

# PEMCO<sup>®</sup>



AUTOMOTIVE OILS AND FLUIDS



The PEMCO brand has been on the engine oil market for many years and has earned the respect and dedication of millions of car enthusiasts and professionals all over the world during this time. The history of the brand began in 1962, but it was not until 2004 that UAB SCT Lubricants, the current brand owner, was formed and initialised a large-scale modernisation process, thereby remarkably increasing the factory's producing capability.

Today all PEMCO products are manufactured under thorough control in the biggest lubricant factory with a high level of process automation in Northern Europe.

The PEMCO product range includes more than 100 different names of automotive oils and fluids. Not only do we produce lubricants, we also fill them into self-made metal and plastic containers.

The high quality of PEMCO lubricants and fluids and their compliance with all the requirements are confirmed by a number of specifications and quality certificates from leading organizations. In addition to high quality, the PEMCO brand is proud of its traditionally low prices for products. A good price-quality ratio is achieved through the automation of production processes, as well as a perfect location on the shores of the Baltic Sea, which helps significantly reduce coordination and transport costs.





## **SCT ESTER**

THE NEW TECHNOLOGY



A team of SCT scientists and engineers set an ambitious task: to use esters that are currently widely used in the aerospace industry in the mass production of lubricants for automotive engines. Today, we are proud to present to you our new technology - SCT ESTER.

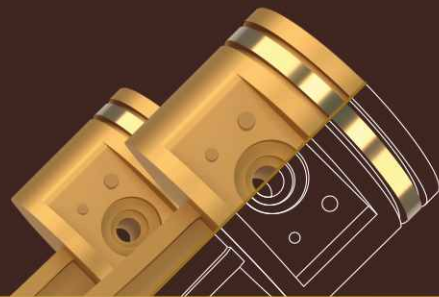
The secret behind how esters reduce friction and wear is that, unlike hydrocarbons, they also contain oxygen. The oxygen makes the ester molecules polar, so they are literally magnetised to metal surfaces, forming a dense and stable oil film. This film also protects the surface from moisture and air, that is, prevents corrosion.

The high stability of the ester molecules enables an oil based on them to withstand temperatures more than 200 °C without boiling or viscosity changes, and their pour point ensures that the oil is pumpable even at temperatures as low as -45 °C for ideal cold starts.

**AND WE MADE IT REAL!**

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## ENGINE OILS FOR PASSENGER CARS

Premium quality range of oils with the most sought-after characteristics for passenger cars. The oils comply with the latest API and ACEA standards and the latest requirements of the major vehicle manufacturers.

The range consists of oils with viscosities from SAE 0W-20 to SAE 60 on various bases: synthetic, semi-synthetic and mineral. It therefore contains oils suitable for the latest vehicles, as well as for older generations.

### PEMCO 328 SAE 0W-20

Product code: PM0328



#### FULLY SYNTHETIC ENGINE OIL

Innovative energy-saving, low-viscosity bi-synthetic (PAO + esters) premium engine oil for the latest models of turbocharged petrol engines with diesel particulate filters.

##### Volume: / Art. Nr.:

1L	PM0328-1	4L	PM0328-4
5L	PM0328-5	20L	PM0328-20
60L	PM0328-60	208L	PM0328-DR
1000L	PM0328-IBC		

##### Specifications:

SAE 0W-20  
API SP (RC)  
ACEA C5  
MB 229.71  
BMW LL-17FE+  
VOLVO VCC RBS0-2AE (Service Fill)  
GM dexos1 Gen2  
HONDA HT-06  
GM 6094M  
CHRYSLER MS-6395  
CHRYSLER MS-13340  
JAGUAR STJLR.51.5122  
LAND ROVER STJLR.51.5122  
FORD WSS-M2C947-A/-B1  
OPEL OV0401547

### PEMCO 332 SAE 0W-30

Product code: PM0332



#### FULLY SYNTHETIC ENGINE OIL

Innovative universal bi-synthetic (PAO+esters) premium engine oil for modern diesel and petrol engines of European vehicles with and without turbocharging.

##### Volume: / Art. Nr.:

1L	PM0332-1	4L	PM0332-4
5L	PM0332-5	20L	PM0332-20
60L	PM0332-60	208L	PM0332-DR

##### Specifications:

SAE 0W-30  
API SN  
ACEA C2/C3  
VOLKSWAGEN 504 00/507 00/505 01  
BMW LL-12FE  
PORSCHE C30  
MB 229.51  
PSAB71 2290  
PSAB71 2312  
RENAULT RN17/RN0710/RN0700  
FIAT 9.55535-DS1/-GS1  
FORD WSS-M2C950-A  
JAGUAR/LAND ROVER STJLR.03.5007  
IVECO 18-1811 CLASSE SC1 LV

## PEMCO 360 SAE 5W-30

Product code: PM0360



### SYNTHETIC ENGINE OIL

Innovative universal ester-containing fully synthetic premium engine oil for modern diesel and petrol engines with and without turbo-charger equipped with particulate filters (DFP / FAP). The product is specifically designed for professional RENAULT car maintenance.

#### Volume: / Art. Nr.:

1L	PM0360-1	5L	PM0360-5
20L	PM0360-20	60L	PM0360-60
208L	PM0360-DR	1000L	PM0360-IBC

#### Specifications:

SAE 5W-30  
API SN  
ACEA C4  
RENAULT RN0720  
MB 226.51  
NISSAN diesel engines with DPF

## PEMCO 350 SAE 5W-30

Product code: PM0350



### FULLY SYNTHETIC ENGINE OIL

Innovative universal multigrade bi-synthetic (PAO + esters) premium motor oil for modern petrol and diesel engines with and without turbocharging, including those equipped with pump nozzles (Pumpe-Duse). Designed based on VW and DAIMLER requirements.

#### Volume: / Art. Nr.:

1L	PM0350-1	4L	PM0350-4
5L	PM0350-5	20L	PM0350-20
60L	PM0350-60	208L	PM0350-DR
1000L	PM0350-IBC		

#### Specifications:

SAE 5W-30  
API SN  
ACEA C3  
MB 229.51  
VOLKSWAGEN 504 00  
VOLKSWAGEN 507 00  
VOLKSWAGEN TL 52 195  
BMW LL-04  
PORSCHE C30

## PEMCO 345 SAE 5W-30

Product code: PM0345



### SYNTHETIC ENGINE OIL

Innovative universal ester-containing synthetic premium motor oil for modern diesel and petrol engines with and without turbocharging. Especially recommended for direct injection turbodiesel engines. Designed to meet VW requirements.

