

MOGUL



LUBRICATING OILS AND GREASES



MOGUL

PARAMO, a.s., (The Pardubice Refinery of Mineral Oils) focuses on processing of crude oil into refinery and bitumen products, lubricants and process oils, including auxiliary and secondary products. PARAMO has two plants. Crude oil is processed in Pardubice. Hydrogenated and hydrocracked distillation cuts are processed in Kolín for production of base oils with extremely low sulphur content and lubricants. Our lubrication oils meet the requirements of renowned machinery and equipment manufacturers, such as VW, BMW, GM, FORD, MB, VOLVO, MAN, SCANIA, RENAULT, DAF, CATERPILLAR, TATRA, TEDOM, DAEWOO AVIA, ZETOR, and others. The MOGUL 5W-50 EXTREME Sport motor oil has been successfully tested and used in motorsport. The refinery, which was founded in 1889, is a traditional producer of fuel, lubricants and a leading producer of bitumen and related products in the Czech Republic. Research and manufacturing processes of fuel, lubricants, bitumen, bitumen products and paraffin at Paramo adhere to a management system that conforms to the standards of ISO 9001:2008, ISO 14001:2004, and OHSAS 18001:2007. The responsible way of doing chemistry business in the Pardubice refinery is demonstrated by its five Responsible Care and Sustainable Development awards.

Automotive Oils

Automotive Motor Oils			
Oils for High-performance Personal Car Engines			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
0W-30 EXTREME LFII	0W-30	Synthetic, high-performance, low-viscosity motor oil of Longlife II type with a special formula for VW/Audi cars, with extended oil change interval. Application of this oil is highly effective in engines operating at extremely low temperatures, high load, and where fuel economy is required.	Complies with: VW 503.00/506.00/506.01
5W-30 EXTREME LFIII	5W-30	Synthetic, high-performance, low-viscosity motor oil of Longlife III type with a special formula for VW/Audi cars, with extended oil service interval. It is also suitable for engines processing LPG and for engines with catalytic converters included Particulate filters.	API SM/CF, ACEA C3 Complies with: VW 504.00/507.00, MB 229.51, BMW Longlife-04, Porsche C30, PSA B71-2290, FIAT 9.55535-S1
5W-30 EXTREME F	5W-30	Synthetic, high-performance, low-viscosity motor oil with low friction coefficient; a special formula for Ford cars. Allows fuel economy and reduction of pollutants in exhaust gas. Also suitable for engines processing LPG.	ACEA A5/B5 Complies with: FORD WSS-M2C 913-C
5W-50 EXTREME SPORT	5W-50	Extreme performance synthetic motor oil suitable especially for application in motorsport and racing cars. This product is recommended by Roman Kresta (a rally driver with World Rally Championship experience) and Roman Častoral (European Champion in Rallycross).	API SL/CF
5W-40 EXTREME	5W-40	Top performance motor oil. This product guarantees high starting ability even at the lowest temperatures and actively assists in promoting fuel economy.	ACEA A3,B3,B4; API SM/CF/EC Complies with: MB 229.3, BMW Longlife Approbation: VW Standard 502 00, VW Standard 505 00, VW Standard 505 01
5W-40 EXTREME PD	5W-40	Top performance synthetic motor oil designed especially for PD engines (Pumpe-Düse) with fixed oil change servicing intervals. This product guarantees high starting ability even at the lowest temperatures and actively assists in promoting fuel economy. It is also suitable for engines processing LPG and for engines with catalytic converters included Particulate filters.	ACEA C3 API SM/CF Odpovídá: VW 502.00/505.00/505.01 MB 229.51, BMW Longlife-04, Porsche A40 Renault RN 0700/ RN 0710
10W-40 EXTREME	10W-40	Top-performance semi-synthetic motor oil. This product maintains exceptional pumpability at very low temperatures, fuel economy and minimum wear of engine components	API SL/CF Complies with: ACEA A3/B4; MB 229.1 Approbation: VW Standard 501.01/505.00
15W-40 EXTREME	15W-40	Universal all-year-round oil for modern petrol and diesel engines. Also suitable for engines processing LPG and for engines with an exhaust gas catalytic converter. This oil excels in its highly favourable price and utility value.	API SL/CF Complies with: VW 505.00

