious particles.

APPLICATIONS: Recommended for the lubrication of plain bearings operating under slow to medium-speed, medium-load and temperature up to 70C. Due to good water repellency characteristics, it is also recommended for the lubrication of the bearings and packing of water pumps immersing equipment. Also recommended for application to exposed components where high temperature is not encountered.

PERFORMANCE LEVEL: 1S 12203-1999 (Reaffirmed 2009), NLGI-3 specifications.

PACKING: 180kg, 18kg, 5kg, 3kg, 2kg, 1kg, 500g





MEGALIFE GREASE



MEGA LIFE GREASE is premium quality lithium soap based all purpose grease, fortified with Extreme Pressure additives. It is formulated to enhance re-lubrication interval, upto 45,000 kms under ideal road conditions. It has good thermal, chemical and structural stability including water wash out properties. It provides excellent lubrication and protection to the bearing parts over a wide temperature & pressure range, under normal as well as adverse mechanical conditions.

APPLICATIONS: Recommended for Lubrication of plain as well as anti-friction bearings in automotive, earth moving equipment, mining equipment and general industrial machineries, Heavy duty ball and roller bearings of steel rolling mills, operating under adverse conditions, Universal joints and spline shafts working under heavy torque or with acute transmission angles, Suitable for

bearings operating at temperature upto 150°C.

PERFORMANCE LEVEL: IS 12203-1999 (Reaffirmed 2009), NLGI- 3 specifications.

PACKING: 180kg, 18kg, 10kg, 7kg, 5kg, 3kg, 2kg, 1kg, 500g

RUBY GEL

RUBY GEL is a high quality, lubricating gel developed by using an optimized combination of high performance base oils, special lithium-semi complex thickener technology, performance additives having drain interval upto **130000 kms** under ideal road conditions. Its high thermal stability ensures prolonged resistance to the effects of heavy braking. Its unique combination of molecular structure offers excellence products stability under wide operating temperatures.

APPLICATIONS: Recommended for use in Automotive Wheel bearing on all types of passenger, commercial Vehicles off highway & farm equipment's.

PERFORMANCE LEVEL: NLGI-3 specifications.

PACKING: 180kg, 18kg, 7kg, 5kg, 3kg, 2kg, 1kg, 500g



W B GREASE



WB GREASE is made from sodium soap, refined & filtered mineral lubricating oil and other additives. The grease is homogeneous and of fibrous texture, free from objectionable odor and visible impurities. No fillers are used in the composition.

APPLICATIONS: Automotive wheel bearings, universal joints, axle journal boxes etc. operating at temperature up to 130°C and not exposed to moisture.

PERFORMANCE LEVEL: IS 10647-1983 specifications.

PACKING: 180kg, 18kg, 500g

CHASSIS GREASE

CHASSIS GREASE is made from calcium soap, refined & filtered mineral lubricating oils, suitable tackifier etc. The grease is smooth, homogeneous, free from objectionable odour and visible impurities and abrasive of deleterious particles.

APPLICATIONS: Automotive chassis parts including suspension and steering system. Chain drives of farm equipment.

PERFORMANCE LEVEL: IS 506-1993 specifications.

PACKING: 180kg, 18kg





Sr. No.	Product Name	Appearance	Kinematic Viscosity, cSt @ 100° C	Viscosity Index, min.	Pour Point, °C, max.	Flash Point, COC, °C, min.	TBN, mg. KOH/gm.
1	GARNET 5W30	Clear Golden Natural	10.5-12.5	150	-33	210	7-8
2	GARNET 10W40	Clear Golden Natural	12.5-16	150	-27	210	7-8
3	LEPOARD 5W30	Clear Golden Natural	10.5-12.5	135	-33	210	7-8
4	ENERGY 20W50	Clear Golden Natural	16.5-20	120	-21	220	6-8
5	ENERGY 20W40	Clear Golden Natural	12-16	120	-21	220	6-8
6	PHG 20W50	Clear Golden Natural	16.5-20	120	-21	220	5-6
7	2T POWER	Green	50-65(@40°C)	110	-	70	-
8	2T POWER GOLD	Clear Golden Natural	50-65(@40°C)	110	-	70	-
9	2T SUPREME	Green	45-60(@40°C)	110	-	70	-
10	SOLITAIRE 20W40	Clear Golden Natural	12.5-16	120	-21	210	7-8
11	TRIDENT 20W40	Clear Golden Natural	12.5-16	120	-21	210	7-8
12	PANTHER 10W30	Clear Golden Natural	9.5-12	140	-21	200	7-8
13	4T BOSS 20W40	Clear Golden Natural	13-16	110	-21	210	5-7
14	4T BOSS 20W50	Clear Golden Natural	16.5-20	110	-21	220	5-7
15	TRAIO 10W30	Clear Golden Natural	9.5-12	140	-21	220	7-8
16	GAJRAJ PLUS 15W50	Clear Golden Natural	17-20	125	-24	210	7-8
17	GAJRAT 15W50	Clear Golden Natural	17-20	115	-24	210	6-7
18	4T DART 20W40	Clear Golden Natural	13-16	105	-21	210	5-7
19	4T DART 10W30	Clèar Golden Natural	10.5-12.5	105	-21	210	5-7



