



Petrol Ofisi



LUBRICANTS PRODUCT CATALOGUE





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WHY TO CHOOSE PETROL OFİSİ LUBRICANTS?

Lubricant is one of the essential components of vehicles and equipment in terms of superior performance and utmost saving. However, each vehicle or equipment demands a different lubricant and it requires experience, technological background and highly-specialized staff to satisfy this demand.

Committed to consistently offer the state-of-the-art technology to its customers, enhance production efficiency and capacity utilization, to expand product ranges and to achieve savings in the utilization of its resources, Petrol Ofisi ceaselessly invests in infrastructure at its Lubricant Blending Plant in Derince.

Thanks to its Technology Centre (POTEC), one of the giants in Turkey and the nearby geography, the laboratory which is capable of conducting extensive lubricant analyses, as well as its training teams, on-site engineering services, environment- and human-friendly approach, and consistently renewed infrastructure, Petrol Ofisi is the leading enterprise of fuel distribution and lubricant market in Turkey.

THE MOST COMPETENT TECHNOLOGICAL RESEARCH CENTRE OF TURKEY: POTEC



Petrol Ofisi Technology Centre (POTEC), one of the giants in Turkey as well as the nearby geography, keeps up with latest technologies in parallel to the global trends, anticipates customer demands and ceaselessly upgrades its product ranges in combination with consistent technical service provision to customers, setting high standards in the market in terms of R&D.

Having obtained the first and the most comprehensive TS EN ISO/IEC 17025 laboratory competence accreditation in the market, POTEC stands as one of the most sophisticated laboratories in Turkey as well as the nearby geography for its mineral oil and fuel research and development efforts allied by state-of-the-art technology and a highly-specialized team. POTEC primarily develops and reviews new lubricants in line with the demands of local and foreign Petrol Ofisi customers.

Proving its competence and capacity through its efforts so far both inside and outside the country, POTEC is the brilliant technology centre of both Petrol Ofisi and Turkey thanks to its intensive and concentrated efforts in R&D, constantly upgraded technological background and wide range of service offerings.

MOTOR OILS



- **Motor Oils for Passenger and Light Commercial Vehicles**
 - **Motorcycle Oils**
 - **Diesel Motor Oils for Heavy Commercial Vehicles**
- 

Maxima HYBRID 0W-20 Fully Synthetic Motor Oil

Applications

Maxima HYBRID 0W-20 is the motor oil, which focuses on the fuel saving, which is produced for vehicles with new-generation hybrid technology and light commercial vehicles and passenger cars having gasoline or diesel motor, and which can rapidly respond to the instant lubrication need of the start-stop technology. It can be used for vehicle motors with particulate filter, which demands motor oil at ACEA C2 or C3 level.

Performance

API SN, ACEA A5/B5, ILSAC GF-5

Typical Specifications*

SAE Viscosity Grade		0W-20
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,85
Flash Point, COC, °C	ASTM D-92	236
Viscosity, 40 °C, mm ² /s	ASTM D 445	47,19
Viscosity, 100 °C, mm ² /s		9,08
Viscosity Index	ASTM D-2270	178
T.B.N., mgKOH/gr	ASTM D-2896	8
Pour Point, °C	ASTM D-97	-48
Sulphated Ash, wt%	ASTM D-874	0,8

* Values shown may differ between productions.



Maxima 0W-20 Fully Synthetic Motor Oil

Applications

Maxima 0W-20 is recommended for the vehicles requiring special lubricants, designed specifically for improved engine performance, increased fuel efficiency and decreased engine deposit.

Performance

API SN/CF, ACEA A1/B1

Typical Specifications*

SAE Viscosity Grade		0W-20
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,844
Flash Point, COC, °C	ASTM D 92	228
Viscosity, 40 °C, mm ² /s	ASTM D 445	45,5
Viscosity, 100 °C, mm ² /s		8,8
Viscosity Index	ASTM D 2270	177
T.B.N, mgKOH/gr	ASTM D 2896	6,8
Pour Point, °C	ASTM D 97	-30
Sulphated Ash, wt%	ASTM D-874	0,8

* Values shown may differ between productions.



Maxima 5W-20

Advanced Technology Fully Synthetic Motor Oil

Applications

Maxima 5W-20 is designed to fulfill the latest standards of modern vehicle motors.

Performance

API SN, ACEA C2-12

Typical Specifications*

SAE Viscosity Grade		5W-20
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,85
Flash Point, COC, °C	ASTM D 92	240
Viscosity, 40 °C, mm ² /s	ASTM D 445	51,4
Viscosity, 100 °C, mm ² /s		8,9
Viscosity Index	ASTM D 2270	153
T.B.N., mgKOH/gr	ASTM D-2896	8,1
Pour Point, °C	ASTM D 97	-33
Sulphated Ash, wt%	ASTM D-874	0,8

* Values shown may differ between productions.



Maxima PG 0W-30

Fully Synthetic Motor Oil for New Generation PSA Group Vehicles

Applications

Suitable for PSA Group Vehicles with "BlueHDI" technology engine containing SCR. Also suitable for gasoline and diesel engines of PSA Group Vehicles with or without DPF. Maxima PG 0W-30 can be used in vehicle engines that require ACEA C3 performance level.

Performance

PSA B71 2312, FIAT 9.55535-DS1, ACEA C2-12

Typical Specifications*

SAE Viscosity Grade		0W-30
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,840
Flash Point, COC, °C	ASTM D-92	240
Viscosity, 40 °C, mm ² /s	ASTM D-445	54,40
Viscosity, 100 °C, mm ² /s		9,9
Viscosity Index	ASTM D-2270	165
T.B.N., mgKOH/gr	ASTM D-2896	5,9
Pour Point, °C	ASTM D- 97	-48
Sulphated Ash, wt%	ASTM D-874	0,7

* Values shown may differ between productions.



Maxima 0W-30 Long Life Fully Synthetic Motor Oil

Applications

Suitable for high performance gasoline and diesel engines of light commercial and passenger cars, especially those require WSS-M2C950-A performance level.

Performance

FORD WSS-M2C950-A, FIAT 9.55535-DS1, API SN, ACEA A5/B5, C2

Typical Specifications*

SAE Viscosity Grade		0W-30
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,842
Flash Point, COC, °C	ASTM D-92	224
Viscosity, 40 °C, mm ² /s	ASTM D 445	51,4
Viscosity, 100 °C, mm ² /s		9,7
Viscosity Index	ASTM D-2270	178
T.B.N., mgKOH/gr	ASTM D-2896	6,4
Pour Point, °C	ASTM D- 97	-39
Sulphated Ash, wt%	ASTM D-874	0,8



* Values shown may differ between productions.

Maxima K 5W-30 Full-Synthetic Gasoline Motor Oil

Applications

Maxima K 5W-30 for diesel passenger and light commercial vehicle motors equipped with DPF and SCR exhaust emission systems demanding motor oil with an ACEA C2 or C3 performance level and gasoline vehicle motors with catalytic converters. This is specially developed for KIA branded vehicles.

Performance

ACEA C2/C3, API SN

Typical Specifications*

SAE Viscosity Grade		5W-30
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,86
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	74,7
Viscosity, 100 °C, mm ² /s		12,4
Viscosity Index	ASTM D-2270	165
T.B.N., mgKOH/gr	ASTM D-2896	7,8
Pour Point, °C	ASTM D- 97	-33
Sulphated Ash, wt%	ASTM D-874	0,8



* Values shown may differ between productions.

Maxima VSA 5W-30 Fully Synthetic Motor Oil

Applications

Recommended for new generation both for gasoline and diesel engines. used in engines demanding VW 504 00/507 00 approval. Recommended for all driving conditions.

Performance

ACEA C3, VW 504 00/507 00, PORSCHE C30

Typical Specifications*

SAE Viscosity Grade		5W-30
Density, @ 15 °C, kg/m ³	ASTM 4052	0,850
Flash Point, COC, °C	ASTM D 92	230
Viscosity, 40 °C, mm ² /s	ASTM D 445	66,7
Viscosity, 100 °C, mm ² /s		11,3
Viscosity Index	ASTM D 2270	171
T.B.N., mgKOH/gr	ASTM D 2896	6,4
Pour Point, °C	ASTM D 97	-33
Sulphated Ash, wt%	ASTM D-874	0,8



* Values shown may differ between productions.

Maxima GA 5W-30 Fully Synthetic Motor Oil

Applications

Recommended for high performance gasoline and diesel passenger cars and light commercial vehicles. It is particularly well suited for Opel cars where Dexos2™ performance level is a requirement.

Performance

GM Dexos2™ , API SN, ACEA C3, MB 229.51, MB 229.52, VW 502.00/505.00/505.01

Typical Specifications*

SAE Viscosity Grade		5W-30
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,848
Flash Point, COC, °C	ASTM D 92	228
Viscosity, 40 °C, mm ² /s	ASTM D 445	60,36
Viscosity, 100 °C, mm ² /s		11,2
Viscosity Index	ASTM D 2270	181
T.B.N., mgKOH/gr	ASTM D 2896	7
Pour Point, °C	ASTM D 97	-33
Sulphated Ash, wt%	ASTM D-874	0,8



* Values shown may differ between productions.

Maxima PG 5W-30

Fully Synthetic, Premium Quality Motor Oil

Applications

Excellently suited for use in PSA Group vehicles equipped with diesel particulate filter systems requiring ACEA C2 performance level. Also recommended for most recent FIAT Group, HONDA and TOYOTA gasoline and diesel engines with/without particulate filter.

Performance

ACEA A5/B5/C2, API SN, Fiat 9.55535 - S1, PSA B71 2290

Typical Specifications*

SAE Viscosity Grade		5W-30
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,850
Flash Point, COC, °C	ASTM D 92	240
Viscosity, 40 °C, mm ² /s	ASTM D 445	58,6
Viscosity, 100 °C, mm ² /s		10,2
Viscosity Index	ASTM D 2270	163
T.B.N., mgKOH/gr	ASTM D-2896	7,8
Pour Point, °C	ASTM D 97	-33
Sulphated Ash, wt%	ASTM D-874	0,9

* Values shown may differ between productions.



Maxima RN 5W-30

Fully Synthetic Motor Oil

Applications

It is recommended for Euro IV diesel engines. Especially suitable for Renault vehicles with Diesel Particulate Filter.

Performance

ACEA C4, RENAULT RN 0720

Typical Specifications*

SAE Viscosity Grade		5W-30
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,848
Flash Point, COC, °C	ASTM D 92	234
Viscosity, 40 °C, mm ² /s	ASTM D 445	71
Viscosity, 100 °C, mm ² /s		12,1
Viscosity Index	ASTM D 2270	169
Pour Point, °C	ASTM D 97	-33
Sulfated Ash, wt. %	ASTM D-874	0,9

* Values shown may differ between productions.



Maxima Diesel LA 5W-30

Fully Synthetic Motor Oil for Vehicle with Diesel Particulate Filter

Applications

Can be used in high performance passenger cars which have gasoline and diesel engines with particulate filter.

Performance

API SN, ACEA C3, MB-Approval 229.51, MB 229.52, VW 502 00/505 00/505 01, BMW LL-04, FIAT 9.55535-S2

Typical Specifications*

SAE Viscosity Grade		5W-30
Density, @ 15 °C, kg/m ³	ASTM 4052	0,848
Flash Point, COC, °C	ASTM D 92	228
Viscosity, 40 °C, mm ² /s	ASTM D 445	60,4
Viscosity, 100 °C, mm ² /s		11,2
Viscosity Index	ASTM D 2270	181
T.B.N., mgKOH/gr	ASTM D-2896	7
Pour Point, °C	ASTM D 97	-33
Sulphated Ash, weight %	ASTM D-874	0,8



* Values shown may differ between productions.

Maxima CX 5W-30

Fully Synthetic Motor Oil for the Vehicles with Diesel Particulate Filter and Catalytic Converters

Applications

Maxima CX 5W-30 can be used in the gasoline vehicles with catalytic convertor and diesel passenger and light commercial vehicles equipped with the exhaust systems containing DPF and SCR, requiring engine oil at the ACEA C2 or C3 performance level.

Performance

ACEA C2/C3-12, API SN, MB-APPROVAL 229.31, FIAT 9.55535-S1

Typical Specifications*

SAE Viscosity Grade		5W-30
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,849
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	74,7
Viscosity, 100 °C, mm ² /s		12,4
Viscosity Index	ASTM D-2270	165
T.B.N., mgKOH/gr	ASTM D-2896	7,8
Pour Point, °C	ASTM D-97	-33
Sulphated Ash, weight %	ASTM D-874	0,8



* Values shown may differ between productions.

Maxima FM 5W-30 Fully Synthetic Motor Oil

Applications

It is formulated for both gasoline and diesel engines. Developed for Ford.

Performance

FORD WSS-M2C913-D (A, B, C), API SN/CF, ACEA A5/B5

SAE Viscosity Grade		5W-30
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,848
Flash Point, COC, °C	ASTM D 92	238
Viscosity, 40 °C, mm ² /s	ASTM D 445	55,7
Viscosity, 100 °C, mm ² /s		10
Viscosity Index	ASTM D 2270	166
T.B.N., mgKOH/gr	ASTM D 2896	10
Pour Point, °C	ASTM D 97	-36
Sulphated Ash, wt%	ASTM D-874	1,2



* Values shown may differ between productions.