Oils for Petrol and Diesel engines of Personal Cars and Light Utility Vehicles			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
RACING 5W-30	5W-30	Extreme-high performance synthetic motor oil for extended oil change intervals (Longlife III) and for automobiles with DPF. This oil meets special requirements for higher fuel economy as well as ecological requirements for road traffic.	Complies with: VW 504.00/507.00; MB 229.51
RACING 5W-30 F	5W-30	Extreme performance, low-viscosity synthetic motor oil. Special formula for FORD cars. It is suitable for engines with catalytic converters.	API SL Complies with: FORD WSS-M2C 913-B; ILSAG GF-3
RACING	5W-40	Extreme performance synthetic motor oil. This product is suitable especially for application in motorsport and racing cars. This product guarantees high startability confidence even at the lowest temperatures and delivers high fuel economy	API SM/CF Complies with: VW 502.00/505.00, MB 229.3; BMW LL-98, GM-LL-B-025 Renault RN 710/ RN 700
GX-FE	10W-40	Semi-synthetic oil for modern petrol and diesel engines. This product maintains exceptional pumpability even at very low temperatures and enhances fuel economy	API SL/CF Complies with: VW 500.00/505.00, MB 229.1
GX	15W-40	Universal all-year-round oil for modern petrol and diesel engines. This oil excels in its highly favourable ratio of price and utility value.	API SL/CF Complies with: VW 505.00, MB 229.1
FELICIA	15W-40	Universal all-year-round oil for modern petrol and diesel engines; its formula has been developed to suit Škoda cars. This product delivers an exceptionally good price-utility ratio.	API SH/CF
SUPER STABIL 15W-40	15W-40	Oil for lubrication of petrol and diesel engines with high to moderate requirements for oil performance.	API SF/CC
SUPER 15W-50	15W-50	For petrol and diesel engines with moderate requirements for oil performance.	API SE/CC
SPECIAL 20W-30	20W-30	Oil for lubrication of older types of petrol or diesel engines with moderate to lower requirements for oil performance.	API SC/CB
M 6 AD	30,40	For older types of petrol and naturally-aspirated diesel engines with moderate to lower lubricant performance requirements.	API SC/CB
M 6 A	30	Oil for lubrication of old petrol engines with low requirements for lubricant utility value; in exceptional cases for modest diesel engines as well.	API SB

Diesel Engine Oils			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
DIESEL L-SAPS 5W-30	5W-30	Synthetic, low-viscosity oil for lubrication of diesel engines operating under extreme load that require Low-SAPS oils (low content of sulphated ash, phosphorus, and sulphur). It is suitable for engines fitted with SCR systems and for EGR engines with or without DPF This product allows meeting the strict emission limits of EURO IV and V; it also guarantees very long oil servicing intervals.	ACEA E7/E6/E4, Complies with: Renault RXD/ RLD-2, MTU Type 3.1 Approbation: MB 228.51, MAN M3477, Volvo VDS-3
DIESEL ULTRA	5W-30	Synthetic low-viscosity motor oil for lubrication of highly supercharged diesel engines of trucks and utility vehicles. The product allows meeting the EURO I, II and III emission limits, possesses exceptional properties under low temperatures, and effectively enhances fuel economy.	API CI-4, Complies with: ACEA E4/E7, Renault RXD/ RLD-2, MTU Type 3 MB 228.5, MAN M3277, Volvo VDS-3

Diesel Engine Oils			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
DIESEL L-SAPS 10W-40	10W-40	Synthetic oil for lubrication of diesel engines operating under extreme load that require Low-SAPS oils (low content of sulphated ash, phosphorus, and sulphur). It is suitable for engines with an EGR unit and a DPF. This product enables meeting the strict emission limits of EURO IV and V; it also guarantees extended drain intervals.	ACEA E7/E6/E4 Complies with: Renault VI RXD a RGD, MTU Type 3.1, Deutz DQC III-05, MAN M3271-1, Volvo CNG, MB-226.9, Approbation: MB-Approval 228.51, MAN M3477/M3277(CRT), Volvo VDS-3
DIESEL CNG	10W-40	Semi-synthetic oil designed especially for all-year-round lubrication of truck and bus engines that operate under extreme load and combust compressed natural gas (CNG).	API CI-4 Complies with: ACEA E7/E6/E4, MB 228.51, MAN M3477, Volvo VDS-3, Scania Low Ash, Renault RXD
DIESEL DTT PLUS	10W-40	Semi-synthetic oil for lubrication of diesel engines with the highest requirements for lubricant performance guarantees to achieve very long oil change intervals. The product allows meeting the EURO I, II, III, IV, and V emission limits and possesses exceptional rheological properties under low temperatures.	ACEA E7/E4, API CI-4 Complies with: MTU Type 3, Cummins CES 20077/78, Renault RXD/ RLD-2, DAF Extended Drain Approbation: MB-Approval 228.5, MAN M3277, Volvo VDS-3, Scania LDF-2, ZETOR
DIESEL L-SAPS 15W-40	15W-40	Semi-synthetic oil for lubrication of diesel engines operating under extreme load that require Low-SAPS oils (low content of sulphated ash, phosphorus, and sulphur). It is highly suitable for engines fitted with SCR systems and for EGR engines with or without DPF. This product allows meeting the strict emission limits of EURO IV and V; it also guarantees very long drain intervals.	ACEA E9/E7, API CJ-4/SM MB-Approval 228.31, MAN M3575, Volvo VDS-4, Renault RLD-3, Mack EO-O, Cummins CES 20081
DIESEL DTT EXTRA	15W-40	For highly rated diesel engines of trucks, buses and construction machinery that operate under extreme load. The ideal application of this product is for modern engines that require oils with extreme performance properties (long-distance freight, rough terrain, etc.). This product enables extended drain oil intervals and meeting the strict emission limits of EURO I, II, III, IV and V.	API CI-4/SL Complies with: ACEA E7/E5, Global DHD-1, Cummins CES 20076/77/78, Caterpillar ECF-1a, Renault RLD/ RLD-2, MTU Type 2 Approbation: MB-Approval 228.3, MAN M3275, Volvo VDS-3, ZETOR, TATRA 30/12, TEDOM 258-3
DIESEL DTT	15W-40	For supercharged diesel engines of trucks, buses and construction machinery that operate under extreme load. The ideal application of this oil is for modern engines that require oils with extreme performance properties (long-distance freight, rough terrain, etc.). This product enables achieving the service intervals and meeting the strict emission limits of EURO I, II and III.	API CG-4/SL Complies with: ACEA E3, Volvo VDS-2, MTU Type 2, Renault RD Approbation: MB-Approval 228.3, MAN M3275-1, Tatra TDS 30/16, AVIA, TEDOM 258-3
DIESEL DT	15W-40	For diesel engines (also highly supercharged) in trucks, buses, train engines, ships, heavy machinery in construction, forestry, agriculture, light utility vehicles, etc. The product suppresses wear, corrosion, and high-temperature sludge formation even when lower-quality fuel is used (i.e. fuel with higher sulphur content). This product allows meeting the strict emission limits of EURO I, II, and III.	API CG-4/SL Complies with: ACEA E2, MB 228.1, MAN 271, MTU Type 1, Volvo VDS Approbation: TEDOM 258-2, AVIA, ZETOR, Tatra TDS 30/12