Sr. No.	Product Name	Appearance	Kinematic Viscosity, cSt @ 100° C	Viscosity Index, min.	Pour Point, °C, max.	Flash Point, COC, °C, min.	TBN, mg. KOH/gm.
20	PAL FRONT FORK OIL	Clear Light Golden	8-9	110	-18	210	-
21	PHD 10W	Clear Golden Natural	5-7	110	-27	200	6-8
22	PHD 30	Clear Red	10.5-12	95	-6	220	6-8
23	PHD 40	Clear Red	12.5-16	95	-6	220	6-8
24	PHD 50	Clear Red	16.5-20	95	-3	220	6-8
25	PHD 15W40 (COMMANDER)	Clear Golden Natural	12.5-16	115	-24	200	8-10
26	PHD 20W40 (COMMANDER)	Clear Red	12.5-16	100	-21	210	6-8
27	PMG 20W40 (SHAKTIMAN)	Clear Red	12.5-16	110	-21	210	7-8
28	PPG4 15W40	Clear Golden Natural	12.5-16	130	-24	200	9-11
29	PPG4 20W40	Clear Golden Natural	12.5-16	120	-21	210	9-11
30	HITECH 15W40	Clear Golden Natural	12.5-16	130	-24	200	9-11
31	HITECH PLUS 15W40	Green	12.5-16	135	-30	200	11-13
32	UNITRACK 20W	Clear Golden Natural	11-14	110	-21	210	-
33	TRACTOR SAMRAT 20W40	Clear Red	12.5-16	100	-21	220	6-8
34	TRACTOR SAMRAT 20W50	Clear Red	16.5-20	110	-21	220	6-8
35	PHB 20W40 (BOUNCER)	Clear Red	12.5-16	110	-21	220	4-5
36	PHB 20W50	Clear Red	16.5-20	110	-21	220	4-5
37	ENGINE OIL SAVER	Light Golden Natural	160-170	180	-6	200	- ///
38	PPS-2	Clear Red	12.5-16	95	-6	210	3-4



Sr. No.	Product Name	Appearance	Kinematic Viscosity, cSt @ 100° C	Viscosity Index, min.	Pour Point, °C, max.	Flash Point, COC, °C, min.	
39	EP 90	Clear Golden Natural	17-20	90	-9	210	-
40	EP 140	Clear Golden Natural	28-34	90	-6	220	-
41	EP 80W	Clear Red	8-10	100	-24	180	-
42	HYPOID 90	Clear Golden Natural	17-20	90	-9	210	-
43	HYPOID 140	Clear Golden Natural	28-34	90	-6	220	-
44	HYPOID 80W90	Clear Golden Natural	13-16	95	-21	210	-
45	HYPOID 85W140	Clear Golden Natural	24-28	95	-21	220	-
46	HYPOID 75W90	Clear Golden Natural	13-16	100	-21	210	-
47	TRANSOL A	Clear Red	7-8	160	-39	180	-
48	TRANSFLUID C4 10W	Clear Golden Natural	6	100	-27	180	-
49	TRANSFLUID C4 30	Clear Golden Natural	11-12.5	100	-18	180	-

	COOLANT						
Sr. No.	Product Name	Appearance	pH Value	Reserve Alkalinity, ml.			
V 1	ICY KOOL	Fluorescent Green	8-9.5	21-25			
2	MINT KOOL	Fluorescent Green	7-9	7-9			
3	ULTRA COOL	Fluorescent Green	8-9.5	21-25			



	BRAKE FLUID							
Sr. No.	Product Name	Appearance	Kinematic Viscosity, cSt @ -40°C	Kinematic Viscosity, cSt @ 100° C, min	pH Value	ERBP, °C, min.,	Rubber swelling properties	
1	HAWK DOT-3	Red (Crimson)	1500	1.5	7-11.5	Dry - 205 , Wet -140	Passes	
2	DOT-4	Light Yellow	1800	1.5	7-11.5	Dry - 230 , Wet -155	Passes	

	GREASES								
Sr. No.	Product Name	Appearance	Consistency of worked grease, @ 25±0.5°C, 0.1mm units (60 double strokes)	Drop Point, °C, min.	Soap Type	Structure			
1	AP-2	Light Yellow	265-280	180	Lithium	Smooth & Buttery			
2	AP-3	Light Yellow	220-250	180	Lithium	Smooth & Buttery			
3	GP-3	Golden Yellow	220-250	100	Calcium	Smooth & Buttery			
4	MEGALIFE	Greenish Brown	220-250	190	Lithium	Smooth & Buttery			
5	RUBY GEL	Transparent Red	220-250	260	Lithium	Smooth & Buttery			
6	W.B.	Dark Brown	250-280	180	Sodium	Smooth & Buttery			
7	CHASSIS	Dark Brown	310-340	95	Calium	Smooth & Buttery			

LIST OF OUR VALUED CUSTOMERS





Hindustan Aeronautics Limited



HQIDS(Department of Military Affairs)



Indian Air Force



Indian Council of Agricultural Research (ICAR)



Indian Ordnance Factory



Indian Railways



Indian Rare Earth Ltd.