Maxima XT 5W-30 Synthetic Motor Oil

Applications

It is developed for both high technology gasoline and diesel engines.

Performance

API SL/CF, ACEA A3/B4

Typical Specifications*

SAE Viscosity Grade		5W-30
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,850
Flash Point, COC, °C	ASTM D 92	230
Viscosity, 40 °C, mm ² /s	ASTM D 445	55,6
Viscosity, 100 °C, mm ² /s		9,4
Viscosity Index	ASTM D 2270	153
T.B.N., mgKOH/gr	ASTM D 2896	8
Pour Point, °C	ASTM D 97	-36
Sulphated Ash, weight %	ASTM D-874	0,95



* Values shown may differ between productions.

Maxima 5W-40 Fully Synthetic Motor Oil

Applications

Suitable for all diesel engines in the passenger cars and light commercial vehicles demanding SAE 5W-40 viscosity grade and ACEA A3/B4 engine oil performance level.

Performance

RENAULT RN 0700, RN0710, MB-Approval 229.3, VW 502.00/505.00, FIAT 9.55535-M2/N2/Z2, API SN/CF, ACEA A3/B4

Typical Specifications*

SAE Viscosity Grade		5W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,854
Flash Point, COC, °C	ASTM D-92	232
Viscosity, 40 °C, mm ² /s	ASTM D-445	77
Viscosity, 100 °C, mm ² /s		12,8
Viscosity Index	ASTM D-2270	169
T.B.N., mgKOH/gr	ASTM D-2896	8,8
Pour Point, °C	ASTM D- 97	-36
Sulphated Ash, wt%	ASTM D-874	1,1



* Values shown may differ between productions.

Maxima Diesel 5W-40 Fully Synthetic Motor Oil

Applications

Suitable for all diesel engines in the passenger cars and light commercial vehicles demanding SAE 5W-40 viscosity grade and ACEA A3/B4 engine oil performance level.

Performance

API CF/SN, ACEA A3/B4, VW 502.00/505.00, RN 700/710, MB 229.3

Typical Specifications*

SAE Viscosity Grade		5W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,86
Flash Point, COC, °C	ASTM D-92	240
Viscosity, 40 °C, mm ² /s	ASTM D-445	77
Viscosity, 100 °C, mm ² /s		12,8
Viscosity Index	ASTM D-2270	169
T.B.N., mgKOH/gr	ASTM D-2896	9
Pour Point, °C	ASTM D- 97	-39
Sulphated Ash, wt%	ASTM D-874	1,1



* Values shown may differ between productions.

Maxima 10W-30 Synthetic Motor Oil

Applications

Suitable for high performance gasoline and diesel engine passenger cars, SUV, pick-ups and off-road vehicles such as CHRYSLER, GMC, FORD, DODGE, TOYOTA, NISSAN, etc.

Performance

API SL/CF, ACEA A3/B4, VW 501.01/505.00

Typical Specifications*

SAE Viscosity Grade		10W-30
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,874
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	62
Viscosity, 100 °C, mm ² /s		9,8
Viscosity Index	ASTM D-2270	141
T.B.N., mgKOH/gr	ASTM D-2896	8,5
Pour Point, °C	ASTM D- 97	-24
Sulphated Ash, wt%	ASTM D-874	0,98

* Values shown may differ between productions.



Maxima 10W-40^{plus} Synthetic Motor Oil with Improved New Formulation

Applications

Suitable for all gasoline and diesel engines in the passenger cars and light commercial vehicles demanding SAE 10W-40 viscosity grade and ACEA A3/B4 engine oil performance level.

Performance

API SL/CF, ACEA A3/B4, VW 501.01/505.00, MB 229.1

Typical Specifications*

SAE Viscosity Grade		10W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,870
Flash Point, COC, °C	ASTM D-92	234
Viscosity, 40 °C, mm ² /s	ASTM D-445	86,5
Viscosity, 100 °C, mm ² /s		13
Viscosity Index	ASTM D-2270	151
T.B.N., mgKOH/gr	ASTM D-2896	8,8
Pour Point, °C	ASTM D- 97	-30
Sulphated Ash, wt%	ASTM D-874	0,98

* Values shown may differ between productions.



Maxima Diesel 10W-40^{plus} Synthetic Motor Oil with Improved New Formulation

Applications

Can be used in diesel engine passenger cars and commercial vehicles including equipped catalytic converter and turbocharger demanding SAE 10W-40 viscosity grade and ACEA A3/B4 motor oil performance level.

Performance

API CF/SL, ACEA A3/B4, VW 501.01/505.00, MB 229.1

Typical Specifications*

SAE Viscosity Grade		10W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,870
Flash Point, COC, °C	ASTM D-92	226
Viscosity, 40 °C, mm ² /s	ASTM D-445	91,2
Viscosity, 100 °C, mm ² /s		13,8
Viscosity Index	ASTM D-2270	154
T.B.N., mgKOH/gr	ASTM D-2896	9
Pour Point, °C	ASTM D- 97	-30
Sulphated Ash, wt%	ASTM D-874	1

* Values shown may differ between productions.



Maxima AUTO LPG 10W-40 Liquefied Petroleum Gas (LPG) Motor Oil

Applications

Recommended for use in all high performance modern passenger cars, operated with LPG.

Performance

API SL/CF, ACEA A3/B4, MB 229.1, VW 501.01/505.00

Typical Specifications*

SAE Viscosity Grade		10W-40
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,87
Flash Point, COC, °C	ASTM D 92	226
Viscosity, 40 °C, mm ² /s	ASTM D 445	91,2
Viscosity, 100 °C, mm ² /s		13,8
Viscosity Index	ASTM D 2270	154
T.B.N., mgKOH/gr	ASTM D 2896	8,8
Pour Point, °C	ASTM D 97	-33
Sulphated Ash, wt%	ASTM D-874	0,94

* Values shown may differ between productions.



Maxima 15W-40 Gasoline Motor Oil

Applications

Can be used in gasoline engine passenger cars and light commercial vehicles including turbocharged engines.

Performance

API SH/CD

Typical Specifications*

SAE Viscosity Grade		15W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,884
Flash Point, COC, °C	ASTM D-92	230
Viscosity, 40 °C, mm ² /s	ASTM D-445	106
Viscosity, 100 °C, mm ² /s		14,5
Viscosity Index	ASTM D-2270	140
T.B.N., mgKOH/gr	ASTM D-2896	6,8
Pour Point, °C	ASTM D- 97	-30
Sulphated Ash, wt%	ASTM D-874	0,8

* Values shown may differ between productions.



Maxima Diesel 15W-40 Diesel Motor Oil

Applications

Can be used in high speed and turbocharged diesel engine passenger cars and light commercial vehicles.

Performance

API SH/CD

Typical Specifications*

SAE Viscosity Grade		15W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,87
Flash Point, COC, °C	ASTM D-92	226
Viscosity, 40 °C, mm ² /s	ASTM D-445	91,2
Viscosity, 100 °C, mm ² /s		13,8
Viscosity Index	ASTM D-2270	154
T.B.N., mgKOH/gr	ASTM D-2896	9
Pour Point, °C	ASTM D- 97	-30
Sulphated Ash, wt%	ASTM D-874	1

* Values shown may differ between productions.



Maxima 20W-50 Multigrade Engine Oil

Applications

Suitable for passenger cars and light commercial vehicles including turbocharged engines. Compatible for severe travelling conditions, such as heavy traffic and highway.

Performance

API SH/CD

Typical Specifications*

SAE Viscosity Grade		20W-50
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,890
Flash Point, COC, °C	ASTM D-92	228
Viscosity, 40 °C, mm ² /s	ASTM D-445	179,8
Viscosity, 100 °C, mm ² /s		20
Viscosity Index	ASTM D-2270	129
T.B.N., mgKOH/gr	ASTM D-2896	7,2
Pour Point, °C	ASTM D- 97	-24
Sulphated Ash, wt%	ASTM D-874	0,8

* Values shown may differ between productions.



Maxima AUTO LPG 20W-50 Liquefied Petroleum Gas (LPG) Motor Oil

Applications

Suitable for all LPG operated engines in the passenger cars demanding SAE 20W-50 viscosity grade motor oil.

Performance

API SG/CD

Typical Specifications*

SAE Viscosity Grade		20W-50
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,89
Flash Point, COC, °C	ASTM D-92	254
Viscosity, 40 °C, mm ² /s	ASTM D-445	180,3
Viscosity, 100 °C, mm ² /s		20,1
Viscosity Index	ASTM D-2270	129
T.B.N., mgKOH/gr	ASTM D-2896	6
Pour Point, °C	ASTM D- 97	-24
Sulphated Ash, wt%	ASTM D-874	0,7

* Values shown may differ between productions.



Maximoto 10W-40 4 Stroke Synthetic Motorcycle Engine Oil

Applications

It is used in 4 stroke and high performance, either liquid or air cooled motorcycles all around year. In addition, it is suitable for European and Japanese motorcycle manufacturers which recommend API SL and/or JASO MA2 specifications.

Performance

API SL, JASO MA2

Typical Specifications*

SAE Viscosity Grade		10W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,87
Flash Point, COC, °C	ASTM D-92	230
Viscosity, 40 °C, mm ² /s	ASTM D-445	90
Viscosity, 100 °C, mm ² /s		13,5
Viscosity Index	ASTM D-2270	152
Pour Point, °C	ASTM D- 97	-27

* Values shown may differ between productions.



Maximoto 15W-50 Four Stroke, Mineral Based Engine Oil

Applications

Used for four-stroke and high performance motorcycles.

Performance

API SH, JASO MA

Typical Specifications*

SAE Viscosity Grade		15W-50
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,88
Flash Point, COC, °C	ASTM D-92	236
Viscosity, 40 °C, mm ² /s	ASTM D-445	154
Viscosity, 100 °C, mm ² /s		20,3
Viscosity Index	ASTM D-2270	153
Pour Point, °C	ASTM D- 97	-27

* Values shown may differ between productions.



Maximoto 20W-50

Four Stroke, Mineral Based Engine Oil

Applications

Used for four-stroke and high performance motorcycles.

Performance

API SG/CF

Typical Specifications*

SAE Viscosity Grade		20W-50
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,89
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	172
Viscosity, 100 °C, mm ² /s		19,5
Viscosity Index	ASTM D-2270	130
Pour Point, °C	ASTM D- 97	-24

* Values shown may differ between productions.



Maximoto 2T

2-Cycle, Air Cooled High Quality Engine Oil

Applications

It can be used in all types of 2-stroke motorcycle and scooter air-cooled engines. In general, oil to fuel ratio ranges between 1/16 to 1/50. It is recommended to refer Original Equipment Manufacturer booklet for suitable ratio ranges.

Performance

API TC, (CEC TSC-3)

Typical Specifications*

Density, @ 15 °C, kg/m ³	ASTM D-4052	0,890
Flash Point, COC, °C	ASTM D-92	250
Viscosity, 40 °C, mm ² /s	ASTM D-445	119
Viscosity, 100 °C, mm ² /s		12,8
Viscosity Index	ASTM D-2270	100
Pour Point, °C	ASTM D- 97	-12

* Values shown may differ between productions.



Maximus HD-E 5W-30

Fully Synthetic Heavy Duty Diesel Engine Oil

Applications

It is recommended for all heavy duty vehicles, construction equipment and highway fleet equipped with high power, 4-cycle diesel engines. It is convenient for engines with and without DPF and engines with EGR and SCR. It is especially recommended for modern Volvo Heavy Duty engines.

Performance

API CJ-4/SN, ACEA E6/E7/E9-16, JASO DH-2, MB-Approval 228.51, MB 228.31, MB 235.28, MAN M3677, M3477, M3271-1, Volvo VDS-4/CNG, RENAULT TRUCKS RXD/RLD-3/RGD, CUMMINS CES 20081, MTU Type 3.1, MACK EO-0/O-N PREMIUM PLUS, DEUTZ DQC IV-10 LA, DETROIT DIESEL DDC93K218, CATERPILLAR ECF-3/ECF-2/ECF-1-a, SCANIA LOW ASH

Typical Specifications*

SAE Viscosity Grade		5W-30
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,870
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	69,7
Viscosity, 100 °C, mm ² /s		11,4
Viscosity Index	ASTM D-2270	157
T.B.N., mgKOH/gr	ASTM D-2896	8,5
Pour Point, °C	ASTM D- 97	-45
Sulphated Ash, wt%	ASTM D-874	0,9

* Values shown may differ between productions.



Maximus HD 10W-30

Fully Synthetic Heavy Duty Diesel Engine Oil

Applications

It is recommended for all heavy duty vehicles, construction equipment and highway fleet equipped with high power, 4-cycle diesel engines. It is convenient for engines with and without DPF and engines with EGR and SCR. It is especially recommended for modern Volvo Heavy Duty engines.