Diesel Engine Oils			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
M7ADS III 20W-40 M7ADS III 20W-50	20W-40 20W-50	For diesel engines (both naturally-aspirated and super-charged) of cars, trucks, buses, train engines and other modern machinery that require high-performance oils.	API CF-4/SG Complies with: MB 227.1
MARINE	40	For lubrication of stationary diesel engines (e.g. power plants for backup supply of electricity) and for diesel engines in ships.	API CD Approved for diesel engines SULZER

Oils for Mixed Fleet			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
OPTIMAL	10W-40	Semi-synthetic oil for four-stroke petrol and diesel engines in modern cars, trucks, and utility vehicles with exceptional requirements for oil performance. This product enhances good starting ability and reduces fuel consumption – a true long-life universal oil.	API CI-4 Complies with: Global DHD-1, MB 228.3, Volvo VDS-3, MAN M3275, MTU Type 2, Cummins CES 20077/78, Renault Trucks RLD

Tractor Oils			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
TRAKTOL STOU	10W-30	This STOU (Super Tractor Oil Universal) for modern tractors is an universal oil for lubrication of diesel engines (naturally-aspirated or supercharged), manual transmission, hydraulic systems, and wet brakes	API CF/CF-4/SF, API GL-4 Complies with: MB 228.1, MAN 271, Allison C-4; John Deere JDM J27, ZETOR, MASSEY FERGUSON CMS M1139/44/45, ZF TE-ML 06B/06C/06D

Gas Engine Oils			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
MOGULGAS	15W-40	For engines combusting natural gas (CNG, LNG), LPG and certain purified biogases. Also suitable for gas engines that combine combustion of gas and diesel or petrol.	API CF TEDOM 61-0-0281.1 a 2
MOGULGAS B	15W-40	For stationary gas engines that drive power generators, gas cogeneration units, etc., especially in biogas systems; the product has a higher TBN content and therefore guarantees neutralisation of acid fumes from combustion of biogas or gas with elevated sulphur content.	API CF TEDOM 60-0-0281.1

Oils for Light Gardening Machinery			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
ALFA 4T	10W-30	For high-speed four-stroke petrol and diesel engines in gardening and agriculture machinery, power stations etc. that require all-year-round motor oil.	API SL/CF
ALFA	30	For high-speed four-stroke petrol and diesel engines of small gardening and agriculture machinery that require monograde motor oil.	API SJ/CF

Loss Lubrication Oils			
MOGUL	ISO VG	Product Specification	Performance classes, Specifications Level
ALFA HOBBY	100	Chain-saw oil with very good protection against wear, suitable for all loss-lubrication applications in high-load chains, pins, joints, pressure and guiding elements, etc. operating under high load. The product provides special adhesive properties.	
ALFA BIO	46, 68	Biologically degradable oils designed for lubrication of chainsaws, with high protection against wear. The product complies with the Act 289/95 Coll. ("Forest Act") and provides a special adhesive properties	