#### Volume: / Art. Nr.:

1L	PM0345-1	5L	PM0345-5
20L	PM0345-20	60L	PM0345-60
208L	PM0345-DR		

#### Specifications:

SAE 5W-30  
API SN/CH-4  
ACEA C2  
ACEA C3  
VOLKSWAGEN 505 01  
BMW LL-04  
MB 229.52  
MB 229.51  
MB 229.31  
MB 226.5  
GM dexos2  
RENAULT RN0700  
RENAULT RN0710

## PEMCO 340 SAE 5W-40

Product code: PM0340



### FULLY SYNTHETIC ENGINE OIL

Innovative universal ester-containing premium motor oil for modern petrol and diesel engines with and without turbocharging, including "old" brands and high mileage. Designed based on the requirements of European producers.

#### Volume: / Art. Nr.:

1L	PM0340-1	4L	PM0340-4
5L	PM0340-5	10L	PM0340-10
20L	PM0340-20	60L	PM0340-60
208L	PM0340-DR	1000L	PM0340-IBC

#### Specifications:

**SAE 5W-40**  
**API SN/CH-4**  
**ACEAA3/B4**  
MB 229.5/229.3  
MB 226.5  
JASO MA2  
VOLKSWAGEN 502 00/505 00  
BMW LL-01/LL-98  
PORSCHE A40  
PSAB71 2296  
RENAULT RN0710/RN0700  
FIAT 9.55535-H2/-Z2  
CHRYSLER MS-10850/-10896/-12991  
GM LL-A-025  
GM LL-B-025

## PEMCO 330 SAE 5W-30

Product code: PM0330



### SYNTHETIC ENGINE OIL

Innovative universal premium ester-containing engine oil for modern petrol and diesel engines with and without turbocharging. Designed based on the requirements of European car manufacturers.

#### Volume: / Art. Nr.:

1L	PM0330-1	4L	PM0330-4
5L	PM0330-5	20L	PM0330-20
60L	PM0330-60	208L	PM0330-DR
1000L	PM0330-IBC		

#### Specifications:

**SAE 5W-30**  
**API SN/CH-4**  
**ACEAA3/B4**  
VOLKSWAGEN 502 00  
VOLKSWAGEN 505 00  
VOLKSWAGEN 503 01  
VOLKSWAGEN 501 01  
MB 229.3  
MB 229.5  
BMW Longlife-98  
RENAULT RN0700  
RENAULT RN0710  
FORD WSS-M2C913-B

## PEMCO 325 SAE 5W-20

Product code: PM0325



### SYNTHETIC ENGINE OIL

Innovative energy-saving premium bi-synthetic engine oil (PAO + esters) for modern petrol engines. Designed to meet the requirements of American, Japanese and Korean automakers.

#### Volume: / Art. Nr.:

1L	PM0325-1	4L	PM0325-4
20L	PM0325-20	208L	PM0325-DR

#### Specifications:

**SAE 5W-20**  
**API SP (RC)**  
**ILSAC GF-6A**  
GM dexos1 Gen2  
HONDA HTO-06  
GM 6094M  
CHRYSLER MS-6395  
CHRYSLER MS-13340  
JAGUAR STJLR.51.5122  
LAND ROVER STJLR.51.5122  
FIAT 9.55535-CR1  
FORD WSS-M2C930-A/-B  
FORD WSS-M2C925-A/-B  
FORD WSS-M2C945-B1  
FORD WSS-M2C948-B  
MAZDA  
SUZUKI

## PEMCO 260 SAE 10W-40

Product code: PM0260



### SEMI-SYNTHETIC ENGINE OIL

Universal ester-containing HC-synthese engine oil for modern petrol and diesel engines with and without a turbocharger, both multi-valve and direct injection, including "old" brands and high mileage vehicles. Designed according to the requirements of European manufacturers.

#### Volume: / Art. Nr.:

1L	PM0260-1	4L	PM0260-4
5L	PM0260-5	7L	PM0260-7
20L	PM0260-20	60L	PM0260-60
208L	PM0260-DR	1000L	PM0260-IBC

#### Specifications:

**SAE 10W-40**  
**API SN/CH-4**  
**ACEAA3/B4**  
**JASO MA2**  
VOLKSWAGEN 505 00  
VOLKSWAGEN 502 00  
VOLKSWAGEN 501 01  
VOLKSWAGEN 500 00  
MB 229.3  
MB 229.1  
PSAB71 2296  
RENAULT RN0710  
RENAULT RN0700

## PEMCO 230 SAE 10W-30

Product code: PM0230



### SEMI-SYNTHETIC ENGINE OIL

Hydro-synthetic universal motor oil for all types of petrol engines. Designed to meet VW and DAIMLER requirements.

#### Volume: / Art. Nr.:

1L	PM0230-1	4L	PM0230-4
5L	PM0230-5	20L	PM0230-20
60L	PM0230-60	208L	PM0230-DR
1000L	PM0230-IBC		

#### Specifications:

**SAE 10W-30**  
**API SN**  
**ACEAA3/B4**  
VOLKSWAGEN 505 00  
VOLKSWAGEN 501 01  
MB 229.1  
ISUZU  
KIA

## PEMCO 140 SAE 15W-40

Product code: PM0140



### UNIVERSAL ENGINE OIL

Highly refined economy-class mineral engine oil for highly accelerated petrol and diesel engines with or without a turbocharger, with a very high mileage used in varying operating conditions.

#### Volume: / Art. Nr.:

1L	PM0140-1	4L	PM0140-4
5L	PM0140-5	20L	PM0140-20
60L	PM0140-60	208L	PM0140-DR

#### Specifications:

**SAE 15W-40**  
**API SN/CH-4**  
**ACEAA3/B4**  
VOLKSWAGEN 505 00  
VOLKSWAGEN 502 00  
VOLKSWAGEN 501 01  
VOLKSWAGEN 500 00  
MB 229.3  
MB 229.1  
PSAB71 2294  
RENAULT RN0700  
RENAULT RN0710



## PEMCO 102 SAE 20W-50

Product code: PM0102



### SYNTHETIC BLEND ENGINE OIL

Universal economy-class synthetic blend engine oil for modern highly accelerated petrol and diesel engines with and without a turbocharger used in difficult operating conditions and engines with a very high mileage used in various operating conditions.

#### Volume: / Art. Nr.:

1L	PM0102-1	4L	PM0102-4
5L	PM0102-5	20L	PM0102-20
60L	PM0102-60	208L	PM0102-DR

#### Specifications:

SAE 20W-50  
API SN/CH-4  
ACEAA3/B4  
VOLKSWAGEN 505 00  
MB 229.1  
MB 228.1  
MAN 271

## PEMCO 060 SAE 60

Product code: PM0060



### UNIVERSAL ENGINE OIL

High-efficiency monograde mineral engine oil for heavy-load diesel-powered engines with and without a turbocharger operating under extra-harsh conditions at ambient temperatures more than -15 °C.