Performance

API CK-4/SN, ACEA E9-16, MB 228.31, VOLVO VDS-4.5, RENAULT TRUCKS RLD-4, MAN M3775, CUMMINS 20086, MTU Type 2.1, MACK EO-S-4.5, CATERPILLAR ECF-3/ECF-2/ECF-1-a, DEUTZ DQC III-18LA, DETROIT DIESEL DFS93K222, JASO DH-2, FORD WSS-M2C171-F1

Typical Specifications*

SAE Viscosity Grade		10W-30
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,866
Flash Point, COC, °C	ASTM D-92	230
Viscosity, 40 °C, mm ² /s	ASTM D-445	75
Viscosity, 100 °C, mm ² /s		11,9
Viscosity Index	ASTM D-2270	153
T.B.N., mgKOH/gr	ASTM D-2896	8,7
Pour Point, °C	ASTM D- 97	-39
Sulphated Ash, wt%	ASTM D-874	1

* Values shown may differ between productions.



Maximus 10W-30 Synthetic Diesel Engine Oil

Applications

Recommended for all applications involving light commercial vehicles, trucks, buses, construction machines, and generators equipped with a diesel engine, especially with turbocharged and low emission diesel engines.

Performance

API CI-4, ACEA E7-16, MAN M3275, MB 228.3, VOLVO VDS-3, RENAULT RLD-2, CUMMINS 20077/20078, MACK EO-N/M, Global DHD1, CAT ECF-1a, JASO DH-1, DETROIT DIESEL DDC 93K215, FORD WSS-M2C921-A

Typical Specifications*

SAE Viscosity Grade		10W-30
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,873
Flash Point, COC, °C	ASTM D-92	230
Viscosity, 40 °C, mm ² /s	ASTM D-445	80
Viscosity, 100 °C, mm ² /s		11,8
Viscosity Index	ASTM D-2270	141
T.B.N., mgKOH/gr	ASTM D-2896	11,3
Pour Point, °C	ASTM D- 97	-33
Sulphated Ash, wt%	ASTM D-874	1,4

* Values shown may differ between productions.



Maximus LA 10W-40 Fully Synthetic Heavy Duty Diesel Engine Oil

Applications

Recommended for all vehicles with EGR and SCR systems that meets EURO I, II, III, IV, V and VI emission requirements and operates under severe conditions.

Performance

API CI-4, ACEA E6/E7-16, MB-Approval 228.51, MAN M3477, MTU Type 3.1, Volvo VDS-3, Renault RLD-2, MACK EO-N, CAT ECF-1-a, Deutz DQC III-10LA, Scania Low Ash, Cummins CES 20076/77

Typical Specifications*

SAE Viscosity Grade		10W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,860
Flash Point, COC, °C	ASTM D-92	240
Viscosity, 40 °C, mm ² /s	ASTM D-445	97,6
Viscosity, 100 °C, mm ² /s		14,7
Viscosity Index	ASTM D-2270	156
T.B.N., mgKOH/gr	ASTM D-2896	10,5
Pour Point, °C	ASTM D- 97	-33
Sulphated Ash, wt%	ASTM D-874	1,2

* Values shown may differ between productions.



Maximus HD 10W-40

Fully Synthetic Heavy Duty Diesel Engine Oil

Applications

It is recommended for all heavy duty vehicles, construction equipment and highway fleet equipped with high power, 4-cycle diesel engines. It is convenient for engines with and without DPF and engines with EGR and SCR. It is especially recommended for modern Volvo Heavy Duty engines.

Performance

API CJ-4/SN, ACEA E9-12, MB-Approval 228.31, VOLVO VDS-4, RENAULT TRUCKS RLD-3, MAN M3575, CUMMINS 20081, MTU Type 2.1, MACK EO-0 PREMIUM PLUS, CATERPILLAR ECF-3/ECF-2/ECF-1-a, DEUTZ DQC III-10LA, DETROIT DIESEL DDC93K218

Typical Specifications*

SAE Viscosity Grade		10W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,858
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	91,55
Viscosity, 100 °C, mm ² /s		13,95
Viscosity Index	ASTM D-2270	153
T.B.N., mgKOH/gr	ASTM D-2896	8,64
Pour Point, °C	ASTM D- 97	-42
Sulphated Ash, wt%	ASTM D-874	1

* Values shown may differ between productions.



Maximus 10W-40

Synthetic Heavy Duty Diesel Engine Oil

Applications

It is recommended for all 4-cycle light commercial or heavy-duty diesel engines with or without turbocharger those are working in construction, mining, transportation, agriculture and fleet.

Performance

API CI-4, ACEA E4/E7-16, MB-Approval 228.5, MAN M3277, Volvo VD-3, CUMMINS 20076/77/78, MACK EO-N, Renault RLD-2, DETROIT DIESEL DDC93K215, DEUTZ DQC III-10, JASO DH-1, Global DHD-1, MTU Type 3

Typical Specifications*

SAE Viscosity Grade		10W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,869
Flash Point, COC, °C	ASTM D-92	230
Viscosity, 40 °C, mm ² /s	ASTM D-445	93
Viscosity, 100 °C, mm ² /s		13,5
Viscosity Index	ASTM D-2270	146
T.B.N., mgKOH/gr	ASTM D-2896	13
Pour Point, °C	ASTM D- 97	-36
Sulphated Ash, wt%	ASTM D-874	1,5

* Values shown may differ between productions.



Maximus XT 10W-40

Synthetic Heavy Duty Diesel Engine Oil

Applications

Recommended for all trucks, buses, construction machines, agricultural machines and generators with diesel engine, especially with turbocharged and low emission engines. It is recommended to use MAXIMUS LA 10W/40 for heavy duty diesel engines with DPF and SCR systems.

Performance

API CI-4, ACEA E7-16, MB 228.3, MAN M3275-1, MTU Type 2, Volvo VDS-3, RENAULT RLD, MACK EO-N, CUMMINS CES 20078, DETROIT DIESEL DDC 93K215, DEUTZ DQC III-10

Typical Specifications*

SAE Viscosity Grade		10W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,871
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	100
Viscosity, 100 °C, mm ² /s		14,7
Viscosity Index	ASTM D-2270	153
T.B.N., mgKOH/gr	ASTM D-2896	11
Pour Point, °C	ASTM D- 97	-36
Sulphated Ash, wt%	ASTM D-874	1,4

* Values shown may differ between productions.



Maximus HD 15W-40

Ultra High Performance Diesel Engine Oil

Applications

It is recommended for all heavy duty vehicles, construction equipment and highway fleet equipped with high power, 4-cycle diesel engines. It is convenient for engines with and without DPF and engines with EGR and SCR. It is especially recommended for modern Volvo Heavy Duty engines.

Performance

API CK-4/SN, ACEA E9-16, MB 228.31, VOLVO VDS-4.5, RENAULT TRUCKS RLD-4/3, MAN M3775, CUMMINS 20086, MTU Type 2.1, MACK EO-S-4.5, CATERPILLAR ECF-3/ECF-2/ECF-1-a, DEUTZ DQC III-10LA, DETROIT DIESEL DFS93K222, JASO DH-2, FORD WSS-M2C171-F1

Typical Specifications*

SAE Viscosity Grade		15W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,876
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	113,4
Viscosity, 100 °C, mm ² /s		14,7
Viscosity Index	ASTM D-2270	133
T.B.N., mgKOH/gr	ASTM D-2896	8,2
Pour Point, °C	ASTM D- 97	-33
Sulphated Ash, wt%	ASTM D-874	1

* Values shown may differ between productions.



Maximus Turbo Diesel Extra 15W-40 Heavy Duty Diesel Engine Oil

Applications

It is recommended for all heavy-duty vehicles, buses, trucks, construction equipment, and generators having diesel engines, especially turbocharged and low-emission diesel engines.

Performance

API CI-4, ACEA E7-16, MB-Approval 228.3, JASO DH-1, GLOBAL DHD-1, MTU Type 2, Volvo VDS-3, RENAULT RV-I/RLD-2, MACK EO-N, CUMMINS CES 20077/78, DETROIT DIESEL DDC 93K215, DEUTZ DQC-III, MAN M3275, CAT ECF-1a

Typical Specifications*

SAE Viscosity Grade		15W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,886
Flash Point, COC, °C	ASTM D-92	240
Viscosity, 40 °C, mm ² /s	ASTM D-445	114
Viscosity, 100 °C, mm ² /s		15
Viscosity Index	ASTM D-2270	139
T.B.N., mgKOH/gr	ASTM D-2896	11,5
Pour Point, °C	ASTM D- 97	-30
Sulphated Ash, wt%	ASTM D-874	1,3

* Values shown may differ between productions.



Maximus Turbo Diesel S 15W-40 Heavy Duty Diesel Engine Oil

Applications

Recommended for trucks, buses, construction machines, agricultural machines and generators with diesel engine, especially with turbocharged engine.

Performance

API CG-4/CF-4/CF/SH/SG, ACEA E2, MB 228.1

Typical Specifications*

SAE Viscosity Grade		15W-40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,884
Flash Point, COC, °C	ASTM D-92	240
Viscosity, 40 °C, mm ² /s	ASTM D-445	111
Viscosity, 100 °C, mm ² /s		15,3
Viscosity Index	ASTM D-2270	145
T.B.N., mgKOH/gr	ASTM D-2896	12
Pour Point, °C	ASTM D- 97	-30
Sulphated Ash, wt%	ASTM D-874	1,4

* Values shown may differ between productions.



Maximus Super Diesel 20W-50 Heavy Duty Diesel Engine Oil

Applications

Recommended for commercial vehicles, trucks, buses, construction machines, and generators having diesel engine including turbocharged and supercharged diesel engines.

Performance

API CF-4/CF/CE/CD/SG, MIL-L-2104D, CAT TO-2, Allison C3, VW 505.00

Typical Specifications*

SAE Viscosity Grade		20W-50
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,892
Flash Point, COC, °C	ASTM D-92	240
Viscosity, 40 °C, mm ² /s	ASTM D-445	176
Viscosity, 100 °C, mm ² /s		19,7
Viscosity Index	ASTM D-2270	128
T.B.N., mgKOH/gr	ASTM D-2896	11
Pour Point, °C	ASTM D- 97	-24
Sulphated Ash, wt%	ASTM D-874	1,2

* Values shown may differ between productions.



Maxitrak Traktör Yağı Series Multigrade Tractor Oil

Applications

Used for turbo diesel engines of agricultural machines including the latest models.

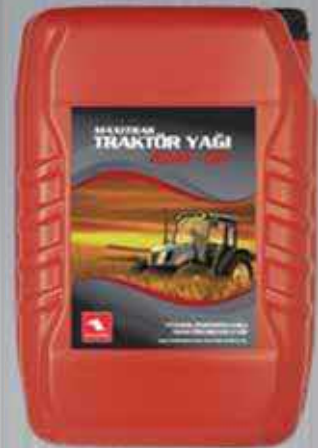
Performance

API CF-4/CF

Typical Specifications*

SAE Viscosity Grade		15W-40	20W-50
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,890	0,890
Flash Point, COC, °C	ASTM D-92	240	260
Viscosity, 40 °C, mm ² /s	ASTM D-445	92	167
Viscosity, 100 °C, mm ² /s		13,7	20
Viscosity Index	ASTM D-2270	150	136
T.B.N., mgKOH/gr	ASTM D-2896	10,5	10,5
Pour Point, °C	ASTM D- 97	-30	-18
Sulphated Ash, wt%	ASTM D-874	1,2	1,2

* Values shown may differ between productions.



Turboşarj Extra 40

Monograde High Performance Diesel Engine Oil

Applications

High-speed, turbocharged diesel engines of heavy duty vehicles.

Performance

API CF-4/CF

Typical Specifications*

SAE Viscosity Grade		40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,89
Flash Point, COC, °C	ASTM D-92	254
Viscosity, 40 °C, mm ² /s	ASTM D-445	126,3
Viscosity, 100 °C, mm ² /s		14
Viscosity Index	ASTM D-2270	109
T.B.N., mgKOH/gr	ASTM D-2896	11
Pour Point, °C	ASTM D- 97	-27
Sulphated Ash, wt%	ASTM D-874	1,4

* Values shown may differ between productions.



Superşarj Series

Monograde High Quality Diesel Engine Oils

Applications

Can be used in heavy duty vehicles.

Performance

API CF/CF-4/SG, MIL-L-2104D ALLISON C3, CAT T0-2

Typical Specifications*

SAE Viscosity Grade		10W	30	30 (20 TBN)	40	50
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,886	0,890	0,902	0,900	0,899
Flash Point, COC, °C	ASTM D-92	220	240	260	260	270
Viscosity, 40 °C, mm ² /s	ASTM D-445	39,8	81	94	125	223
Viscosity, 100 °C, mm ² /s		6	9,8	11	13	19,5
Viscosity Index	ASTM D-2270	107	100	102	98	99
T.B.N., mgKOH/gr	ASTM D-2896	11	11	21	11	11
Pour Point, °C	ASTM D- 97	-30	-18	-18	-15	-12
Sulphated Ash, wt%	ASTM D-874	1,3	1,3	2,4	1,3	1,3

* Values shown may differ between productions.



Spesiyal Series Monograde Diesel Engine Oils

Applications

Can be used in light commercial and heavy duty vehicles.