Oils for motorcycles			
Oils for modern motorcycles			
MOGUL	SAE	Product characteristic	Performance classes, specifications
MOTO 4T 5W-40 MOTO 4T 10W-40	5W-40 10W-40	Synthetic engine oils for high-performance four-stroke petrol engines of motorcycles and quad bikes, where joint oil filling for engine and gearbox lubrication including wet clutch is being used. Prevents clutch slippage and protects the mechanism against excessive wearing.	API SM JASO MA 2
MOTO 4T 15W-40	15W-40	For high-performance four-stroke petrol engines of motorcycles and quad bikes, where joint oil filling for engine and gearbox lubrication including wet clutch is being used. Prevents clutch slippage and protects the mechanism against excessive wearing.	API SM JASO MA 2
MOTO 2T FD	-	Fully synthetic ester based oil designated for heavily stressed high rpm two-stroke engines of especially scooters including skidoos, motorcycles and other vehicles lubricated with fuel-oil mixture or by a dosing pump.	API TC JASO FD ISO-L-EGD Complies with: Husqvarna 346 a 372 Rotax 253
MOTO TRANS 75W-90	75W-90	Synthetic transmission oil for wide range of extremely stressed transmission mechanisms of modern motorcycles and quad bikes. Ensures excellent long-term viscosity and temperature stability and protection against wearing and corrosion. Secures flawless function of transmission and clutch. Designed for whole year usage.	API GL-4, GL-5
MOTO TRANS 80W-90	80W-90	Transmission oil for lubricating extremely stressed transmission mechanisms of modern motorcycles and quad bikes. Ensures excellent long-term viscosity and temperature stability and protection against wearing and corrosion. Secures flawless function of transmission and clutch. Designed for whole year usage.	API GL-4, GL-5

Two-stroke Engine Oils			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
TSF	-	Semi-synthetic low-smoke motor oil for high-speed, high-thermal load two-stroke engines (especially in chainsaws, trimmers, edgers, motorcycles, etc.). This product contains a component for better dilution and PIB to eliminate clogging of the spark plugs and combustion chamber.	API TC, JASO FD, TISI, ISO-L-EGD/OEM, Husqvarna 346 test
ALFA 2T	-	Semi-synthetic motor oil for high-speed, high-thermal-load two-stroke engines (especially in chainsaws, trimmers, etc.). This product contains component for better dilution and PIB to eliminate clogging of spark plugs and combustion chamber.	API TC, JASO FD
TS	40	For two-stroke petrol engines with thermal load (motorcycles, cars, agriculture and forestry machinery, etc.), complies with lubrication requirements in the most powerful of today's two-stroke engines.	API TC, JASO FC
2T	40	For two-stroke engines that have lower to intermediate requirements to oil performance (older motorcycles, cars, etc.).	API TB
2T	20W-30	For two-stroke engines that have lower to intermediate requirements to oil performance (older motorcycles, cars, etc.). This product is recommended especially at low temperatures.	API TB

Automotive Gear Oils			
Gear Oils			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
SYNTRANS 75W-90 PLUS	75W-90	Synthetic, multi-purpose oil designed for lubrication of a wide range of transmission systems operating under extreme load (final drives and gear boxes with manual or other type of gear selection) in modern trucks and other mobile equipment where exceptional performance is required.	API GL-4/GL-5, MT-1, MAN M3343S, MB 235.8, SCANIA STO 1:0, ZF TE-ML 02B, 05B, 12B, 16F, 17B, 19C
SYNTRANS 75W-90 HYP	75W-90	Synthetic oil designed for lubrication of most types of transmission gears that operate under extreme load (final drive and hypoid gearboxes with manual or other type of gear selection). Suitable as all-year-round oil for a wide range of operating temperatures.	API GL-5; TATRA TDS 100/40
SYNTRANS 75W-90	75W-90	Synthetic oil for mechanical transmissions and final drives in modern cars and other machinery. A universal transmission oil for a very wide range of operating temperatures; this product delivers a very good price-utility ratio.	API GL-4+
TRANS 80W-90 PLUS	80W-90	All-year-round, multi-purpose gear oil designed for lubrication of a most transmission systems operating under extreme load (final drives and gear boxes with manual or other type of gear selection) in modern trucks and other mobile equipment where high performance is required.	API GL-4/GL-5, MT-1, MAN 3343M, SCANIA STO 1:0, DAIMLER 235.0, ZF TE-ML 02B, 05A, 07A, 12E, 16B/C/D, 17B, 19B, 21A, DAF Transmission Axle, IVECO Axle, Renault Axle
TRANS 85W-140 H TRANS 80W-140 H TRANS 80W-90 H	85W-140 80W-140 80W-90	For manual gearboxes and drives that operate under high load (hypoid final drives, worm gears, etc.). Suitable as all-year-round oil for a very wide range of operating temperatures.	API GL-5, MIL-L-2105D, ZF TE-ML 05A, 07A, 12A (for SAE 85W-140), MAN 342 Typ M-1 (for SAE 80W-90)
TRANS 90 H TRANS 80 H	90 80W	Monograde gear oils designed for lubrication of transmission systems in modern machinery (especially hypoid gears and worm gears).	API GL-5, MIL-L-2105D, TATRA TDS 80/32 (for SAE 80W), MAN 342 Typ M-1 (for SAE 90)