#### Volume: / Art. Nr.:

5L	PM0060-5	20L	PM0060-20
60L	PM0060-60	208L	PM0060-DR

#### Specifications:

SAE 60  
API CH-4

## PEMCO 050 SAE 50

Product code: PM0050



### UNIVERSAL ENGINE OIL

High-efficiency monograde mineral engine oil for heavy-load diesel-powered engines with and without a turbocharger operating under very harsh conditions at ambient temperatures more than -15 °C.

#### Volume: / Art. Nr.:

5L	PM0050-5	20L	PM0050-20
60L	PM0050-60	208L	PM0050-DR

#### Specifications:

SAE 50  
API CH-4

## PEMCO 040 SAE 40

Product code: PM0040



### UNIVERSAL ENGINE OIL

High-efficiency monograde mineral engine oil for heavy-load diesel powered engines with and without a turbocharger operating under harsh conditions at ambient temperatures more -20 °C.

#### Volume: / Art. Nr.:

1L	PM0040-1	4L	PM0040-4
5L	PM0040-5	20L	PM0040-20
60L	PM0040-60	208L	PM0040-DR
1000L	PM0040-IBC		

#### Specifications:

SAE 40  
API CH-4/SJ

## PEMCO 114 SAE 15W-40

Product code: PM0114



### UNIVERSAL DIESEL ENGINE OIL

Universal, all-season mineral engine oil for modern high-load and high-speed turbocharged and non-turbocharged diesel engines operating in all conditions. Designed specifically to protect both light and heavy-duty equipment and get the best performance out of it regardless of its operating conditions.

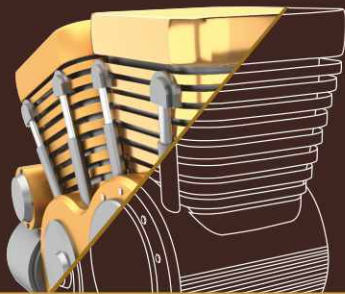
#### Volume: / Art. Nr.:

1L	PM0114-1	5L	PM0114-5
7L	PM0114-7	20L	PM0114-20
10L	PM0114-10	60L	PM0114-60
208L	PM0114-DR	1000L	PM0114-IBC

#### Specifications:

SAE 15W-40  
API CH-4/SL  
ACEA E7, A3/B4  
MAN M 3275  
MB 228.3 / 229.1  
MTU Type 2.0  
VOLVO VDS-2

# PEMCO®



## ENGINE OILS FOR MOTORBIKES

These are the most popular oils for four-stroke and two-stroke engines in motorbikes, mopeds and scooters.

## PEMCO 640 SAE 10W-40

Product code: PM0640



### SYNTHETIC 4-STROKE ENGINE OIL

An innovative synthetic ester-containing engine oil for 4-stroke high-load engines of motorcycles, pit bikes, motards, etc. for off-road (enduro, motocross, trials, etc.) and highway (stuntriding, supermoto, etc.) driving under extreme loads. It was designed for a guaranteed protection of the engine and the durability of the gearbox.

#### Volume: / Art. Nr.:

1L	PM0640-1	20L	PM0640-20
208L	PM0640-DR		

#### Specifications:

**SAE 10W-40**  
**API SN**  
JASO MA  
JASO MA2  
HONDA  
HUSABERG  
KAWASAKI  
SUZUKI  
YAMAHA

## PEMCO 620 API TC

Product code: PM0620



### UNIVERSAL 2-STROKE ENGINE OIL

A universal high-quality mineral-based engine oil for modern high-load and high-speed 2-stroke engines with air cooling. It is suitable for the lubrication by a pre-mixed blend and an automatic mixing in an engine intake.

#### Volume: / Art. Nr.:

1L	PM0620-1	20L	PM0620-20
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#### Specifications:

**API TC**  
**JASO FB**  
**ISO L-EGB**



## ENGINE OILS FOR TRUCKS AND BUSES

These oils are designed specifically for use in heavy-duty diesel engines of heavy trucks, construction, road and agricultural machines, as well as buses and other special equipment. The oils comply with the latest API and ACEA standards and many of them have official approvals from major vehicle manufacturers such as DAIMLER, MAN and VOLVO.

### DIESEL M-50 SHPD SAE 20W-50

Product code: PM0702



#### UNIVERSAL TRUCK ENGINE OIL

Special multi-season, highly alloyed mineral engine oil with the addition of hydrosynthetics for modern, heavy duty and high-speed diesel engines with and without turbocharging, operating in extremely difficult conditions (including, at high ambient temperatures) and for engines with high mileage. Designed specifically to protect equipment and benefit most out of it under extreme loads.

##### Volume: / Art. Nr.:

5L	PM0702-5	7L	PM0702-7
10L	PM0702-10	20L	PM0702-20
60L	PM0702-60	208L	PM0702-DR
1000L	PM0702-IBC		

##### Specifications:

**SAE 20W-50**  
**API CH-4/SL**  
**ACEA E7, A3/B4**  
MAN M 3275-1  
MB 228.3  
MB 229.1  
MTU Type 2  
VOLVO VDS-2

### DIESEL G-4 SHPD SAE 15W-40

Product code: PM0704



#### UNIVERSAL TRUCK ENGINE OIL

Innovative all-weather mineral-synthetic (esters + HC-synthes) motor oil for modern heavy duty and high-speed diesel engines with and without turbocharging, operated in difficult conditions. The oil complies with the Global Specification GLOBAL DHD-1, which takes into account all the requirements of European, American and Japanese manufacturers for heavy diesel engines manufactured since 1998.

##### Volume: / Art. Nr.:

5L	PM0704-5	10L	PM0704-10
20L	PM0704-20	60L	PM0704-60
208L	PM0704-DR	1000L	PM0704-IBC

##### Specifications:

**SAE 15W-40**  
**API CI-4 Plus, CI-4/CH-4/SL**  
**ACEA E7, A3/B4**  
JASO DH-1  
GLOBAL DHD-1  
CATERPILLAR ECF-1-a/ECF-2  
CUMMINS CES 20076/-77/-78  
DETROIT DIESEL 93K215  
MACK EO-N/EO-M Plus  
MAN M 3275-1  
MB 228.1/228.3  
RENAULT RLD-2  
VOLVO VDS-3  
MTU Type 2

## DIESEL G-5 UHPD SAE 10W-40

Product code: PM0705



### SEMI-SYNTHETIC TRUCK ENGINE OIL

All-weather semi-synthetic (esters+HC-synthes) motor oil for modern heavy duty and high-speed diesel engines with and without turbocharging, operated in difficult conditions. The oil complies with the Global Specification GLOBAL DHD-1, which takes into account all the requirements of European, American and Japanese manufacturers for heavy diesel engines manufactured since 1998.