Performance

API SC/CB

Typical Specifications*

SAE Viscosity Grade		10W	30	40
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,877	0,891	0,894
Flash Point, COC, °C	ASTM D-92	220	250	270
Viscosity, 40 °C, mm ² /s	ASTM D-445	34	100,6	145
Viscosity, 100 °C, mm ² /s		5,6	11,2	14
Viscosity Index	ASTM D-2270	103	96	94
T.B.N., mgKOH/gr	ASTM D-2896	3	3	3
Pour Point, °C	ASTM D- 97	-30	-18	-15
Sulphated Ash, wt%	ASTM D-874	0,35	0,35	0,35

* Values shown may differ between productions.



Kalibratör SAE 30 Monograde Engine Oil

Applications

Can be used for four-stroke engines using diesel oil or gasoline.

Performance

API CC

Typical Specifications*

SAE Viscosity Grade		30
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,889
Flash Point, COC, °C	ASTM D-92	244
Viscosity, 40 °C, mm ² /s	ASTM D-445	100,7
Viscosity, 100 °C, mm ² /s		11,5
Viscosity Index	ASTM D-2270	96
T.B.N., mgKOH/gr	ASTM D-2896	5,1
Pour Point, °C	ASTM D- 97	-18
Sulphated Ash, wt%	ASTM D-874	0,6

* Values shown may differ between productions.



GEARBOX AND DIFFERENTIAL FLUIDS



- **Gear Oils**
 - **Transmission and Automatic Gearbox Fluids**
- 

Maxigear S 75W-80

Full Synthetic Long-Life Transmission Oil

Applications

Maxigear S 75W-80 is developed for buses and commercial vehicles operating under extremely heavy duty, where particularly long oil change intervals are recommended, for use in ZF gear boxes with or without interarder systems.

Performance

API GL-4, MIL-L-2105, MAN 341 Type Z3, MAN 341 Type Z4, ZF TE ML-02L/16K, DAF, IVECO, RENAULT, Volvo 97307, ZF TE-ML 01L, ZF TE-ML 08, ZF TE-ML 13, ZF TE-ML 24A, Eaton Europe (300,000 km or 3 years)

Typical Specifications*

SAE Viscosity Grade		75W-80
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,860
Flash Point, COC, °C	ASTM D-92	230
Viscosity, 40 °C, mm ² /s	ASTM D-445	51,75
Viscosity, 100 °C, mm ² /s		8,9
Viscosity Index	ASTM D-2270	153
Pour Point, °C	ASTM D- 97	-39

* Values shown may differ between productions.



Maxigear EP 75W-80

High Quality Synthetic Passenger Car Transmission Oil

Applications

Maxigear EP 75W-80, is developed for manual transmissions of passenger cars.

Performance

API GL-4

Typical Specifications*

SAE Viscosity Grade		75W-80
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,850
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	48
Viscosity, 100 °C, mm ² /s		7,9
Viscosity Index	ASTM D-2270	131
Pour Point, °C	ASTM D- 97	-39

* Values shown may differ between productions.



Maxigear D 75W-90

Full Synthetic Long-Life Transmission and Axle Oil

Applications

Maxigear D 75W-90 is developed for commercial vehicles operating under very heavy workloads. Suitable for particularly long oil change intervals.

Performance

API GL-5, MIL-PRF-2105E, MAN 342 S1, MB-Approval 235.8, ZF TE-ML 02B/05B/12L/12N/16F/17B/19C/21A, DAF, Volvo 97312, Scania ST0 1:0

Typical Specifications*

SAE Viscosity Grade		75W-90
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,870
Flash Point, COC, °C	ASTM D-92	280
Viscosity, 40 °C, mm ² /s	ASTM D-445	108
Viscosity, 100 °C, mm ² /s		15,7
Viscosity Index	ASTM D-2270	155
Pour Point, °C	ASTM D- 97	-39

* Values shown may differ between productions.



Maxigear EP-X 75W-90

High Quality Automotive Gear Oil

Applications

Maxigear EP-X 75W-90, is developed for manual transmissions and differentials of passenger cars and heavy duty vehicles that needs API GL-5 performance level.

Performance

API GL-5, MT-1, MIL-L-2105D

Typical Specifications*

SAE Viscosity Grade		75W-90
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,860
Flash Point, COC, °C	ASTM D-92	200
Viscosity, 40 °C, mm ² /s	ASTM D-445	99
Viscosity, 100 °C, mm ² /s		16
Viscosity Index	ASTM D-2270	172
Pour Point, °C	ASTM D- 97	-33

* Values shown may differ between productions.



Maxigear Tech EP-X 80W-90 High Quality Automotive Gear Oil

Applications

Maxigear Tech EP-X 80W-90, is used in the powertrain systems, transmissions and differentials of heavy duty vehicles that need API GL-5 performance level. It can be used in passenger cars, busses, trucks, off-highway vehicles, construction vehicles, mining equipments and agricultural machines. It is not recommended for automatic transmissions.

Performance

API GL-5, MB-Approval 235.20, MAN 342 Type M3, ZF TE-ML 05A/12L/12M/16B/17B/19B/21A

Typical Specifications*

SAE Viscosity Grade		80W-90
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,900
Flash Point, COC, °C	ASTM D-92	200
Viscosity, 40 °C, mm ² /s	ASTM D-445	140
Viscosity, 100 °C, mm ² /s		14
Viscosity Index	ASTM D-2270	103
Pour Point, °C	ASTM D- 97	-27

* Values shown may differ between productions.



Maxigear EP-X 80W-90 High Quality Automotive Gear Oil

Applications

Maxigear EP-X 80W-90 is developed for all vehicles operating under all types of workloads. It is used in the gear systems of all passenger cars and heavy duty vehicles that need API GL-4/5 performance level.

Performance

API GL-5, MT-1, MIL-L-2105D, MB 235.0, MAN 342 Type M2, ZF TE-ML 05A/12E/16B/17B/19B/21A

Typical Specifications*

SAE Viscosity Grade		80W-90
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,900
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	142
Viscosity, 100 °C, mm ² /s		15,5
Viscosity Index	ASTM D-2270	101
Pour Point, °C	ASTM D- 97	-24

* Values shown may differ between productions.



Maxigear EP-X 85W-90 LS **High Quality Limited Slip Automotive Gear Oil**

Applications

Can be used in passenger car, heavy duty vehicle and off-road vehicle gear boxes and locked differentials requiring limited slip quality.

Performance

API GL-5, ZF TE-ML 05C-12C-21C

Typical Specifications*

SAE Viscosity Grade		85W-90
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,900
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	160
Viscosity, 100 °C, mm ² /s		15,5
Viscosity Index	ASTM D-2270	100
Pour Point, °C	ASTM D- 97	-24

* Values shown may differ between productions.



Maxigear EP-X 85W-140 **High Quality Automotive Gear Oil**

Applications

Maxigear EP-X 85W-140 is used in differentials of heavy duty vehicles that need API GL-5 performance level.

Performance

API GL-5, MIL-L-2105D

Typical Specifications*

SAE Viscosity Grade		85W-140
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,910
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	347
Viscosity, 100 °C, mm ² /s		25,6
Viscosity Index	ASTM D-2270	97
Pour Point, °C	ASTM D- 97	-15

* Values shown may differ between productions.



Maxigear Tech EP 80W

High Quality Automotive Gear Oil

Applications

Maxigear Tech EP 80W, is especially developed for Mercedes-Benz and ZF manual transmissions. It is suitable for manual transmissions of vehicles that need API GL-4 performance level.

Performance

API GL-4, MIL-L-2105, MB-Approval 235.1, ZF TE-ML 06L/08/16A/17A/19A/19C/24A

Typical Specifications*

SAE Viscosity Grade		80W
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,880
Flash Point, COC, °C	ASTM D-92	218
Viscosity, 40 °C, mm ² /s	ASTM D-445	54,7
Viscosity, 100 °C, mm ² /s		7,9
Viscosity Index	ASTM D-2270	110
Pour Point, °C	ASTM D- 97	-30

* Values shown may differ between productions.



Maxigear Tech EP-X 90

High Quality Automotive Gear Oil

Applications

Maxigear Tech EP-X 90, is especially developed for Mercedes-Benz and ZF. It is suitable for differentials of all vehicles that need API GL-5 performance level.

Performance

API GL-5, MB 235.0, DAF, MIL-L-2105D, Voith 3.325-339, ZF TE-ML 07A, 16B, 16C, 16D, 17B, 19B, 21A, 24A

Typical Specifications*

SAE Viscosity Grade		90
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,900
Flash Point, COC, °C	ASTM D-92	200
Viscosity, 40 °C, mm ² /s	ASTM D-445	156
Viscosity, 100 °C, mm ² /s		15
Viscosity Index	ASTM D-2270	95
Pour Point, °C	ASTM D- 97	-12

* Values shown may differ between productions.



Maxigear EP Series High Quality Automotive Transmission Oil

Applications

Used in automotive differentials, manual transmissions and hypoid gears of passenger vehicles, heavy-duty vehicles and off-highway vehicles operating under high-speed/low-torque and low-speed/high-torque condition.

Performance

API GL-4, MIL-L-2105

Typical Specifications*

SAE Viscosity Grade		80W	90	140	80W-90
Density, 15 °C, kg/m ³	ASTM D-4052	0,890	0,890	0,900	0,890
Flashing Point, COC, °C	ASTM D-92	240	260	236	230
Viscosity, 40 °C, mm ² /s	ASTM D-445	84	160	379	147
Viscosity, 100 °C, mm ² /s		10	15	26	15
Viscosity Index	ASTM D-2270	99	95	93	100
Pour Point, °C	ASTM D-97	-30	-21	-9	-24

* Values shown may differ between productions.



Maxigear Series Automotive Transmission Oil

Applications

Used in the gear boxes and differentials of automotive and industrial type equipment where extreme pressure characteristics are not required.

Performance

API GL-1

Typical Specifications*

SAE Viscosity Grade		90	140
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,891	0,900
Flash Point, COC, °C	ASTM D-92	260	356
Viscosity, 40 °C, mm ² /s	ASTM D-445	185	25
Viscosity, 100 °C, mm ² /s		16,6	94
Viscosity Index	ASTM D-2270	105	300
Pour Point, °C	ASTM D- 97	-15	-6

* Values shown may differ between productions.



ATF CVT

Synthetic CVT Automatic Transmission Fluid

Applications

They are used in the following applications:

- Chrysler Jeep NS-2
- Dodge CVTF+4
- Honda HCF2
- Hyundai SP-III
- Mini Cooper EZL799
- Mitsubishi SP-III
- Nissan NS-1
- Nissan NS-3
- Subaru iCVT
- Suzuki CVTF TC
- Toyota CVTF FE
- Daihatsu Ammix CVT
- GM Dex-CVT
- Honda HMMF *1)
- JASO 1A capable
- Mitsubishi CVTF-J1
- Nissan NS-2
- Subaru ECVT
- Suzuki CVT Green 1
- Suzuki NS-2
- Toyota CVTF TC

Performance

GM Dextron II, GM Allison C4, MB 236.1 Approval, MAN 339 Type VI, ZF TE ML-02F/03D/04D/14A/17C, Voith DIWA G607

Typical Specifications*

Density, @ 15 °C, kg/m ³	ASTM D 4052	0,844
Flash Point, COC, °C	ASTM D 92	230
Viscosity, 40 °C, mm ² /s	ASTM D 445	37
Viscosity, 100 °C, mm ² /s		7,66
Viscosity Index	ASTM D 2270	182
Pour Point, °C	ASTM D 97	-42

* Values shown may differ between productions.



ATF DCT

Dual Clutch Transmission (DCT) Fluid

Applications

It is used in the following applications:

- Audi VW TL 052 182
- Audi VW TL 052 529
- BMW (Getrag) 83 22 2 148 578,
83 22 2 148 579,
83 22 0 440 214,
83 22 2 147 477
- Citroen Peugeot/Citroen 9734.S2
- Ford/Getrag Ford M2C936A
- Mercedes-Benz MB 236.21(001 989 85 03)
- Mitsubishi MZ320065 Dia-Queen SSTF-I
- Nissan Ford M2C936A
- Peugeot Peugeot/Citroen 9734.S2
- Porsche (ZF) Porsche Oil No. 999.917.080.00
- Seat VW TL 052 182
- Skoda VW TL 052 182
- Volkswagen VW TL 052 182
- Volvo 1161838 1161839

Typical Specifications*

Density, @ 15 °C, kg/m ³	ASTM D 4052	0,855
Flash Point, COC, °C	ASTM D 92	222
Viscosity, 40 °C, mm ² /s	ASTM D 445	42
Viscosity, 100 °C, mm ² /s		7,95
Viscosity Index	ASTM D 2270	165
Pour Point, °C	ASTM D 97	-42

* Values shown may differ between productions.



ATF 3

Synthetic Automatic Transmission and Power Steering Fluid

Applications

Used in automatic transmission and steering gears of passenger cars and heavy vehicles; and used in mechanisms with hydraulic system if recommended.

Performance

GM Dexron III H, Allison C4, MB 236.9, MAN 339 Type L1/V1/Z1/V2/Z2, ZF TE ML-03D/04D/14A/14B/14C/16L/17C, Voith 55.6336.XX (G1363)

Typical Specifications*

SAE Viscosity Grade		
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,840
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	36.9
Viscosity, 100 °C, mm ² /s		7.7
Viscosity Index	ASTM D-2270	183
Pour Point, °C	ASTM D- 97	-45

* Values shown may differ between productions.