Gear Oils			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
MOGUL TRANS 90 HT	90	For transmission operating under heavy load, especially gearboxes with hypoid assembly; typical application -lubrication of hypoid transmissions in ČKD tramways (all-year-round).	API GL 5 ČKD Tatra
TRANS 85W-140 TRANS 80W-90	85W-140 80W-90	For mechanical gearboxes and final drives in modern cars and other machinery. Wide-range transmission oil for all operation temperatures.	API GL-4, MIL-L-2105, ZF TE-ML 02A, 08A (for SAE 80W-90)
TRANS 90 TRANS 80 TRANS 75W	90 80W 75W	Monograde gear oils for lubrication of a wide range of mechanical transmission systems (final drives and gear boxes with manual or other type of gear selection) in modern cars, vans, trucks and other machinery. Industry applications are also possible.	API GL-4, MIL-L-2105, MAN 341 Type Z1 and E1 (for SAE 80W), VW 726Y (for SAE 75W)

Automatic Transmission Oils			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
TRANS ATF D III		Operating fluid for automatic transmission systems (ATF) in cars, trucks, and a variety of other mobile machinery requiring GM DEXRON III G grade oil.	GM Dexron III G, Allison C-4, Ford Mercon, Voith 55.6335 (DIWA and Midimat), Caterpillar TO-2, ZF TE-ML 02F, 04D, 17C, ZF Lenksystem TE-ML 09A, 09B, MAN Standard 339 Type F
TRANS ATF D II		Operating fluid for automatic transmission systems (ATF) in cars, trucks, and a variety of other mobile machinery requiring GM DEXRON II D grade oil.	GM Dexron II D, Allison C-4, Ford Mercon, Voith G 607, ZF TE-ML 11A
OTHP 3	ISO VG 32	Operating fluid for selected types of hydrodynamic clutches, converters and hydrodynamic transmission systems in certain trucks, buses, construction machinery etc.; it is also used in industry applications.	GM Type C3, Voith Turbo T, TP, DTP, S, R „VIR“

Tractor Oils			
MOGUL	SAE	Product Specification	Performance classes, Specifications Level
TRAKTOL UTTO	80W	Oil for all-year-lubrication of transmission units in modern, high-performance tractors that require special oils or in other agriculture, forestry, construction or other types of machinery. This product may be used as general lubrication oil to serve manual transmission systems (with gears selected manually also under load – “power shift”), hydrostatic systems, and so-called “wet brakes”. It enables significant reduction of the range of lubricants to be used.	API GL-4; ZETOR, JOHN DEERE J20C, MASSEY FERGUSON CMS M1141/ M1143, FORD M2C 86C, CNH MAT 3525, ZF TE-ML-03E, 05F

Automotive Oils, Other			
Shock Absorber Oil			
MOGUL	ISO VG	Product Specification	Performance classes, Specifications Level
SILENCE 15	15	Designed especially for piston shock absorbers of cars and trucks, for hydraulic lifting equipment, brake load regulators, etc. Suitable also for high-pressure hydrostatic systems of both mobile and stationary equipment with high mechanical and thermal load and with high requirements for positive (low) viscosity and temperature relation.	ISO 6743/4 - HV 15, DIN 51 524/3 HVLP 15 ATESO