#### Volume: / Art. Nr.:

5L	PM0705-5	10L	PM0705-10
20L	PM0705-20	60L	PM0705-60
208L	PM0705-DR	1000L	PM0705-IBC

#### Specifications:

**SAE 10W-40**  
**API CI-4 Plus, CI-4/CH-4/SL**  
**ACEA E7, A3/B4**  
JASO DH-1  
GLOBAL DHD-1  
CATERPILLAR ECF-2/ECF-1-a  
CUMMINS CES 20076/-77/-78  
DETROIT DIESEL 93K215  
MACK EO-N/EO-M Plus  
MAN M 3275-1  
MB 228.3/228.1  
MTU Type 2  
RENAULT RLD-2  
VOLVO VDS-3

## DIESEL G-6 UHPD Eco SAE 10W-40

Product code: PM0706



### SYNTHETIC TRUCK ENGINE OIL

All-weather modern synthetic motor oil for heavy-duty and high-speed diesel engines with and without turbocharger, operating in difficult conditions. The oil has successfully passed road and laboratory tests at MAN, MTU and MERCEDES-BENZ centres and has their written approvals. Synthetic base of the highest quality, featuring ideal viscosity in a wide temperature range.

#### Volume: / Art. Nr.:

10L	PM0706-5	20L	PM0706-20
60L	PM0706-60	208L	PM0706-DR
1000L	PM0706-IBC		

#### Specifications:

**SAE 10W-40**  
**API CI-4**  
**ACEA E7, E4**  
CUMMINS CES 20077/-78  
MB 235.28  
MACK EO-N  
RENAULT RLD-2  
SCANIALDF-3  
VOLVO VDS-3  
VOITH Class B  
MB Approval 228.5  
MAN M 3277 Approval  
MTU Type 3 Approval

## DIESEL G-7 UHPD Blue SAE 10W-40

Product code: PM0707



### SYNTHETIC TRUCK ENGINE OIL

All-weather synthetic motor oil for heavy-duty and high-speed diesel engines of the latest generation with and without turbocharger, operating in severe conditions on low sulphur fuel. The oil has successfully passed road and laboratory tests at VOLVO, MACK, MAN, MERCEDES-BENZ and RENAULT centres and has their written approvals.

#### Volume: / Art. Nr.:

10L	PM0707-10	20L	PM0707-20
208L	PM0707-DR	1000L	PM0707-IBC

#### Specifications:

**SAE 10W-40**  
**API CK-4/CJ-4**  
**ACEA E8, E11**  
DAF (ACEA E6)  
IVECO (ACEA E6)  
CATERPILLAR ECF-3  
CUMMINS CES 20086  
DETROIT DIESEL DDC 93K222  
MACK EOS-4.5 Approval  
MAN M 3477 Approval  
MAN M 3775  
MB Approval 228.51  
MB 228.31  
RENAULT VI RLD-3 Approval  
VOLVO VDS-4.5 Approval

## DIESEL G-8 UHPD SAE 5W-30

Product code: PM0708



### SYNTHETIC TRUCK ENGINE OIL

Energy-saving synthetic (PAO-based) motor oil for heavy duty and high-speed diesel engines of the latest generation with and without turbocharging, operating in difficult conditions. The unique low-viscosity synthetic PAO-containing base of the highest quality, with ideal viscosity in the required temperature range, combined with an innovative additive package, provides unrivaled anti-friction, anti-wear and anti-scuffing properties.

#### Volume: / Art. Nr.:

10L	PM0708-10	20L	PM0708-20
208L	PM0708-DR	1000L	PM0708-IBC

#### Specifications:

**SAE 5W-30**  
**API CI-4**  
**ACEA E4**  
**ACEA E7**  
MB 228.5  
VOLVO VDS-3  
MAN M 3277/3377  
MTU Type 3  
MACK EO-N  
RENAULT RLD-2  
CUMMINS CES 20076/-77/-78  
DETROIT DIESEL 93K215

## DIESEL G-10 UHPD SAE 5W-40

Product code: PM0710



### SYNTHETIC TRUCK ENGINE OIL

The universal all-season synthetic engine oil for modern high-load and high-speed diesel engines with and without turbocharging, operating in harsh conditions and at low ambient temperatures. A state-of-the-art additive package combined with a synthetic base of the highest quality, which has an ideal viscosity over a wide temperature range, provides unsurpassed anti-friction, anti-wear and extreme pressure properties.

#### Volume: / Art. Nr.:

10L	PM0710-10	20L	PM0710-20
208L	PM0710-DR	1000L	PM0710-IBC

#### Specifications:

**SAE 5W-40**  
**API CI-4/SL**  
**ACEA E4**  
**ACEA E7**  
MB 228.5  
MACK EO-N  
MTU Type 3  
MAN M 3277  
RENAULT RLD-2  
VOLVO VDS-3

## DIESEL G-12 SHPD SAE 10W-30

Product code: PM0712



### SEMI-SYNTHETIC TRUCK ENGINE OIL

All-weather semi-synthetic (HC synthesis) motor oil for modern heavy duty and high-speed diesel engines with and without turbocharging, operated in difficult conditions. Designed specifically to protect machinery and benefit most out of it regardless of operating conditions. Innovative additives in combination with a semi-synthetic base of the highest quality and low viscosity provide excellent anti-friction, anti-wear and extreme pressure characteristics.

#### Volume: / Art. Nr.:

20L	PM0712-20	208L	PM0712-DR
1000L	PM0712-IBC		

#### Specifications:

**SAE 10W-30**  
**API CI-4 Plus, CI-4/CH-4/SL**  
**ACEA E7, A3/B4**  
VOLVO VDS-3  
MAN M 3275-1  
MB 228.3/228.1  
MTU Type 2  
MACK EO-N/EO-M Plus  
RENAULT RLD-2  
JASO DH-1  
CUMMINS CES 20076/-77/-78  
CATERPILLAR ECF-2/-1a  
GLOBAL DHD-1  
DETROIT DIESEL 93K215

## DIESEL G-14 UHPD SAE 15W-40

Product code: PM0714



### SYNTHETIC TRUCK ENGINE OIL

All-weather synthetic motor oil for heavy-duty and high-speed diesel engines with and without turbocharger, operating in difficult conditions. The oil has successfully passed road and laboratory tests at VOLVO, MACK and RENAULT centres and has their written approvals.