ATF DX-3

Synthetic Automatic Transmission and Power Steering Fluid

Applications

Used in automatic gear boxes and transmissions and in steering gears of passenger cars and heavy duty vehicles and in hydraulic mechanisms where recommended.

Performance

GM Dexron III H, Ford Mercon, Allison C4, Volvo 97341, TES 389, MAN 339 Type V1/Z1, MB Approval 236.1, MB Approval 236.9, Voith 55.6335, ZF TE ML-03D-04D-14A-17C

Typical Specifications*

SAE Viscosity Grade		
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,860
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	41
Viscosity, 100 °C, mm ² /s		7,9
Viscosity Index	ASTM D-2270	167
Pour Point, °C	ASTM D- 97	-42

* Values shown may differ between productions.



ATF II Synthetic Automatic Transmission Fluid

Applications

Used in automatic transmission and steering gears of passenger cars and heavy vehicles; and used in mechanisms with hydraulic system if recommended.

Performance

GM Dexron II, GM Allison C4, MB-Approval 236.1, MAN 339 Type V1, ZF TE ML-02F/03D/04D/14A/17C, Voith DIWA G607

Typical Specifications*

SAE Viscosity Grade		
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,870
Flash Point, COC, °C	ASTM D-92	200
Viscosity, 40 °C, mm ² /s	ASTM D-445	39
Viscosity, 100 °C, mm ² /s		7,8
Viscosity Index	ASTM D-2270	176
Pour Point, °C	ASTM D- 97	-42

* Values shown may differ between productions.



TMS Oil 970 Series High Performance Transmission Oil For Off-Highway Vehicles

Applications

Suitable for transmissions of construction equipments requiring CAT TO-4, GM Allison C4 and Komatsu Micro Clutch specifications.

Performance

GM Allison C4, Caterpillar TO-4, Komatsu Micro-Clutch, API CF-2, Caterpillar 1M-PC, ZF TE-ML 01, 03

Typical Specifications*

TMS OIL		971	973	975
SAE Viscosity Grade		10W	30	50
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,880	0,900	0,910
Flashing Point, COC, °C	ASTM D-92	230	250	250
Viscosity, 40 °C, mm ² /s	ASTM D-445	40	109	217,7
Viscosity, 100 °C, mm ² /s		6,3	11,7	18,5
Viscosity Index	ASTM D-2270	105	96	94
Pour Point, °C	ASTM D-97	-33	-15	-12

* Values shown may differ between productions.



Torque Fluid 32 Paraffinic Based Transmission Oil

Applications

Used in hydraulic torque converters and transmissions of heavy vehicles and equipments, and hydraulic transmissions of locomotives.

Typical Specifications*

Density, @ 15 °C, kg/m ³	ASTM D-4052	0,880
Flash Point, COC, °C	ASTM D-92	220
Viscosity, 40 °C, mm ² /s	ASTM D-445	33
Viscosity, 100 °C, mm ² /s		5,4
Viscosity Index	ASTM D-2270	96
Pour Point, °C	ASTM D- 97	-30

* Values shown may differ between productions.



Maxitrak TMS Oil 500

High Performance Transmission and Hydraulic Oil

Applications

Used in hydraulics, transmissions and wet brakes of agricultural, construction and industrial vehicles. Meets the specifications of OEM manufacturers which recommend UTTO type lubricant.

Performance

API GL-4, ZF TE-ML 03E/05F/06K/17E/21F, AGCO Massey-Ferguson M1135/ M1141, CNH Case/ New Holland MAT 3525, FNHA-2-C-201, John Deere JDM J20C and J20D, Volvo CE WB-101, ZF TE-ML 03F, AGCO-Allis Power Fluid 821XL, Allis-Chalmers Power Fluid 821, Deutz-Allis 272843, 257541, 246634, Massey-Ferguson M-1110, M-1127A, and M-1127B, M-1129A, M-1135 (Current Worldwide), M-1141 (Current EP THF) M-1143 (Finished Oil) M-1145 (Finished Oil), White Farm Equipment Q-1826 (Current), Minneapolis-Moline Q-1766, Q-1722, Q-1766B, Oliver Q-1705, New Idea Q-1802, Type 55, Allison C-2, C-3 and C-4, Caterpillar TO-2, Case International: MS-1204, 1205, 1206, 1207, Case-IH MS-1210, JIC 145 JI Case JIC 143 / 144, International Farmall MS-1204, JIC 185 ,International Harvester B-5, B-6 (International Harvester), Steiger SEMS 17001 (Steiger), New Holland (Fiat): FNHA-2-C-200, Ford and New Holland FNHA-2-C-200A, FNHA-2-C-201, MAT 3225 / Nexple fluid, 3525, 3526 (Current), ESNM2C41- B, ESN-M2C43, ESN-M2C48-A and ESN-M2C48-B, ESN-M2C53-A and ESN-M2C53- B, ESN M2C92-A, ESN-M2C134-A, B, C, D (Current) ,Sperry-Vickers 35VQ25 and M-2952-S (Vickers), I-286-S (Vickers), M-2950-S (Vickers) ,Versatile Specification 23M or 24M (Versatile), Hesston-Fiat: (tractors only) AF-87, Multi-F, Multi G 134/NH410B (FNHA-2-C-201), Multi-G (Current), John Deere: JDM J20A and J20B JDM J20C and J20D JDM J14B and J14C JDM J21A JDT 303 Quatrol, Komatsu Dresser: B-06-0001 and B-06-0002, Kubota: UDT (Current), Renk Doromat: 873 874 A and 874 B (current), ZF TE-ML 05E

Typical Specifications*

SAE Viscosity Grade		10W-30
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,890
Flash Point, COC, °C	ASTM D-92	230
Viscosity, 40 °C, mm ² /s	ASTM D-445	62
Viscosity, 100 °C, mm ² /s		9,7
Viscosity Index	ASTM D-2270	140
Pour Point, °C	ASTM D- 97	-33

* Values shown may differ between productions.



Maxitrak Transmisyon 300

Power Transmission Oil For Agricultural Vehicles

Applications

It is used in powertrain systems, brakes, hydraulic systems, final drive units, differentials and transmissions of tractors and construction equipment in agricultural industry, automotive and industrial sectors. It is recommended as power transmission fluid for all systems of contemporary tractors except the engine.

Performance

Massey Ferguson CMS M1135, Ford ESEN M2C 86B

Typical Specifications*

SAE Viscosity Grade		
Density, @ 15 °C, kg/m ³	ASTM D-4052	0,890
Flash Point, COC, °C	ASTM D-92	240
Viscosity, 40 °C, mm ² /s	ASTM D-445	84,5
Viscosity, 100 °C, mm ² /s		10,8
Viscosity Index	ASTM D-2270	113
Pour Point, °C	ASTM D- 97	-27

* Values shown may differ between productions.



MARINE OILS





Deniz Dizel Series

Applications

For crankcase in piston type marine diesel engines and cylinder oils in crosshead type engines.

Performance

API CF



Typical Specifications*

		1000 SERIES		2000 SERIES		3000 SERIES		4000 SERIES
		SAE 30	SAE 40	SAE 30	SAE 40	SAE 30	SAE 40	SAE 40
SAE Viscosity Grade		SAE 30	SAE 40	SAE 30	SAE 40	SAE 30	SAE 40	SAE 40
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,896	0,902	0,903	0,909	0,906	0,914	0,91
Flash Point, COC, °C	ASTM D 92	262	262	264	264	250	250	260
Viscosity, 40 °C, mm ² /s	ASTM D 445	90	144	95	142	90	150	139
Viscosity, 100 °C, mm ² /s		10,3	14,3	11	14,5	10,2	14,6	14
Viscosity Index	ASTM D 2270	100	97	100	98	102	97	98
T.B.N., mgKOH/gr	ASTM D 2896	12	12	22	22	32	32	41
Pour Point, °C	ASTM D 97	-18	-15	-18	-15	-18	-15	-12

* Values shown may differ between productions.

Super DCL Series

Applications

They are used in lubrication of the cylinders of high-output marine engines and stationary diesel engines.



Typical Specifications*

		DCL Heavy	DCL Special	DCL 304	DCL Universal
		SAE Viscosity Grade	40	50	40
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,920	0,930	0,900	0,92
Flashing Point, COC, °C	ASTM D 92	260	260	260	270
Viscosity, 40 °C, mm ² /s	ASTM D 445	171	187	123	226
Viscosity, 100 °C, mm ² /s		16	17	13	19
Viscosity Index	ASTM D 2270	97	97	99	95
T.B.N., mgKOH/gr	ASTM D 2896	42	72	33	57
Pour Point, °C	ASTM D 97	-9	-9	-12	-9

* Values shown may differ between productions.

Marine System Oil

Applications

They are used in the oil pan of the low-speed marine diesels.

Performance

API CF

Typical Specifications*

SAE Viscosity Grade		SAE 30	SAE 40
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,89	0,895
Flash Point, COC, °C	ASTM D 92	244	278
Viscosity, 40 °C, mm ² /s	ASTM D 445	102	148
Viscosity, 100 °C, mm ² /s		12	14,5
Viscosity Index	ASTM D 2270	104	95
T.B.N., mgKOH/gr	ASTM D 2896	6	6
Pour Point °C	ASTM D 97	-12	-15

* Values shown may differ between productions.



INDUSTRIAL OILS



- **Turbine and Circulation Oils**
 - **Industrial Gear Oils**
 - **Hydraulic Oils**
 - **Compressor Oils**
 - **Metalworking and Cutting Oils**
- **Metalworking and Cooling Fluids**
 - **Heat Transfer Oils**
 - **Transformer Oils**
 - **Slideway Oils**
 - **Roller Bearing Oils**
 - **Textile Oils**
 - **Rock Drill Oils**
 - **Mould Oils**

Turbine Oil TX Series

Ultimate Performance Ash-Free Turbine Oils

Applications

Intended for a wide range of marine and industrial applications demanding high performance as well as in gas turbines, steam turbines, combined cycle steam and gas turbines, circulation systems, R&O hydraulic systems, R&O gear systems and gear turbines.

Performance

DIN 51515 Part I and Part II, BS 489 ,GE GEK 32568G-46506E, ISO 8068:2006 (E) L-TSA, L-TGA, ALSTOM HTGD 90 117, SIEMENS TLV 9013 04 (approved), SIEMENS TLV 9013 05 (approved), SIEMENS 55125Z3, ALSTOM HTGD 90 117 (approved)

Typical Specifications*

ISO Viscosity Grade		ISO VG	
		32	46
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,840	0,845
Flash Point, COC, °C	ASTM D 92	240	242
Viscosity, 40 °C, mm ² /s	ASTM D 445	31,29	43,18
Viscosity, 100 °C, mm ² /s		5,55	6,72
Viscosity Index	ASTM D 2270	119	110
Pour Point, °C	ASTM D 97	-30	-30



* Values shown may differ between productions.

Türbin ve Sirkülasyon Yağı Series

High-Quality Turbine Oil

Applications

It can be successfully used in gas, vapor and hydraulic turbines, reciprocating air compressors, medium pressure hydraulic systems, vacuum pumps and roller and journal bearings.

Performance

DIN 51515 (R+O), BS 489

Typical Specifications*

ISO Viscosity Grade		ISO VG					
		32	46	68	100	150	220
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,873	0,878	0,883	0,886	0,891	0,895
Flash Point, COC, °C	ASTM D 92	216	234	238	250	270	286
Viscosity, 40 °C, mm ² /s	ASTM D 445	32	46	68	100	150	220
Viscosity, 100 °C, mm ² /s		5,4	6,7	8,6	11,1	14,4	18,5
Viscosity Index	ASTM D 2270	101	98	97	95	93	93
Pour Point, °C	ASTM D 97	-21	-18	-18	-9	-6	-6



* Values shown may differ between productions.

Gravis PG 220

High Performance Synthetic Industrial Gear Oil

Applications

It is recommended particularly for roll bearings operating under elevated temperatures. It can be used in dry cutting process of paper machine, calender bearings, plastic mixers, textile machines, wind power plants, lift gear systems (be cautious for equipment manufacturers recommendation in hypoid gear systems)

Performance

DIN 51517 Part 3, David Brown G Lubricant, Defense Standard 05-50.1 No 29

Typical Specifications*

ISO Viscosity Grade		ISO VG 220
Density, @ 15 °C, kg/m ³	ASTM D 4052	1,006
Flash Point, COC, °C	ASTM D 92	260
Viscosity, 40 °C, mm ² /s	ASTM D 445	220
Viscosity, 100 °C, mm ² /s		31
Viscosity Index	ASTM D 2270	170
Pour Point, °C	ASTM D 97	-30

* Values shown may differ between productions.



Gravis SP Series

High Performance Synthetic Industrial Gear Oil

Applications

Reliably used in worm gears and circulation systems. Due to its high viscosity index, it is ideal for applications subject to significant heat variations. Particularly recommended for calender bearings, spur gears, helical gears and conical gears as well as sealed gearboxes that may incorporate any range of gears operating at high temperatures. Highly suitable for running gears without hardened surfaces, heavy-duty gears operating at high temperatures and corrosive conditions, or applications incorporating precision oil filters. Thanks to its high-shear stability, the oil film formed maintains lubrication without tear even under high tensile stress. Likewise, it has superior thermal stability and oxidation resistance.