Indo Tibetan Border Police (ITBP)



Integral Coach Factory



Kudremukh Iron Ore Company Ltd. (KIOCL)



Ministry of Water Resources River Development & Ganga Rejuvenation



Ministry of Labor & Employment



MSME



Municipal Corporation-Warora



National Institute of Technology (NIT)



Naval Physical and Oceanographic Laboratory



Oil India Ltd.



Road & Building Department Gujarat



Sardar Vallabhbhai National Institute of Technology(SVNIT), Surat



Skill Development and Entrepreneurship Department



Steel Authority of India Ltd.



Urban Development Department, Maharashtra

LIST OF OUR VALUED CUSTOMERS



Air India Limited



Airport Authority of India



Bank Note Press



BEML



BHEL



Bhakra Beas Management Board



BSF



Central Institute of Plastics Engineering and Technology Jaipur



Chennai Metro Rail Limited



Coal India Limited



Container Corporation of India Ltd.



Council of Scientific and Industrial Research (CSIR)



CRPF



Delhi Fire Service



Delhi Jal Board



Delhi Police



Department of Atomic Energy



Ministry of Defence



Directorate of Employment and Training



Directorate of Printing



DRD0



Ferro Scrap Nigam Limited



Geological Survey of India

INDUSTRIAL OILS

- GENERAL PURPOSE MACHINERY OILS
- GENERAL PURPOSE LUBRICATING OILS
- CIRCULATING AND HYDRAULIC OILS
- SOLUBLE CUTTING OILS
- SYNTHETIC CUTTING FLUIDS
- NEAT CUTTING OILS
- ▲ RUST PREVENTIVE (WATER DISPLACING FLUIDS) ▲ CYLINDER OILS
- ▲ RUST PREVENTIVE (MINERAL OIL BASED)
- RUST PREVENTIVE (SOLVENT BASED)
- QUENCHING OILS
- WIRE DRAWING OILS
- TURBINE OILS
- AIR COMPRESSOR OILS
- INDUSTRIAL GEAR LUBRICANTS
- TRANSFORMER OIL
- PNEUMATIC EQUIPMENT OILS
- SUGAR MILL ROLL BEARING OILS
- TEXTILE OILS
- KNITTING OILS (WASHABLE)
- ▲ LOOM OILS
- REFRIGERATION COMPRESSOR OILS
- SEMI SYNTHETIC REFRIGERATION OILS
- HEAT TRANSFER FLUIDS (MINERAL OIL BASED)
- ▲ SYNTHETIC HEAT TRANSFER FLUIDS
- GENERAL PURPOSE ENGINE OILS

- ▲ INDUSTRIAL ENGINE OILS (API SC/CC)
- MARINE OILS
- RUBBER PROCESS OILS (AROMATIC)
- ▲ RUBBER PROCESS OILS (NAPHTHENIC)
- RUBBER PROCESS OILS (PARAFFINIC)
- INDUSTRIAL MACHINERY TOOL WAY OILS
- GENERAL PURPOSE FLUSHING OIL
- GLASS MOULD OIL
- OPEN GEAR COMPOUNDS
- INDUSTRIAL SPECIAL OILS

INDUSTRIAL GREASES

- ▲ LITHIUM SOAP WITH MOS2
- CALCIUM SOAP
- LITHIUM COMPLEX
- **FXTREME PRESSURE**
- NON SOAP

SPECIALITY LUBRICANTS

- ▲ HIGH TEMP NON SOAP GREASES
- HIGH TEMP MOLY GREASES
- TEFLON FORTIFIED LITHIUM SOAP GREASES
- SILICONE GREASE





PALCO GROUP OF COMPANIES









PARAS HOLDINGS LIMITED, UAE



PALCO CHEMICALS LLP, INDIA



GREENWICH INDUSTRIES LTD., GHANA



PALCO EXIMS PRIVATE LTD., INDIA

PALCO PETROCHEM MANUFACTURING PLC, ETHIOPIA

PARAS LUBRICANTS LIMITED

AN ISO 9001: 2015 CERTIFIED ORGANISATION

CIN NO.: U24229DL1985PLC022086

Regd. & H.O.: 311-312, Manglam Paradise, Plot No.8, Manglam Place, Sec.-3, Rohini, New Delhi - 110085, INDIA. Ph. +91-11-47889999 E-mail: info@palco.co.in, info@palcochemicals.com

Mumbai Office: 402, Skyline Epitome, Near Jolly Gymkhana, Kirol Road, Vidhya Vihar, Ghatkopar (W), Mumbai-400086, INDIA. Ph. +91-22-67340555