Industrial Oils

Hydraulic Oils			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
HV 32	Hydraulic oil for systems operating at low temperatures (winter, or all-year-round operation).	HV 32	HVLP 32
HV 46	Hydraulic oil for hydrostatic systems operating under typical conditions (all-year-round operation).	HV 46	HVLP 46
HV 68	Hydraulic oil for hydrostatic systems operating at temperatures ranging from high to very high (continuous operation in summer).	HV 68	HVLP 68
HM 32 S	Hydraulic oil for hydrostatic systems with extended life. For systems operating at low temperatures (winter, or all-year-round operation).	HM 32	HLP 32 CLP 32
HM 46 S	Long-life hydraulic oil for hydrostatic systems with extended life. For hydraulic systems operating under typical conditions (all-year-round operation).	HM 46	HLP 46 CLP 46
HM 68 S	Long-life hydraulic oil for hydrostatic systems with extended life. For systems operating at high temperatures (operation in summer).	HM 68	HLP 68 CLP 68
HM 46 ZF	Zinc-free oil for hydrostatic systems of both stationary and mobile machinery that operate under very high mechanical and thermal load and that run in unprotected environments. These oils bring excellent water separability, very good air-release property, and superior hydrolytic stability.	HM 46	HLP 46 CLP 46 Müller-Weingarten
H-LPD 46 ZF	Zinc-free oil with dispersant-detergent effect for hydrostatic systems operating under very high mechanic and thermal load. The special component allows dispersion of limited amount of water, oxidation products (sludge), and other impurities that result in higher cleanliness of the hydraulic system with long-term oil fills.	HM 46	H-LPD 46 CLP 46 MAN N 698 H-LPD 46 Müller-Weingarten
HM 10	Long-life hydraulic oil for hydrostatic systems – special applications for extremely low temperatures.	HM 10	HLP 10
HM 22	Hydraulic oil for hydrostatic mechanisms operating at very low temperatures (winter operation).	HM 22	HLP 22
HM 32	Hydraulic oil for hydrostatic systems operating at low temperatures (winter or all-year-round operation).	HM 32	HLP 32
HM 46	Hydraulic oil for hydrostatic systems - hydraulic systems operating under typical conditions (all-year-round operation).	HM 46	HLP 46
HM 68	Hydraulic oil for hydrostatic systems operating at high temperatures (summer operation).	HM 68	HLP 68
HM 100	Hydraulic oil for hydrostatic systems operating at extremely high temperatures, for special applications.	HM 100	HLP 100
H-LPD 22	Hydraulic oil with detergent-dispersant component for hydrostatic systems operating at very low temperatures (winter operation).	HM 22	H-LPD 22, CLP 22 MAN N 698 H-LPD 22
H-LPD 46	Hydraulic oil with a detergent-dispersant component for hydrostatic systems operating under typical conditions (all-year round operation).	HM 46	H-LPD 46, CLP 46 MAN N 698 H-LPD 46
H-LPD 68	Hydraulic oil with a detergent-dispersant component for hydrostatic systems operating at high temperatures (summer operation).	HM 68	H-LPD 68, CLP 68 MAN N 698 H-LPD 68
ON 1	Oil based on naphthenic raffinate for hydraulic systems of quick-closing valves of water turbines, exceptionally for hydraulic systems of modern machinery – only in winter seasons at very low temperatures.	HH 15	

Biologically Degradable Hydraulic Oils			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
HESS 32	Biologically degradable synthetic hydraulic oils designed for hydrostatic systems that operate under high load.	HM 32 VDMA HEES 32	HLP 32
HESS 46	all-year-round (temperature range from -20 to 80°C, with short periods up to 90°C) where the useful life is assumed similar as in application of HV or HM mineral oils.	HM 46 VDMA HEES 46	HLP 46

Bearing Oils			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
LK 32	For bearings and gears in machines (usually textile production or machining) with low to moderate load, for undemanding hydraulic systems	FC 32	AN 32 CL 32
LK 46	For bearings and gears in larger machines (usually in machining applications) with low to moderate load, for undemanding hydrostatic systems and steel hardening baths.	FC 46	AN 46 CL 46
LK 68	For moving mechanical parts of operating and driving machinery with low speeds and higher mechanical load.	FC 68	AN 68 CL68

Slideway Oils			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
GLISON 46	For lubrication of guiding surfaces of machining equipment. This product prevents "stick-slip" effects at low speeds and high load.	G 46	CGLP 46
GLISON 68		G 68	CGLP 68
GLISON 100	For ultimate requirements for lubrication of sliding surfaces (low gliding speeds, etc.) and certain specific applications. Prevents the "stick-slip" effect.	G 100	CGLP 100
GLISON 220		G 220	CGLP 220
GLISON 320		G 320	CGLP 320

Turbine Oils			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
TB 32 EP	For circulating lubrication systems of steam, gas turbines and compressors that share the oil filling with the gears where oil with increased efficiency of the lubrication film is required (FZG test A/8.3/90 > 8).	TSA/TSE 32 TGB/TGE 32 HL 32	TD 32 HL 32 CL 32
TB 46 EP		TSA/TSE 46 TGB/TGE 46 HL 46	TD 46 HL 46 CL 46
TB 32 S	For lubrication systems of steam or gas turbines and turbo-compressors. These products deliver excellent oxidation stability; their life expectancy outlasts the MOGUL TB group oils by more than double	TSA 32 TGB 32 HL 32	TD 32 HL 32 CL 32
TB 46 S		TSA 46 TGB 46 HL 46	TD 46 HL 46 CL 46
TB 68 S	Oil for lubrication of oil turbines. This product delivers excellent oxidation stability; its life expectancy outlasts the MOGUL TB group oils by more than double.	TSA 68 TGB 68 HL 68	TD 68 HL 68 CL 68

Turbine Oils			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
TB 32	Oils for lubrication of steam or gas turbines and turbo-compressors.	TSA 32 TGB 32 HL 32	TD 32 HL 32 CL 32
TB 46		TSA 46 TGB 46 HL 46	TD 46 HL 46 CL 46
TB 68	Oil for water turbines.	TSA 68 TGB 68 HL 68	TD 68 HL 68 CL 68

Compressor Oils			
Air and Gas Compressor Oils			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
KOMPRIMO VDL 46	For rotating - screw compressors operating under higher loads (output temperature of 100°C), also for turbo-compressors.	DAJ 46	VDL 46
KOMPRIMO VDL 68		DAJ 68	VDL 68
KOMPRIMO VDL 100	For air and gas compressors operating under high load (output temperature up to 220°C), especially in applications where oils with lower performance fail to deliver, e.g. by formation of deposits, carbon layers, etc.	DAC 100	VDL 100
KOMPRIMO VDL 150		DAC 150	VDL 150