Performance

Flender Revision 15 (approval), DIN 51517 Part 3, AIST 224, SEB 181226, AGMA 9005-E02, David Brown S1.53.106, Cincinnati P-74

Typical Specifications*

ISO Viscosity Grade		ISO VG					
		100	150	220	320	460	680
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,85	0,858	0,860	0,862	0,863	0,859
Flash Point, COC, °C	ASTM D 92	240	244	250	254	258	264
Viscosity, 40 °C, mm ² /s	ASTM D 445	100	150	220	320	460	690
Viscosity, 100 °C, mm ² /s		14,25	19,3	25,4	34,5	46,8	77,5
Viscosity Index	ASTM D 2270	146	147	148	152	159	195
Pour Point, °C	ASTM D 97	-45	-42	-42	-39	-36	-27

* Values shown may differ between productions.



Gravis MP Series High Quality Industrial Gear Oil

Applications

Meets FLENDER AG requirements. Prevents friction, scratching, micropitting and crack formation on gear surfaces during their sliding-rolling movements. Intended for all range of sealed gearboxes. Also recommended for gear systems in rolling mills, calenders, hoists, excavators, cranes, conveyors, machine tools and elevators and other applications such as flexible coupling in various industries involving high and impact loads, primarily including cement, iron and steel industries.

Performance

DIN 51517 Part 3, AIST 224, AGMA 9005-E02, SEB 181226, David Brown S1.53.101 E, FLENDER Revision 15 (approval)

Typical Specifications*

ISO Viscosity Grade		150	220	320	460
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,896	0,898	0,901	0,902
Flash Point COC, °C	ASTM D 92	260	270	282	290
Viscosity, 40 °C, mm ² /s	ASTM D 445	150	220	320	460
Viscosity, 100 °C, mm ² /s		14,65	18,9	23,9	30,1
Viscosity Index	ASTM D 2270	96	96	95	94
Pour Point, °C	ASTM D 97	-21	-18	-12	-9

* Values shown may differ between productions.



Gravis M Series Industrial Gear Oil

Applications

It is designed to use in all types of enclosed gearboxes. It is recommended mainly for cement, iron and steel industries, where severe and impact loads are encountered. It is used in gear systems of rolling stands, piling machines, cranes, excavators, conveyors, machine tools and elevators.

Performance

DIN 51517 Part 3, AIST 224, David Brown S1.53.101, AGMA 9005-E02, FAG FE-8

Typical Specifications*

ISO Viscosity Grade		68	100	150	220	320	460	680	1000	1500
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,884	0,888	0,893	0,897	0,900	0,902	0,913	0,909	0,911
Flash Point COC, °C	ASTM D 92	236	246	250	256	260	264	230	232	240
Viscosity, 40 °C, mm ² /s	ASTM D 445	68	100	150	220	320	460	680	1000	1500
Viscosity, 100 °C, mm ² /s		8,65	11,25	14,65	18,9	23,95	30,4	39,5	52,8	74,81
Viscosity Index	ASTM D 2270	98	97	96	96	95	95	96	100	110
Pour Point, °C	ASTM D 97	-24	-24	-21	-18	-12	-12	-9	-6	-6

* Values shown may differ between productions.



Hydro Tech HVI TX Series

New Generation High Viscosity Index Zinc-Free Hydraulic Oil

Applications

It is recommended in the fixed and moveable hydraulic systems where the moderate and heavy working conditions are in question and where the characteristics of intense abrasion, corrosion, oxidation protection, water separation and working compatibility with yellow metals are important. It can be used in the hybrid and all the other pumps, the systems working with sensitive valves, the systems requiring long life and high performance in an environment with water.

Performance

DIN 51524 Part III (HVLPL), Cincinnati P 68, 69, 70 (approval), Parker HF-0, HF-1, HF-2 (approval), Bosch 90220, Eaton M-2950 S, Eaton I-286 S3

Typical Specifications*

ISO Viscosity Grade		ISO VG		
		32	46	68
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,859	0,874	0,876
Flash Point COC, °C	ASTM D 92	212	220	230
Viscosity, 40 °C, mm ² /s	ASTM D 445	32	46	68
Viscosity, 100 °C, mm ² /s		6,31	8,15	10,95
Viscosity Index	ASTM D 2270	152	152	152
Pour Point, °C	ASTM D 97	-42	-42	-39

* Values shown may differ between productions.



Hydro Oil TX Series

New Generation Hydraulic Oils

Applications

It is recommended for all industrial and mobile hydraulic systems where there are intensive environmental restrictions to use oils containing heavy metals such as zinc. Among its special industrial applications include construction machines, presses, mobile construction equipment, plastic injection molding and towing machines, high speed-high pressure vane and gear pumps, screw-type air compressors, speed reducers and marine hydraulic applications.

Performance

DIN 51524 Part II (HLP), Parker HF-0, HF-1, HF-2 (approval), Bosch 90220, Eaton M-2950 S, Eaton I-286 S3, Cincinnati P 68, P 69, P 70 (approval)

Typical Specifications*

ISO Viscosity Grade		ISO VG		
		32	46	68
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,88	0,880	0,886
Flash Point COC, °C	ASTM D 92	220	236	242
Viscosity, 40 °C, mm ² /s	ASTM D 445	32	46	68
Viscosity, 100 °C, mm ² /s		5,36	6,76	8,73
Viscosity Index	ASTM D 2270	101	100	100
Pour Point, °C	ASTM D 97	-27	-24	-21

* Values shown may differ between productions.



Hydro Tech HVI Series

High Performance and High Viscosity Index Hydraulic System Oils

Applications

It is recommended for all industrial non-stationary hydraulic and vessel hydraulic systems. Among its special industrial applications include construction machines, pressing machine, moveable construction equipment, plastic injection and air compressor.

Performance

DIN 51524 Part III (HVLP), Bosch 90220, JCMAS P041 HK, ISO 20763 Conestoga Vane Pump Tests Eaton M-2950 S, Eaton I-286 S3, Parker HF-0, HF-1, HF-2 (approval), Cincinnati P 68, 69, 70

Typical Specifications*

ISO Viscosity Grade		ISO VG				
		15	32	46	68	100
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,851	0,872	0,876	0,878	0,884
Flash Point, COC, °C	ASTM D 92	150	208	214	216	240
Viscosity, 40 °C, mm ² /s	ASTM D 445	15	32	46	68	100
Viscosity, 100 °C, mm ² /s		4,17	6,6	8,75	11,8	15,6
Viscosity Index	ASTM D 2270	200	168	173	171	166
Pour Point, °C	ASTM D 97	-42	-39	-39	-36	-33

* Values shown may differ between productions.



Hydro Oil AW 46

High Performance Hydraulic System Oil

Applications

It is recommended for all industrial and mobile hydraulic systems. Among its special industrial applications include construction machines, presses, moveable construction equipment, plastic injection, towing machines and screw-type air compressors. It is also suitable for Arburg and Engel brand machines.

Performance

DIN 51524 Part II (HLP), Bosch 90220, Eaton M-2950 S, Eaton I-286 S3, Cincinnati P 68, 69, 70, Müller Weingarten, Arburg

Typical Specifications*

ISO Viscosity Grade		46
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,870
Flash Point COC, °C	ASTM D 92	236
Viscosity, 40 °C, mm ² /s	ASTM D 445	46
Viscosity, 100 °C, mm ² /s		6,8
Viscosity Index	ASTM D 2270	100
Pour Point, °C	ASTM D 97	-24

* Values shown may differ between productions.



Hydro Oil HD Series High Performance Hydraulic System Oil

Applications

It is recommended to all industrial and moving hydraulic systems. Among its special industrial applications include construction machines, presses, moving construction equipment, plastic injection and drawing machines and screw-type air compressors.

Performance

DIN 51524 Part II (HLP), JCMAS P041 HK, ISO 20763 Conestoga Vane Pump Tests, Eaton M-2950 S, Eaton I-286 S3, Parker HF-0, HF-1, HF-2 (approval for ISO VG 32, 46 and 68 grades), Cincinnati P 68, 69,70 (approval for SAE 32, SAE 68, SAE 46 grades, respectively), Bosch Rexroth RDE 90235 (approval for ISO VG 32, 46 and 68 grades)

Typical Specifications*

ISO Viscosity Grade		ISO VG							
		10	22	32	46	68	100	150	220
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,857	0,869	0,877	0,880	0,886	0,888	0,894	0,899
Flash Point COC, °C	ASTM D 92	138	202	220	236	242	248	266	266
Viscosity, 40 °C, mm ² /s	ASTM D 445	10	22	32	46	68	100	150	220
Viscosity, 100 °C, mm ² /s		2,658	4,31	5,36	6,76	8,73	11	14,45	18,5
Viscosity Index	ASTM D 2270	100	101	101	100	100	94	94	93
Pour Point, °C	ASTM D 97	-33	-30	-27	-24	-21	-18	-12	-9

* Values shown may differ between productions.



Hydraulic SAE 10W High Performance Off-Road Hydraulic Oil

Applications

It is recommended for hydraulic systems of construction machines, heavy duty vehicles and agricultural machinery.

Performance

API CF/CF-4/SG, MIL-L-2104D, ALLISON C3, CAT TO-2

Typical Specifications*

ISO Viscosity Grade		SAE 10W
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,880
Flash Point COC, °C	ASTM D 92	220
Viscosity, 40 °C, mm ² /s	ASTM D 445	39,8
Viscosity, 100 °C, mm ² /s		6,2
Viscosity Index	ASTM D 2270	107
Pour Point, °C	ASTM D 97	-30

* Values shown may differ between productions.



Compressor Oil SP Series

Synthetic Compressor Oil

Applications

Developed to use for cooling and lubricating of screw and rotary compressors. Formulated to maintain the maximum performance of the compressors during operation.

Performance

DIN 51506 VDL, DIN 51524 HLP, GM LJ , SAE MS1003-2

Typical Specifications*

ISO Viscosity Grade		46	68
Density, @ 15 °C, kg/m ³	ASTM-D4052	0.85	0.86
Viscosity, 40 °C, mm ² /s	ASTM-D445	46,3	69,3
Viscosity Index	ASTM-D2270	135	138
Flash Point, °C	ASTM-D-92/93	252	252
Pour Point, °C	ASTM-D97	-33	-33
Rust	ASTM-D665B	Pass	Pass
TAN, mgKOH/gr	ASTM-D974	0,33	0,33
Copper Strip Corrosion, 3h @100 °C	ASTM-D130	1b	1b

* Values shown may differ between productions.



Compressor Oil XT Series

High Performance, Mineral Based, Zinc -Free Compressor Oils

Applications

Specially designed for reciprocating and rotary screw type air compressors.

Performance

DIN 51506 Type VDL, DIN 54506 Type VBL, DIN 51517-1 Type CL

Typical Specifications*

ISO Viscosity Grade		32	46	68	100
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,872	0,881	0,884	0,887
Flash Point COC, °C	ASTM D 92	226	234	240	246
Viscosity, 40 °C, mm ² /s	ASTM D 445	32	46	68	100
Viscosity, 100 °C, mm ² /s		5,39	6,79	8,74	11,4
Viscosity Index	ASTM D 2270	102	101	100	98
Pour Point, °C	ASTM D 97	-30	-27	-24	-21

* Values shown may differ between productions.



Procut HD

Neat Cutting Oil for Heavy Duty Metal Cutting Operations

Applications

Specially developed for ultra heavy-duty metalworking conditions. Intended for a wide range of metalworking operations including screw cutting, milling, drilling and cutting on automatic lathes and screw cutters.

Typical Specifications*

Density, @ 15 °C, kg/m ³	ASTM D 4052	0,887
Flash Point, COC, °C	ASTM D 92	206
Viscosity, 40 °C, mm ² /s	ASTM D 445	35,65
Pour Point, °C	ASTM D 97	-12

* Values shown may differ between productions.



Procut LD

Neat Cutting Oil for Light Duty Metal Cutting Operations

Applications

It is formulated for cutting operations of metals with low-middle hardness level. Suitable for many cutting operations.

Typical Specifications*

Density, @ 15 °C, kg/m ³	ASTM D 4052	0,878
Flash Point, COC, °C	ASTM D 92	208
Viscosity, 40 °C, mm ² /s	ASTM D 445	28,8
Pour Point, °C	ASTM D 97	-27

* Values shown may differ between productions.



Procut A

Neat Cutting Oil for High-Speed Metal Cutting Operations

Applications

Recommended for deep drilling of ferrous and non-ferrous materials, particularly aluminium alloys. Intended for high-speed milling and honing operations. Shavings and excessive metal loss are avoided, thanks to its perfect cutting, cooling and flushing functions during drilling. Chlorine-free.

Typical Specifications*

Density, @ 15 °C, kg/m ³	ASTM D 4052	0,866
Flash Point, COC, °C	ASTM D 92	182
Viscosity, 40 °C, mm ² /s	ASTM D 445	18,1
Pour Point, °C	ASTM D 97	-15

* Values shown may differ between productions.



Alüminyum Tel Çekme Yağı

Wire Drawing Oil

Applications

It can be used safely in all kind of wire drawing processes due to its high qualified additives.