#### Volume: / Art. Nr.:

20L	PM0714-20	208L	PM0714-DR
1000L	PM0714-IBC		

#### Specifications:

SAE 15W-40  
API CK-4  
ACEA E6  
ACEA E7  
ACEA E9  
JASO DH-2  
MB 228.31  
CATERPILLAR ECF-3  
CUMMINS CES 20086  
MAN M 3775  
DETROIT DIESEL DDC 93K222  
MACK EOS-4.5 Approval  
RENAULT RLD-3 Approval  
VOLVO VDS-4.5 Approval

## DIESEL G-15 SHPD SAE 20W-50

Product code: PM0715



### MINERAL TRUCK ENGINE OIL

Special multi-season, highly alloyed mineral engine oil with the addition of hydrosynthetics for modern, heavy duty and high-speed diesel engines with and without turbocharging, operating in extremely difficult conditions (including, at high ambient temperatures) and for engines with high mileage. The oil complies with the Global Specification GLOBAL DHD-1, which takes into account all the requirements of European, American and Japanese manufacturers for heavy diesel engines manufactured since 1998.

#### Volume: / Art. Nr.:

20L	PM0715-20	208L	PM0715-DR
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#### Specifications:

SAE 20W-50  
API CI-4 Plus/CI-4/CH-4/SL  
ACEA E7, A3/B4  
JASO DH-1  
GLOBAL DHD-1  
CATERPILLAR ECF-2/ECF-1-a  
CUMMINS CES 20076/-77/-78  
DETROIT DIESEL 93K215  
MACK EO-N/EO-M Plus  
MB 228.1/228.3  
MTU Type 2  
RENAULT RLD-2  
VOLVO VDS-3  
MAN M 3275-1

## DIESEL G-17 UHPD Blue SAE 5W-30

Product code: PM0717



### SYNTHETIC TRUCK ENGINE OIL

Energy-saving synthetic (PAO-based) motor oil for heavy duty and high-speed diesel engines of the latest generation with and without turbocharging, operating in severe conditions on low sulphur fuel. Designed specifically to protect machinery and benefit most out of it regardless of operating conditions.

#### Volume: / Art. Nr.:

20L	PM0717-20	60L	PM0717-60
208L	PM0717-DR	1000L	PM0717-IBC

#### Specifications:

SAE 5W-30  
API CK-4  
ACEA E8, E11  
MB 228.51  
VOLVO VDS 4.5  
CUMMINS CES 20086  
MAN M 3677  
IVECO (ACEA E6-2016)  
DAF (ACEA E6-2016)  
DETROIT DIESEL DDC93K222  
SCANIALDF-4  
RENAULT RLD-3  
MACK EOS-4.5  
CATERPILLAR ECF-3

## DIESEL G-18 SHPD SAE 15W-40

Product code: PM0718



### SYNTHETIC TRUCK ENGINE OIL

All-weather synthetic motor oil for heavy-duty and high-speed diesel engines of the latest generation with and without turbocharger, operating in severe conditions on low sulphur fuel. Designed specifically to protect machinery and benefit most out of it regardless of operating conditions.

#### Volume: / Art. Nr.:

20L	PM0718-20	208L	PM0718-DR
1000L	PM0718-IBC		

#### Specifications:

**SAE 15W-40**  
**API CK-4**  
**ACEA E8, E11**  
MB 228.31/228.51  
VOLVO VDS-4.5  
CUMMINS CES 20086  
MAN M 3775  
IVECO (ACEAE6-2016)  
DAF (ACEAE6-2016)  
DETROIT DIESEL DDC93K222  
RENAULT RLD-3  
MACK EOS-4.5  
CATERPILLAR ECF-3

## DIESEL G-20 SHPD SAE 10W-30

Product code: PM0720



### SYNTHETIC TRUCK ENGINE OIL

All-weather synthetic motor oil for heavy-duty and high-speed diesel engines with and without turbocharger, operating in difficult conditions. The oil has successfully passed road and laboratory tests at VOLVO, MACK and RENAULT centres and has their written approvals.

#### Volume: / Art. Nr.:

208L	PM0720-DR
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#### Specifications:

**SAE 10W-30**  
**API CJ-4/CK-4**  
**ACEA E8, E11**  
JASO DH-2  
MB 228.31/228.51/235.28  
SCANIA LowAsh  
MAN M 3677/M 3477  
VOLVO VDS-4  
RENAULT Truck RLD-3  
MACK EO-O Premium Plus  
MACK EO-O Premium Plus -07  
MTU Type 3.1  
CATERPILLAR ECF-2/-3  
CUMMINS CES 20081  
DETROIT DIESEL DDC 93K218  
VOITH Retarder Class B

## DIESEL G-21 SHPD SAE 10W-30

Product code: PM0721



### SYNTHETIC TRUCK ENGINE OIL

All-weather synthetic motor oil for heavy-duty and high-speed diesel engines of the latest generation with and without turbocharger, operating in severe conditions on low sulphur fuel. The oil has successfully passed road and laboratory tests at VOLVO, MACK and RENAULT centres and has their written approvals.

#### Volume: / Art. Nr.:

20L	PM0721-20	208L	PM0721-DR
1000L	PM0721-IBC		

#### Specifications:

**SAE 10W-30**  
**API CK-4/SN, CJ-4/CI-4 Plus**  
**ACEA E8, E11**  
JASO DH-2  
CUMMINS CES 20086/-87  
RENAULT Truck RLD-4  
FORD WSS-M2C171-F1  
MB 228.31  
DETROIT DIESEL DDC93K222/DDC93K223  
MTU Type 2.1  
CATERPILLAR ECF-3  
ALLISON TES-439  
MAN M 3775/M 3575  
VOLVO VDS-4.5 Approval  
RENAULT VI RLD-3 Approval  
MACK EOS-4.5 Approval





## TRANSMISSION FLUIDS

Range of automatic and manual transmission oils for trucks, cars and heavy vehicles. It includes oils for classic automatic transmissions, for variators and for dual clutch automatic transmissions. For manual transmissions, this range includes manual transmission oils, rear axle oils and universal oils.

### PEMCO 465 ATF D VI

Product code: PM0465



#### SYNTHETIC TRANSMISSION FLUID

A universal all-season synthetic transmission fluid (ATF) for automatic gearboxes, hydraulic converters, hydraulic power steering systems, car hydraulic clutches and other hydraulic devices, including the ones operating in heavy-duty conditions in trucks and off-road vehicles. It ensures a flawless operation of an automatic gearbox.