Refrigeration Compressor Oils			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
ON -3	Oils for refrigeration compressors. For ammonia compressors operating under moderate load (output temperature below 100°C, sump temperature below 50°C).	DRA 32	KA 32
ONF 46	For screw ammonia compressors.	DRA 46	KC 46
KOMPRIMO ONC 68	For piston ammonia compressors.	DRA 68	KA 68 KC 68

Multipurpose Oils			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
MULTI 46	These oils are designed for lubrication of gears, hydraulic circuits, bearings and sliding surfaces of modern machining equipment operating under demanding conditions that may benefit from the several purposes as well as the quality of these oils.	G 46 HM 46 CKC 46	CGLP 46 HLP 46 CLP 46
MULTI 68		G 68 HM 68 CKC 68	CGLP 68 HLP 68 CLP 68
MULTI 100		G 100 HM 100 CKC 100	CGLP 100 HLP 100 CLP 100
MULTI 150		G150 HM 150 CKC 150	CGLP 150 HLP 150 CLP 150
MULTI 220		G 220 HM 220 CKC 220	CGLP 220 HLP 220 CLP 220

Industrial Gear Oils			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
INTRANS 100	For all types of gearbox systems that operate under high levels of load and use a wide range of speeds; for lubrication of bearings and other machine components with high requirements for antiwear properties of oil.	CKC 100	CLP 100
INTRANS 150		CKC 150	CLP 150
INTRANS 220		CKC 220	CLP 220
INTRANS 320	For low-speed, high-load gears (spur, bevel, worm gears), for lubrication of low-speed bearings and other machine components with high requirements for antiwear properties of oil.	CKC 320	CLP 320
INTRANS 460		CKC 460	CLP 460

Chain Lubrication Oils			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
ŘETĚZOL 68	For lubrication of chains operating at low temperatures.		
ŘETĚZOL 100	For lubrication of chains - typical operating temperatures.		
ŘETĚZOL 150	For lubrication of chains operating at higher temperatures.		

Special Purpose Oils		
Transformer Oils		
MOGUL	Product Specification	Classification
TRAFO CZ-A TRAFO CZ	Inhibited transformer oils for transformers of all voltage levels, including equipment operating under excessive load.	IEC 60296
TRAFO D	Non-inhibited transformer oil for equipment with high requirements.	IEC 60296, VDE 57370, DIN 57 370 1A

Mould Release Oils	
MOGUL	Product Specification
MK S MK-5 MKS-L	These products are designed as mould release oils for applications in ceramics or cement industries, construction, etc. For separation of metal, plastic, ceramic and wood chip moulds.
MK S IDEAL	For separation of moulds in production of wood-cement boards in combination with polystyrene or mineral fibres.

Lubricating greases					
Lubricating Greases for Mobile Machinery and Equipment					
MOGUL	Type of Thickener	Product Specification	Classification ISO 6743	Classification DIN 51 502	Temperature range of application (°C)
LA 2	Li soap	For lubrication of rolling and plain bearings (especially as long-term fills) in mobile machinery, or for some other applications (e.g. lubrication of gears, etc.).	CCEB 2	KP2K-30	-30 to 120
LA 00	Li soap	Semi-fluid grease with high pressure properties and good flow properties at low temperatures; this product is designed for use in central lubrication systems of trucks, buses and other machinery.	CBEB 00	GP00G-35	-35 to 100

Lubricating greases					
Lubricating Greases for Mobile Machinery and Equipment					
A 00	Al soap	Highly adhesive, semi-fluid grease designed for central pressure lubrication systems, some low-speed gear-boxes, chains, etc.	BBHA 00	G00G-20	-20 to 90
PZ0 P	Li soap	This lubricant is primarily designed for encased gear-boxes, chains, etc , suitable also for central pressure lubrication systems	BBEA 0	G0E-20	-20 to 90
LP 00	Li soap	For final drives of train engines or for lubrication of other encased gearboxes (product contains graphite).	BBEB 00	GP00E-20	-20 to 90