Typical Specifications*

ISO Viscosity Grade		ISO VG 220
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,890
Flash Point, COC, °C	ASTM D 92	288
Viscosity, 40 °C, mm ² /s	ASTM D 445	220
Viscosity, 100 °C, mm ² /s		20,41
Viscosity Index	ASTM D 2270	106
Pour Point °C	ASTM D 97	6

* Values shown may differ between productions.



Cleancut 100

Fully Synthetic Oil for Grinding Operations

Applications

It is suitable for surface, cylindrical and centerless grinding operations. It is recommended to use 3% minimum, in mixtures for grinding operations.

Typical Specifications*

Appearance (3% mixture)	Visual	Light Yellow, Clear
Density, @ 15 °C, kg/m ³	ASTM D 4052	1,090
Emulsion pH, 20 °C (3% mixture with deionized water)	ASTM 1287	10,2

* Values shown may differ between productions.



Cleancut 200

Metal Cutting Fluid for Light/Medium Operations

Applications

Intended for light- and medium-duty operations for treating cast, carbon steel and alloy steel as well as some non-ferrous metals, universal processes

Typical Specifications*

Appearance (3% mixture)	Visual	Light Amber
Density, @ 20 °C, kg/m ³	ASTM D 4052	1,020
Emulsion pH, 20 °C (3% mixture with deionized water)	ASTM 1287	9,6

* Values shown may differ between productions.



Cleancut 300

Metal Cutting Fluid for Medium/Heavy Operations

Applications

Medium- and heavy-duty operations for treating high-alloy steels as well as aluminium and non-ferrous metals, universal processes.

Typical Specifications*

Appearance (3% mixture)	Visual	Light Amber
Density, @ 15 °C, kg/m ³	ASTM D 4052	1,026
Emulsion pH, 20 °C (3% mixture with deionized water)	ASTM 1287	9,5

* Values shown may differ between productions.



Bor Yağı

Emulsifiable, Multi-Purpose Metal Cutting Fluid

Applications

It is suitable to use as lubricant and coolant for light and heavy machining operations of metals like aluminum and copper alloys, soft and cast iron (machining operations) and drawing of aluminum bars (non-machining operations). It provides excellent cooling. Warning: Oil addition process should be held slowly while the system water is in circulation. Oil should not be added to water directly. Before new emulsion is prepared, water tank should be emptied completely and cleaned thoroughly. Meanwhile, emulsion should be prepared in a separate tank in suitable concentration and then should be added into the system.

Typical Specifications*

Density, @ 20 °C, kg/m ³	ASTM D 4052	0,882
Viscosity, 40 °C, mm ² /s	ASTM D 445	28
Refractometric Index	ASTM D 1218	1
Emulsion pH 20 °C (mixed with deionized water in 5%)	ASTM D 1287	8,57

* Values shown may differ between productions.



Heat Transfer Oil 32

Heat Transfer Oil

Applications

It is produced with refined paraffin base oils. It does not have any corrosive effect on steel and copper and performs remarkable thermal stability and oxidation resistance. It can be safely used for close and open systems up to 315 °C and 200 °C temperatures, respectively. It has high specific heat and thermal conductivity. Its volatility is low, featuring good performance at low temperatures.

Typical Specifications*

ISO Viscosity Grade		32
Density, 15 °C, kg/m ³	ASTM D 4052	0,877
Flash Point COC, °C	ASTM D 92	220
Flash Point PMCC, °C	ASTM D 93	210
Viscosity, 40 °C, mm ² /s	ASTM D 445	32
Viscosity, 100 °C, mm ² /s		5,36
Viscosity Index	ASTM D 2270	100
Pour Point, °C	ASTM D 97	-12

* Values shown may differ between productions.



Transformer Oils

Trafo Yağı

Applications

It is used for electrical insulation and cooling in transformers and circuit breakers.

Performance

IEC 60296 Edition 4.0, Turkish Electrical Authority (TEIAS)

Typical Specifications*

Density, @ 20 °C, kg/m ³	ASTM D 4052	0,86
Flash Point, COC, °C	ASTM D 92	153
Viscosity, 40 °C, mm ² /s	ASTM D 445	9,1
Viscosity, -30 °C, mm ² /s	ISO 3104	720
Water Content, mg/kg	IEC 60814	3
Breakdown voltage, kV	IEC 60156	76
DDF at 90 °C	IEC 60247	< 0.001
Pour Point, °C	ASTM D 97	-45

* Values shown may differ between productions.



Kızak Yağı Series Machine Tool Slide Oil

Applications

It is used for vertical and horizontal slides of machine tools. It can also be used for hydraulic systems of machine tools, if recommended.

Typical Specifications*

ISO Viscosity Grade		D 68	G 220
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,880	0,896
Flash Point COC, °C	ASTM D 92	230	248
Viscosity, 40 °C, mm ² /s	ASTM D 445	68	220
Viscosity, 100 °C, mm ² /s		8,57	18,5
Viscosity Index	ASTM D 2270	96	93
Pour Point, °C	ASTM D 97	-18	-9

* Values shown may differ between productions.



Mortech Oil Series High Quality, High Performance Bearing Oil

Roller Bearing Oils

Applications

Suitable for rolling bearings working in low and high rotation rate with single central lubrication system; final units of "No-Twist" rolling machines with dual central lubrication system; low speed initial units and other machine equipments in the same system. For low speed units, higher viscosity Mortech Oils should be used, in accordance with OEM recommendation.

Typical Specifications*

ISO Viscosity Grade		ISO VG			
		150	220	320	460
Viscosity, 40 °C, mm ² /s	ASTM D 445	158	228	330	435
Viscosity Index	ASTM D 2270	93	93	92	92
Flash Point COC, °C	ASTM D 92	270	280	304	320
Pour Point, °C	ASTM D 97	-9	-9	-9	-9
Demulsibility	ASTM D 2711	81	82	76	80
		0,5	0,5	1	1
		0	0	0	1
Foaming Tendency/Stability (24 °C - 93 °C - 24 °C)	ASTM D 892	30/0	10/0	10/0	10/0
		20/0	20/0	20/0	20/0
		30/0	10/0	10/0	10/0
TAN, Total Acid Number	ASTM D 974	0,1	0,1	0,1	0,1
Copper Strip Corrosion	ASTM D 130	1a	1a	1a	1a
Corrosion-Prevention	ASTM D 665B	Pass	Pass	Pass	Pass
Rotary bomb oxydation test (RBOT)	ASTM D 2272	377	369	318	291

* Values shown may differ between productions.



Tekstil Yağı 15 K

Applications

Suitable for in a wide variety of textile machines, pins of twisting and wrapping loom and knot machines. Used in also hydraulic systems, bearings and in case of low viscosity lubricant needed.

Typical Specifications*

ISO Viscosity Grade		ISO VG 15
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,867
Flash Point COC, °C	ASTM D 92	196
Viscosity, 40 °C, mm ² /s	ASTM D 445	16,9
Viscosity, 100 °C, mm ² /s		3,6
Viscosity Index	ASTM D 2270	94
Pour Point, °C	ASTM D 97	-12

* Values shown may differ between productions.



Rock Drill Oils

Rock Dril Lubricant Epxm100 Rock Drilling Oil

Applications

It is used for impact type rock drilling pneumatic equipments like screws, rock drills, pneumatic hammers, piling machines and shaving hammers.

Typical Specifications*

ISO Viscosity Grade		ISO VG 100
Density, @ 15 °C, kg/m ³	ASTM D 4052	0,890
Flash Point, COC, °C	ASTM D 92	222
Viscosity, 40 °C, mm ² /s	ASTM D 445	107
Viscosity, 100 °C, mm ² /s		11,8
Viscosity Index	ASTM D 2270	98
Pour Point, °C	ASTM D 97	-18

* Values shown may differ between productions.



Kalıp Yağı M Series

Aerated Concrete Mold Oil

Applications

It is applied on the surfaces of big size aerated concrete molds by spraying or with a brush to prevent sticking on the concrete.

Typical Specifications*

		M6	M14	M20
Density, 15 °C, kg/m ³	ASTM D 4052	0,83	0,89	0,86
Flash Point COC, °C	ASTM D 92	93	240	120
Viscosity, 40 °C, mm ² /s	ASTM D 445	2,68	88,95	16,8
Viscosity, 100 °C, mm ² /s		1,10	10,29	3,69
Viscosity Index	ASTM D 2270	N/A**	96	104
Pour Point, °C	ASTM D 97	-18	-6	-18



* Values shown may differ between productions.

** Non-Applicable

Kalıp Yağı YPM-1

Water Resistant Steel Mold Oil

Applications

It is applied on the surfaces of big size concrete steel molds by spraying or with a brush to prevent sticking on the concrete.

Typical Specifications*

Density, @ 15 °C, kg/m ³	ASTM D 4052	0,840
Flash Point COC, °C	ASTM D 92	110
Viscosity, 40 °C, mm ² /s	ASTM D 445	6,62
Viscosity, 100 °C, mm ² /s		2,11
Viscosity Index	ASTM D 2270	122
Pour Point, °C	ASTM D 97	-18



* Values shown may differ between productions.

Hydraulic Oils of Turkish Manufacturers

The most preferred
hydraulic oil of Turkey:

**PETROL OFİSİ
HYDRO SERIES**



PREPARATIONS





Hidrolik Fren Yağı Dot Series Hydraulic Brake Fluid DOT-3, DOT-4

Applications

It is used in the hydraulic brake system of any type of vehicle.

Performance

FMVSS No.116, SAE J 1703

Typical Specifications*

		DOT-3	DOT-4
Density, @ 15 °C, kg/m ³	ASTM D-4052	1.06	1.07
Boiling Point, °C	ASTM D-1120	>205	>230
Ph Value (According to SAE)	FMVSS 116	7-11.5	7-11.5
Viscosity, 100 °C, mm ² /s	ASTM D-445	1.5	1.8

* Values shown may differ between productions.



Extended Life Coolant SNF Type Extended Life Engine Cooling Liquid

Applications

Durable coolant formulated with organic additives to help achieve optimal operating temperatures for engines at every climatic condition. Provides excellent anti-rust and anti-corrosion properties for cooling systems of all iron and aluminium alloy engines. No nitrite, amine, phosphate, borate and silicate content in compliance with environmental health regulations.

Performance

SAE J 1034, TS 3582, MB 325.3, MAN 324 Type SNF, Deutz, Cummins, Ford WSS-M97B44-D, GM 6277M, Saab, VW TL 774F, Skoda, DAF Trucks, Scania TB 1451, Volvo, Renault Trucks, Detroit Diesel Series 50&60, Isuzu, Komatsu, Leyland Trucks.

Typical Specifications*

Nitrite, Amine, Phosphate, Borate, Silicate		N/A
Colour		Light Pink
Density, @ 20 °C, kg/m ³	ASTM D-1122	1,116
Ph in water, %33 vol.	ASTM D-1287	8.31
Reserve Alkalinity (Ph 5.5)	ASTM D-1121	5.2
Freezing Point, °C, (%33 Antifreeze)	ASTM D-1177	-20
Freezing Point, °C, (%50 Antifreeze)		-37
Boiling Point, °C	ASTM D-1120	166

* Values shown may differ between productions.



Özel Antifriz

Ethylene Glycol Based Special Antifreeze

Applications

It can be used in all cooling systems especially new generation vehicles.

Performance

MAN 324 Type NF, MB 325.0, ZF INTARDER, BMW N 600 69.0, AUDI TL 774-C, VW TL 774 C, PORSCHE 774 C, CAT SEBU 6250-12, MTU MTL 5048, JENBACHER, SKODA, SEAT, OPEL

Typical Specifications*

Density, @ 15°C, kg/m ³	ASTM D-4052	1,129
Freezing Point, °C, (%50 Antifreeze)	ASTM D-1177	-38
Freezing Point, °C, (%33 Antifreeze)		-18
Boiling Point, °C, (%100)	ASTM D-1120	174
Ph, 20°C, (%100)	ASTM D-1287	7.2
Ph, 20°C, (%30)		8.4

* Values shown may differ between productions.



Süper Antifriz

Engine Coolant

Applications

It is used in aluminum or other type radiators. It is recommended both in winter/summer, since it prevents freezing/boiling of the coolant.

Performance

SAE J 1034, TS 3582, BS 6580, ASTM D-3306, ASTM D-4985

Typical Specifications*

Density, @ 15 °C, kg/m ³	ASTM D-4052	1,126
Freezing Point, °C, (%100 Antifreeze)	ASTM D-1177	-18
Freezing Point, °C, (%50 Antifreeze)		-38
Boiling Point, °C, (%100)	ASTM D-1120	164
Boiling Point, °C, (%50)		108
Ph, 20 °C, (%100)	ASTM D-1287	8.15
Ph, 20 °C, (%50)		9.08

* Values shown may differ between productions.



Cam Suyu Antifrizi (-32 °C) Windshield Washer Fluid Antifreeze

Applications

It is used in all kind of vehicles during all four seasons.

Typical Specifications*

Density, @ 15 °C, kg/m ³	ASTM D-4052	0.94
Freezing Point, °C	ASTM D- 1177	-32
pH 20 °C %100	ASTM D-1287	9.2

* Values shown may differ between productions.