##### Volume: / Art. Nr.:

1L	PM0465-1	20L	PM0465-20
208L	PM0465-DR		

##### Specifications:

JASO M315, Class 1-A-LV  
 AISIN WARNER JWS 3309/3324  
 AISIN WARNER ATF-0T4/-0WS  
 CITROEN Z.000.169756  
 ALLISON C3/C2/C4/389  
 BENTLEY PY112995PA  
 BOSCH TE-ML 09  
 FORD ESP-M2C138-CJ/-M2C166-H/-M2C922-A1  
 FORD Mercon LV  
 GM Type A Suffix A  
 HYUNDAI SP/SP4-M1/SPH-IV/SP-II/SP-III-IV  
 KIA ATF RED-1K/ATF SP-IV/SP/SP4-M1  
 MB 236.11/236.12/236.15/236.2/236.41/236.5  
 VW G 052 533/G 052 990 A2/G 055 005 A2  
 NISSAN Fluid A, Matic D/J/K/W/S  
 BMW ATF 3+/ATF4/ATF6  
 MAN 339A/D/F  
 and many others

### PEMCO 460 CVT-Fluid

Product code: PM0460



#### FULLY SYNTHETIC TRANSMISSION FLUID

Special synthetic gear oil for CVT – variable-speed gears. It was specially developed for use in continuously variable transmissions with a rigid articulated chain or a steel pull chain. It ensures a flawless operation of an automatic gearbox, guarantees minimal wear, a lasting service life of a transmission and fuel economy.

##### Volume: / Art. Nr.:

1L	PM0460-1	20L	PM0460-20
208L	PM0460-DR	1000L	PM0460-IBC

##### Specifications:

VW G 052 180 (TL 521 80)  
 MB 236.20  
 BMW/MINI 83 22 0 429 154/CVT EZL 799A  
 FORD WSS-M2C928-A/M2C933-A  
 FORD CVT Fluid 23/30/Mercon C  
 CHRYSLER CVT Fluid NS-2  
 JEEP CVT Fluid NS-2  
 SATURN DEX-CVT  
 GM DEX-CVT  
 MOPAR CVTF +4  
 HYUNDAI/KIA SP-III  
 DAIHATSU AMIX CVT Fluid DC  
 HONDA HMMF (08260-99904)/HCF-2  
 MITSUBISHI DiaQueen CVT Fluid J1/J4  
 TOYOTA CVT Fluid TC/FE  
 NISSAN CVT Fluid NS-1/-2 (KLE52-00004)  
 MAZDA CVT Fluid JWS 3320  
 and many others

## PEMCO 455 ATF TL 55

Product code: PM0455



### SYNTHETIC TRANSMISSION FLUID

A special all-season synthetic transmission fluid (ATF) for new-generation 6-speed automatic gearboxes of the ZF Group. It ensures a flawless operation of an automatic gearbox, guarantees minimal wear, a lasting service life of transmissions and fuel economy even under extreme loads. It was developed taking into account special requirements G 055 025 set by the Group VW.

#### Volume: / Art. Nr.:

1L	PM0455-1	20L	PM0455-20
60L	PM0455-60	208L	PM0455-DR
1000L	PM0455-IBC		

#### Specifications:

JASO Type 1A  
ALLISON C4  
VW G 052 025-A2/G 052 055/G 052 162 -A1/-A2  
VW G US 000 162/G 055 025-A2/G 052 990-A2  
ZF TE-ML 11A/11B  
FORD WSS-M2C922-A1  
CHRYSLER SP-III  
JEEP/DODGE ATF+/ATF+2/ATF+3/ATF+4  
BMW 83 22 9 407 765/81 22 9 407 858/81 22 9 400 272  
HONDA Z-1  
GM Dexron II-E/II-D/III-G/III-H/T-IV  
MB 236.5/236.10/236.11  
OPEL 19 40 700/19 40 767  
Others LT 71141/Shell 3403-M115/LA2634/  
Texaco ETL 7045E/8072B/N402  
and many others

## PEMCO 453 DCT-Fluid

Product code: PM0453



### FULLY SYNTHETIC TRANSMISSION FLUID

Special synthetic gear oil (containing PAO) for DCT – dual clutch transmission/DSG – Direct Shift Gearbox or “robots”. It is not recommended for gearboxes with a “dry” clutch. It ensures a flawless operation of a gearbox, guarantees minimal wear, a lasting service life and fuel economy.

#### Volume: / Art. Nr.:

1L	PM0453-1	20L	PM0453-20
60L	PM0453-60	208L	PM0453-DR
1000L	PM0453-IBC		

#### Specifications:

VW G 052 182/G 052 529/6-speed  
BMW 83 22 2 148 578/148 579/147 477/0 440 214  
BMW Drivelogic 7-speed (Getrag)  
BMW DCTF-1/ DCTF-1+/MTF-LT-5/6-speed DCT  
FORD/NISSAN WSS-M2C936-A  
CHRYSLER 68044345 EA&GA  
CHRYSLER Powershift 6-speed (Getrag)  
MB 236.21/001 989 85 03  
MITSUBISHI MZ320065/TC-SST 6-speed (GFT)  
PORSCHE 999.917.080.00  
RENAULT EDC 6-speed (Getrag)/EDC-7  
RENAULT Talisman R7D  
PEUGEOT DCS 6-speed (GFT)  
VOLVO 1161838/1161839  
FERRARI 7-speed (Getrag)/TF DCT-3  
PENTOSIN FFL-8  
Others SHELL TF DCT-F3  
and many others

## PEMCO 452 ATF TL 52

Product code: PM0452



### SYNTHETIC TRANSMISSION FLUID

Special all-season synthetic transmission fluid (ATF) for modern 4-5-speed automatic transmission gearboxes of the ZF Group. It is not suitable for 6-speed automatic transmissions. It ensures a flawless operation of an automatic gearbox, guarantees minimal wear, a lasting service life of transmissions and fuel economy even under maximum loads. It was developed taking into account special requirements of the group VW G 052 162.