Industrial Lubricating Greases					
MOGUL	Type of Thickener	Product Specification	Classification ISO 6743	Classification DIN 51 502	Temperature range of application (°C)
LV 2-3	Li soap	For lubrication of rolling and plain bearings or other large moving parts; the universal nature of these products gives them a wide range of application conditions. This product is unsuitable for central lubrication systems.	CCEA 2/3	K2/3K-30	-30 to 120
LVS 1	Li soap	For lubrication of rolling and plain bearings or other moving components operating under common conditions.	BCEA 1	K1K-25	-25 to 120
LVS 2	Li soap	For lubrication of rolling and plain bearings or other moving components operating under common conditions; higher viscosity of base oil against MOGUL LV 2-3.	BCEA 2	K2K-25	-25 to 120
LVS 3	Li soap	For lubrication of rolling and plain bearings or other moving components operating under common conditions; higher viscosity of base oil against MOGUL LV 2-3.	BCEA 3	K3K-25	-25 to 130
LV 00 EP	Li soap	For lubrication of transmissions that require semi-fluid lubricating grease, for rolling and plain bearings, and gliding surfaces. Suitable for central lubrication systems in both mobile and industrial applications.	BBEB 00	GP00G-25	-25 to 100
LV 2 EP	Li soap	For lubrication of high-load rolling and plain bearings or other moving components operating under high load. This product is unsuitable for central lubrication systems.	CCEB 2/3	KP2/3K-30	-30 to 120
LV 2-EPS	Li soap		CCEB 3	KP3K-30	-30 to 120
LVT 1-EP	Li soap	High pressure lubricating grease with higher viscosity of base oil for applications in rolling and plain bearings; this product is suitable for central lubrication systems with long lube pipes.	BCEB 1	KP1K-20	-25 to 120
LVT 2-EP	Li soap	High pressure lubricating grease with higher viscosity of base oil for applications in rolling and plain bearings.	BCEB 2	KP2K-20	-25 to 120
LV 2 WR	Li soap	High pressure lubricating grease resistant to water washing designed for lubrication of rolling and plain bearings which are subject to excessive splashing of water.	BCHB 2	KP2K-20	-20 to 120
LVT 2M	Li soap	For applications identical to MOGUL LV 2-M, with higher viscosity of the base oil, higher content of MoS ₂ and with adhesive agent.	BCEB 2	KFP2K-25	-25 to 120
LVG 2	Li soap	Especially for lubrication of high-load rolling and plain bearings or other moving components operating under high load. This product contains graphite.	CCEA 2/3	KF2/3K-30	-30 to 120
MOLYKA G	Li soap	Especially for lubrication of high-load rolling and plain bearings or other moving components operating under high load. For cases that require "emergency" properties of the lubricant, the product contains graphite and MoS ₂ .	CCEB 2/3	KF2/3K-30	-30 to 120

Industrial Lubricating Greases					
MOGUL	Type of Thickener	Product Specification	Classification ISO 6743	Classification DIN 51 502	Temperature range of application (°C)
LC 2	Li complex soap	For rolling and plain bearings and other applications in demanding environments, especially for bearings operating under high load and temperature.	BEEB 2	KP2P-20	-20 to 150 (180)
A 4	Ca soap	In general for all bearings exposed directly to water.	CAHA 4	K4E-25	-25 to 80
N 000	Ca soap	Semi-fluid grease used in central lubrication systems.	CAEA 000	K000C-30	-30 to 60
N 1	Ca soap	For rolling and plain bearings operating under low pressure and limited range of temperatures, also for applications that are centrally lubricated.	CAGA 1/2	K1/2C-30	-30 to 50
K3	Ca soap	For rolling and plain bearings operating under normal pressure and temperature especially in applications under wet conditions.	CAHA 2/3	K2/3C-30	-30 to 70
G3	Ca soap	For low-speed plain or rolling bearings that may operate in wet environments; its graphite content gives this product improved "emergency" properties.	CAHB 3	KF3C-30	-30 to 70

Biologically Degradable Lubricating Greases					
MOGUL	Type of Thickener	Product Specification	Classification ISO 6743	Classification DIN 51 502	Temperature range of application (°C)
EKO L2	Ca soap	Lubricating grease designed for lubrication of machines that operate in ecology reserves; the product replaces common oil-based greases.	BBEB 2	KP2E-20	-20 to 80
EKO V	Al soap	For lubrication of rail switches.	-	-	-15 to 50
EKO-V-PS	Al soap	For lubrication of switches in rail transportation industry (product formula contains synthetic ester to enhance product resistance to weather).	-	-	-20 to 80
EKO OK	Al soap	Wheel flange lubricant for railways.	-	-	-15 to 50
EKO OK-PS	Al soap	Wheel flange lubricant for railways (product formula contains synthetic ester to enhance the resistance of the lubricant to weather conditions).	-	-	-20 to 80

Special Products			
MOGUL	Product Specification	Classification ISO 6743	Classification DIN 51 502
MOLYKA R	Solid lubricant in the form of powder MoS ₂ is used for lubrication of moving parts where subsequent lubrication is difficult or impossible (joints, valves, etc.), for finishing of surfaces in demountable connections especially at high temperatures and in aggressive environments (preparation of a separation layer), also as a lubricant for drawing and pressing of metals.	-	-
MOLYKA paste	A mixture of molybdenum disulphide and mineral oil. For applications, refer to MOGUL MOLYKA R	-	-

MOGUL	Product Specification	Congeeing point (°C)
Yellow Vaseline	Petroleum jelly for technological purposes.	48 - 58
Corrosion Preventives Vaseline KORON L	Conservation grease for temporary protection of metal products against atmospheric corrosion during transportation and storage, especially for long-term protection in mild climates.	-



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