Yazlık Cam Suyu Windshield Cleaning Liquid

Applications

Can be used on all cars to wash off the dirt deposited on the windows.

Typical Specifications*

Density, @ 15 °C, kg/m ³	ASTM D-4052	0,998
pH, 20 °C 100%	ASTM D-1287	7,4

* Values shown may differ between productions.



Motor Oil Economizer Motor Oil Additive

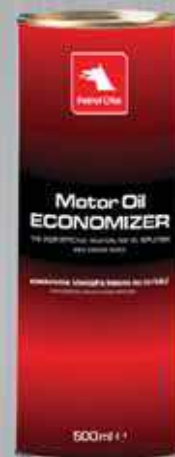
Applications

It is added into the engine oil while the engine is idling. This operation should be repeated at each engine oil replacement. It readily mixes with all kind of engine oils. It is not recommended for engine using Petrol Ofisi multigrade oils.

Typical Specifications*

Viscosity, 100 °C, mm ² /s	ASTM D-445	142.1
Pour Point, °C	ASTM D- 97	-18

* Values shown may differ between productions.





Petrol Ofisi

Yazlık CAM SUYU

WINDSHIELD
CLEANER



ADBLUE

PO  **Lubricants**



ADBLUE®

Applications

Adblue® is bound to use in diesel vehicles equipped with SCR to adapt the vehicle Euro IV, V and VI emission standards. It is carried onboard SCR-equipped vehicles in specially and seperately designed tanks. It is necessary to avoid adding fuel into Adblue® tank. SCR is the technology designed on refining the exhaust gases by injection of Adblue® directly on to emission channel. This system reduces levels of NOX using ammonia as a reductant within a catalyst system. Adblue®, as the reducing agent, reacts with NOX to convert the pollutants into nitrogen, water and tiny amounts of carbon dioxide (CO2) - natural elements common to the air we breathe everyday.

Performance

ISO 22241-1, DIN 70070 (standard)

Typical Specifications*

Urea Content Unit % (m/m)	ISO 22241-2	31.8-33.2
Density, @ 20 °C kg/m³	ISO 12185	1,090
Refractive Index	ISO 22241-2	1.3814-1.3843
Alkalinity as NH3 % (m/m)	-	Max. 0.2
Biuret % (m/m)	ISO 22241-2	Max. 0.3
Aldehydes mg / kg	ISO 22241-2	Max. 5
Insolubles mg / kg	ISO 22241-2	Max. 20

- * AdBlue® is a registered trademark of the VDA (Verband der Automobilindustrie).
- * Petrol Ofisi A.Ş. is a licensed member of VDA.
- * Values shown may differ between productions.



GREASES





Hi-Thermo 850

High Temperature and Extreme Pressure Grease

Applications

It is recommended for lubrication of journal and ball bearings used in iron and steel industry, cooling units and rotary steam couplings of kilns in cement industry, ball bearings and chain drives of oven conveyors, journal and ball bearings of heavy duty construction equipments. It is recommended for lubrications of ball bearings at elevated temperatures between 175 °C and 210 °C. Please contact to our technical expert for applications above 195 °C.

Performance

DIN 51825: KP1(1,5) R-20

Typical Specifications*

NLGI		1
Thickener Type		Bentonite
Colour		Yellow
Base Oil Viscosity, 40 °C, mm ² /s	ASTM D-445	550
Timken OK, lb	ASTM D 2509	60
Dropping Point, °C	ASTM D 566	N/A
Welding Load	ASTM D 2596	400
Rust Test	ASTM D 1743	Pass



* Values shown may differ between productions.

Ultra Gres CS Series

Calcium Sulfonate Complex Grease

Applications

It is recommended to use in heavy loaded and water saturated operations in paper and steelwork applications. Other suitable applications are listed below.

- Continuous casting lines
- Heavy industrial applications working under extreme pressure and temperature even with water presence
- Pot turret bearings
- Paper mills
- Rolling mill bearings

Performance

DIN 51825: KP1 (1,5) R-20 (Ultra Gres CS 146), DIN 51825: KP1 R-20 (Ultra Gres CS-2)

Typical Specifications*

		Ultra Gres CS 146	Ultra Gres CS 2
Thickener Type		Calcium Sulfonate Complex	Calcium Sulfonate Complex
NLGI		1.5	2
Colour		Yellow	Yellow
Basel Oil Viscosity, 40 °C, mm ² /s	ASTM D 445	460	460
Timken OK, lb	ASTM D 2509	60	60
Dropping Point, °C	ASTM D 566	>300	>300
Welding Load	ASTM D 2596	620	620
Rust Test	ASTM D 1743	Pass	Pass



* Values shown may differ between productions.

Carius EP Series

High Temperature and Extreme Pressure Grease

Applications

Carius EP 146 is recommended for lubrication of low speed roll bearings used in iron, continuous casting line output units operating between 150 °C and 190 °C. It can be used in central lubrication applications. Base oil viscosity is ISO VG 460, NLGI is 1,5. Carius EP 220 is recommended for lubrication of middle speed roll bearings used under heavy and shock loads in a water intense environment. It can be used in a wide range applications such as iron-steel, cement and automotive industries. Base oil viscosity is ISO VG 220, NLGI is 2. Carius EP 320 is recommended especially in mining industry. Due to its Molybdenum Disulfide additive, it prevents metal-metal friction in case of vibration. Base oil viscosity is ISO VG 320, NLGI is 2. It can be used up to 175 °C.

Performance

DIN 51825-KP 1 (1,5) P-20 (Carius EP 146), DIN 51825-KP 2 P-20 (Carius EP 220) DIN 51825- KPF 2 P-20 (Carius EP 320)

Typical Specifications*

		Carius EP 146	Carius EP 220	Carius EP 320
Thickener Type		Lithium Complex	Lithium Complex	Lithium Complex
NLGI		1,5	2	2
Colour		Blue	Blue	Black
Base Oil Viscosity, 40 °C, mm ² /s	ASTM D 445	460	220	320
Timken OK, lb	ASTM D 2509	60	60	60
Dropping Point, °C	ASTM D 566	>240	>240	>240
Welding Load	ASTM D 2596	400	400	500
Rust Test	ASTM D 1743	Pass	Pass	Pass



* Values shown may differ between productions.

Mega Gres WR 2

Lithium/Calcium Thickener High Performance Grease

Applications

It is used in medium and high speed operations where excessive impact loads are present. It is recommended for wide range of industrial and automotive applications. Especially for roller bearings used in steel industry, working in the presence of water and moisture. It is suitable for operations between -20 to 130 °C.

Performance

DIN 51825: KP 2 K-20

Typical Specifications*

Thickener Type		Lithium/Calcium
NLGI		2
Colour		Yellow
Base Oil Viscosity, 40 °C, mm ² /s	ASTM D 445	220
Timken OK, lb	ASTM D 2509	50
Dropping Point, °C	ASTM D 566	>180
Welding Load	ASTM D 97	200
Rust Test	ASTM D 174	Pass



* Values shown may differ between productions.

Süper Gres EP 00

Lithium Thickener High Performance Grease

Applications

It is used for the lubrication of impact loaded heavy duty bearing. Type 00 is used in especially central lubrication system of heavy duty vehicles. It can be used up to 110 °C.

Performance

DIN 51825-GP 00 G-30

Typical Specifications*

Thickener Type		Lithium
NLGI		00
Colour		Yellow
Base Oil Viscosity, 40 °C, mm ² /s	ASTM D 445	220
Timken OK, lb	ASTM D 2509	50
Dropping Point, °C	ASTM D 566	>160
Welding Load	ASTM D 97	250
Rust Test	ASTM D 1743	Pass



* Values shown may differ between productions.

Süper Gres EP

Lithium Thickener High Performance Grease

Applications

It is used for the lubrication of impact loaded heavy duty bearing. NLGI 0 is used for high-speed applications with capillary tubes in the presence of the water, or in the winter, whereas type 1 and 2 are used during summer. Type 2 is recommended for especially wide roller bearings located at the dry and wet ends of paper machines. It is suitable for operation between -12 °C and 130 °C.

Performance

DIN 51825: KP 0 K-20 (Süper Gres EP 0), DIN 51825: KP 1 K-20 (Süper Gres EP 1),
DIN 51825: KP 2 K-20 (Süper Gres EP 2), DIN 51825: KP 3 K-20 (Süper Gres EP 3)

Typical Specifications*

		NLGI			
		0	1	2	3
Thickener Type		Lithium	Lithium	Lithium	Lithium
Colour		Yellow	Yellow	Yellow	Yellow
Base Oil Viscosity, 40 °C, mm ² /s	ASTM D 445	220	220	220	220
Timken OK, lb	ASTM D 2509	50	50	60	60
Dropping Point, °C	ASTM D 566	>175	>185	>185	>185
Welding Load	ASTM D 97	250	250	315	315
Rust Test	ASTM D 1743	Pass	Pass	Pass	Pass



* Values shown may differ between productions.

Molibdenli Gres 2

Lithium Thickener Industrial Grease

Applications

It is used for chassis lubrication, joint connections, universal joints, wheel bearings, front wheel mechanisms, bushing and ball joint pins. In addition, it is very suitable for numerous industrial applications where grease with molybdenum additive is required like sliding surfaces, ball bearings, cams, railway journal and chain drives. It is suitable for temperatures between -20 °C and 140 °C.

Performance

DIN 51825-KPF 2 K-20

Typical Specifications*

Thickener Type		Lithium
NLGI		2
Colour		Black
Base Oil Viscosity, 40 °C, mm ² /s	ASTM D 445	220
Timken OK, lb	ASTM D 2509	50
Dropping Point, °C	ASTM D 566	>185
Welding Load	ASTM D 97	400
Rust Test	ASTM D 1743	Pass



* Values shown may differ between productions.

Süper Gres Series

High Performance Automotive Grease

Applications

It is used for lubrication of journal and rolling bearings, all kind of sliding surfaces and greasing points of automotive vehicles, if necessary. It is recommended for bearings of electric motors.

Performance

DIN 51825: K 3 K-20

Typical Specifications*

		Super Gres 2	Super Gres 3
Thickener Type		Lithium	Lithium
Colour		Yellow	Yellow
NLGI		2	3
Basel Oil Viscosity, 40 °C, mm ² /s	ASTM D 445	100	100
Timken OK, lb	ASTM D 2509	50	50
Dropping Point, °C	ASTM D 566	>185	>185
Welding Load	ASTM D 2596	250	250
Rust Test	ASTM D 1743	Pass	Pass



* Values shown may differ between productions.

Süper Gres MP-2

Lithium Thickener Automotive Grease

Applications

It is used for chassis lubrication requiring grease and medium speed rolling bearings carrying light and medium loads in automotive industry. Recommended for wheel hub of heavy duty vehicles and construction equipment. Suitable for use at temperature between -20 °C and 140 °C.

Performance

DIN 51825: K 2 K-20

Typical Specifications*

Thickener Type		Lithium
NLGI		2
Colour		Yellow
Base Oil Viscosity, 40 °C, cSt	ASTM D 445	150
Timken OK, lb	ASTM D 2509	50
Dropping Point, °C	ASTM D 566	>180
Welding Load	ASTM D 97	315
Rust Test	ASTM D 1743	Pass

* Values shown may differ between productions.



Kauçuklu Gres

Calcium Thickener Automotive Grease

Applications

It is developed for journal and ball bearings operating under light-medium loads with medium and high speed.

Performance

DIN 51825-KP 2 E-10 (Kauçuklu Gres), DIN 51825-KP 3 E-10 (Kauçuklu Gres 3)

Typical Specifications*

		Kauçuklu Gres	Kauçuklu Gres 3
Thickener Type		Calcium	Calcium
NLGI		2	3
Colour		Green	Green
Base Oil Viscosity, 40 °C, mm ² /s	ASTM D 445	1000	1000
Timken OK, lb	ASTM D 2509	40	40
Dropping Point, °C	ASTM D 566	>95	>95
Welding Load	ASTM D 2596	200	200
Rust Test	ASTM D 1743	Pass	Pass

* Values shown may differ between productions.



Kap Gres

Calcium Thickener Industrial Grease

Applications

It provides quick and efficient protection in various application fields at medium operating temperatures. It features high pumping capability. It is used especially for operations under medium speed and load, with operating temperature less than 80 °C, especially low-speed journal bearing operating under average loading.

Performance

DIN 51825: K2C-10 (Kap Gres 2), DIN 51825: K3C-10 (Kap Gres 3)

Typical Specifications*

Thickener Type		Kap Gres 2	Kap Gres 3
		Calcium	Calcium
NLGI		2	3
Colour		Red	Red
Base Oil Viscosity, 40 °C, mm ² /s	ASTM D 445	150	150
Timken OK, lb	ASTM D 2509	40	40
Dropping Point, °C	ASTM D 566	>95	>95
Welding Load	ASTM D 2596	200	200
Rust Test	ASTM D 1743	Pass	Pass



* Values shown may differ between productions.

Pamuk Toplama Gresi

Applications

It is developed for the usage in cotton picking machines. It is suitable for cotton picking and other agricultural machineries.

Typical Specifications*

Color		Blue
Type of Soap		Lithium
Penetration, Processed, 25 °C	ASTM D-217	450-490
Dropping Point,	ASTM D-566	>180

* Values shown may differ between productions.



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