#### Volume: / Art. Nr.:

1L	PM0452-1	20L	PM0452-20
60L	PM0452-60	208L	PM0452-DR
1000L	PM0452-IBC		

#### Specifications:

JASO M315 Type 1A  
MB 236.1/236.2/236.5/236.6/236.7/236.8/236.9  
MB 236.91/236.10/236.11/ATF 3403-M115  
VW G 052 990-A2/G 055 025-A2/G US 000 162  
BMW ATF4/LA2634/LT 71141  
BMW ETL-7045/-7045 E/-8072B  
BMW 81 22 9 400 272/400 275/407 858/407 859  
BMW 83 22 0 024 249/024 359/026 922/ 402 413  
JAGUAR WSS-M2C922-A1  
LAND ROVER ATF N402/JWS 3309US  
RENAULT DP-0/Matic D2/SATF-D  
ZF LifeguardFluid 5 (ZF No. S671 090 170)  
ZF TE-ML 05L/11A/11B/21L  
AUDI G 052 990-A2/G 055 025-A2/G US 000 162  
and many others

## PEMCO 450 JWS 3309

Product code: PM0450



### SYNTHETIC TRANSMISSION FLUID

Universal all-season high-viscosity synthetic transmission fluid (ATF) for automatic gearboxes. It was specially developed for all modern automatic gearboxes (manual or sequential modes, electronic control, etc.) equipped with and without a hydraulic converter lock-up.

#### Volume: / Art. Nr.:

1L	PM0450-1	4L	PM0450-4
20L	PM0450-20	60L	PM0450-60
208L	PM0450-DR	1000L	PM0450-IBC

#### Specifications:

JASO M315 Type 1A  
AISIN WARNER JWS 3309  
VW G 052 025-A2/G 052 162-A1  
VW G 052 990-A1/-A2/G 055 025-A1/-A2  
BMW 83 22 0 403 248/83 22 2 163 514  
BMW 83 22 9 407 807  
CHRYSLER ATF+3/ATF+4  
DAIHATSU ALUMIX ATF MULTI  
GM Dexron II/II D/II E/III F/III G/III H  
HONDA ATF-Z1 (not for CVT)/ATF DW-1/ATF SP-II/-III  
IDEMITSU K17-Jaguar X Type 2001-2005  
INFINITI Matic D/J/K  
JATCO ATF 3100 PI085  
KIA ATF-SP-II/-III  
MAN 339 F/V1/V2/Z1/Z2  
MAZDA ATF M-III/M-V  
MB 236.1/236.2/236.3/236.5/236.6/236.7/236.9/236.11  
and many others

## PEMCO 430 ATF D III

Product code: PM0430



### SYNTHETIC TRANSMISSION FLUID

Universal all-season synthetic-based transmission fluid (ATF) for automatic gearboxes, hydraulic converters, hydraulic power steering systems, car hydraulic clutches and other hydraulic devices, including the ones operating under heavy-duty conditions in trucks and off-road vehicles. It was developed on the basis of the requirements set by GM and FORD groups.

#### Volume: / Art. Nr.:

1L	PM0430-1	10L	PM0430-10
20L	PM0430-20	60L	PM0430-60
208L	PM0430-DR	1000L	PM0430-IBC

#### Specifications:

GM Dexron III H/III G/III F  
FORD Mercon V  
FORD ESP-M2C138-CJ  
FORD ESP-M2C166-H  
ZF TE-ML 09/-ML 11/-ML 14  
MB 236.1  
ALLISON C4  
VOITH H55.6335xx (G607)  
CATERPILLAR TO-2  
Others Power Steering Fluid

## PEMCO 420 ATF D II

Product code: PM0420



### MINERAL TRANSMISSION FLUID

Universal all-season mineral-based transmission fluid (ATF) for automatic gearboxes, hydraulic power steering systems, cab tilt mechanisms, car hydraulic clutches and other hydraulic devices, including the ones operating under heavy-duty conditions in trucks and off-road vehicles. It ensures a flawless operation of an automatic gearbox, minimal wear, a lasting service life of transmissions and fuel economy.

#### Volume: / Art. Nr.:

1L	PM0420-1	10L	PM0420-10
20L	PM0420-20	60L	PM0420-60
208L	PM0420-DR	1000L	PM0420-IBC

#### Specifications:

ALLISON C4  
CATERPILLAR TO-2  
GM Dexron II D  
MAN 339 V1/Z1  
MB 236.5/236.7  
RENK  
VOITH H 55.6335.xx (G607)  
ZF TE-ML 03D  
ZF TE-ML 04D  
ZF TE-ML 11A  
ZF TE-ML 14A  
ZF TE-ML 17C

## PEMCO 410 ATF-A

Product code: PM0410



### MINERAL TRANSMISSION FLUID

Universal all-season mineral oil for power steering systems, automatic transmissions of older generations, torque converters and hydraulic clutches of all types of vehicles. Designed following GM requirements.

#### Volume: / Art. Nr.:

1L	PM0410-1	10L	PM0410-10
20L	PM0410-20	60L	PM0410-60
208L	PM0410-DR	1000L	PM0410-IBC

#### Specifications:

GMATF Type A Suffix A  
MB 236.2  
ALLISON C4  
CATERPILLAR TO-2  
MAN 339 Type A



## GEAR OILS

High-quality gear oils for manual gearboxes. Ensures fast and smooth shifting of gears. Reliably protect synchronisers against corrosion and cog-wheels against wear. Effectively reduces friction to save fuel and reduce CO<sub>2</sub> emissions.

### PEMCO 580 SAE 75W-80

Product code: PM0580



#### SYNTHETIC GEAR OIL

Universal energy-conserving synthetic gear oil. It may be used in all manual transmission devices, including 5- and 6-speed synchronized manual transmissions, transmissions with an incorporated differential of front wheel drive vehicles, transfer cases and main gears, including hypoid. It was developed specially for ensuring the protection of the technical equipment and receiving the maximum return regardless of its operating conditions.

#### Volume: / Art. Nr.:

60L	PM0580-60	1000L	PM0580-IBC
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#### Specifications:

**SAE 75W-80**  
**API GL-4/GL-5 LS**  
MIL-L-2105 C  
FORD WSD-M2C200-C  
MACK GO-J Plus

### PEMCO 578 SAE 75W-80

Product code: PM0578



#### SYNTHETIC GEAR OIL

Latest-generation energy-conserving synthetic gear oil for manual transmissions. It is recommended for use in all types of 5- and 6-speed synchronized manual transmissions, including transmissions with an incorporated differential of front wheel drive vehicles, transfer cases and main gears, in which the application of the standard GL-4 is prescribed. It was developed on the basis of the requirements set by the BMW group.

#### Volume: / Art. Nr.:

1L	PM0578-1	10L	PM0578-10
20L	PM0578-20	60L	PM0578-60
208L	PM0578-DR	1000L	PM0578-IBC

#### Specifications:

**SAE 75W-80**  
**API GL-4**  
VW G 009 317/055 726  
VW G 052 171/178/512/532/527/726/798  
BMW MTF LT-1/-2/-3/-4  
FORD WSS-M2C200-D2  
MB 235.10  
MITSUBISHI MZ312644 3005401  
NISSAN 999MP-MTF20P KE91699932R  
PEUGEOT 9730A2/9730A8  
PSAB71 2330  
TOYOTA JWS 227

## PEMCO 501 SAE 75W-80

Product code: PM0501



### SYNTHETIC GEAR OIL

Latest-generation universal energy-conserving completely synthetic all-season gear oil in compliance with the newest world standards. It is suitable for all synchronized and non-synchronized manual transmission types operating under heavy loads and at high speed in extremely low temperatures. It is developed on the basis of the requirements of European and American truck manufacturers.

#### Volume: / Art. Nr.:

20L	PM0501-20
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#### Specifications:

##### SAE 75W-80

##### API GL-4

EATON Manual Transmission  
MAN 341 Type Z4  
MAN 341 Type E3  
VOLVO 97307  
ZF TE-ML 01L  
ZF TE-ML 02L  
ZF TE-ML 16K

## PEMCO 595 SAE 75W-90

Product code: PM0595



### SYNTHETIC GEAR OIL

Universal last-generation energy-conserving all-season synthetic gear oil for all types of manual transmissions. It is recommended for use in all types of synchronized manual transmissions (including heavy-duty), in differentials (including LS with excessive friction), steering equipment and other transmission parts where an excessive pressure and impact load is encountered and in which the use of standards GL-4 and/or GL-5 is prescribed.

#### Volume: / Art. Nr.:

1L	PM0595-1	10L	PM0595-10
20L	PM0595-20	60L	PM0595-60
208L	PM0595-DR	1000L	PM0595-IBC

#### Specifications:

##### SAE 75W-90

##### API GL-4/GL-5 LS (Limited Slip)

MACK GO-J Plus/GO-J  
MAN 342 Type M1  
MAN 342 Type M2  
MAN 342 Type M3  
SCANIA ST0 1:0

## PEMCO 575 SAE 75W-140

Product code: PM0575



### SYNTHETIC GEAR OIL

All-season last-generation gear oil (contains PAO) specially designed for the lubrication of all types of differentials, including excessive friction differentials where the oil "Limited Slip Oil API GL-5" is required. It was developed for hypoid, bevel and spiral gears. The unique high-viscosity PAO base of the highest quality preserving its main properties in a wide range of temperatures in combination with a latest-generation additive package ensures superior antifriction properties thus ensuring a significant fuel economy.

#### Volume: / Art. Nr.:

20L	PM0575-20	208L	PM0575-DR
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#### Specifications:

##### SAE 75W-140

##### API GL-5 LS (Limited Slip)

MIL-L-2105 D  
MAN 342  
SCANIA ST0 1:0

## PEMCO 589 SAE 80W-90

Product code: PM0589



### MINERAL GEAR OIL

Universal all-season mineral-based gear oil. It was developed for hypoid gears withstanding extreme loads; in heavy-duty bevel, cylindrical and worm pairs. It is recommended for use in differentials (including excessive friction – LS). It may be used for all types of manual transmissions, including the ones withstanding extremely heavy loads and high temperatures and in other transmission parts where extreme pressure and impact loads are encountered.

#### Volume: / Art. Nr.:

1L	PM0589-1	10L	PM0589-10
20L	PM0589-20	60L	PM0589-60
208L	PM0589-DR	1000L	PM0589-IBC

#### Specifications:

SAE 80W-90  
API GL-5 LS (Limited Slip)  
API GL-4  
API MT-1  
MIL-L-2105 D  
MACK GO-J  
MAN 342  
FORD WSD-M2C200-C

## PEMCO 548 SAE 80W-90

Product code: PM0548



### MINERAL GEAR OIL

Universal all-season mineral-based gear oil. It was developed for hypoid gears withstanding extreme loads; in heavy-duty bevel, cylindrical and worm pairs. It is recommended for use in differentials (including excessive friction – LS). It may be used for all types of manual transmissions, including the ones withstanding extremely heavy loads and high temperatures and in other transmission parts where extreme pressure and impact loads are encountered.

#### Volume: / Art. Nr.:

1L	PM0548-1	10L	PM0548-10
20L	PM0548-20	60L	PM0548-60
208L	PM0548-DR	1000L	PM0548-IBC

#### Specifications:

SAE 80W-90  
SAE J2360  
API GL-4  
MIL L 2105  
US STEEL 224

## Hypoid LSD SAE 85W-140

Product code: PM0540



### MINERAL GEAR OIL

Universal all-season high-viscosity mineral-based gear oil for manual transmissions. It was developed for a safe and reliable operation of self-locking differentials (differentials with excessive friction/limited slip – LS), main gears with hypoid pinions and other manual transmission parts with bevel, worm and cylindrical pairs withstanding extreme (including impact) loads and high operating temperatures.

#### Volume: / Art. Nr.:

20L	PM0540-20	60L	PM0540-60
208L	PM0540-DR	1000L	PM0540-IBC

#### Specifications:

SAE 85W-140  
API GL-5 LS (Limited Slip)  
API MT-1  
MIL-L-2105 D

## PEMCO 519 SAE 90

Product code: PM0519



### MINERAL GEAR OIL

Mineral simple-composition gear oil for mild operating conditions (low loads and sliding velocities). It may be recommended for the lubrication of accessory equipment to be installed in special vehicles (reducers in autocranes, mechanisms of garbage trucks, side lifting components) when operating at temperatures no lower than -18 °C.

#### Volume: / Art. Nr.:

1L	PM0519-1	20L	PM0519-20
208L	PM0519-DR		

#### Specifications:

SAE 90  
API GL-1

## PEMCO 515 SAE 140

Product code: PM0515



### MINERAL GEAR OIL

Mineral simple-composition gear oil for mild operating conditions (low loads and sliding velocities). It may be recommended for the lubrication of accessory equipment to be installed in special vehicles (reducers in autocranes, mechanisms on garbage trucks, side lifting components) when operating at temperatures no lower than 0 °C.

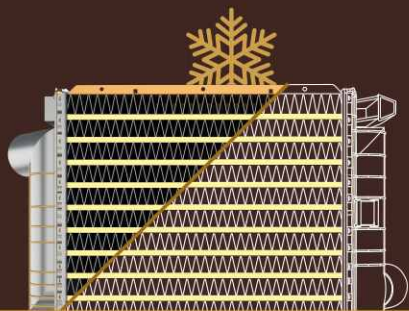
#### Volume: / Art. Nr.:

1L	PM0515-1	20L	PM0515-20
208L	PM0515-DR		

#### Specifications:

SAE 140  
API GL-1





## ANTIFREEZES AND COOLANTS

Range of coolants of all major classes. It contains coolants based on inorganic (IAT-Inorganic Acid Technology), organic (OAT-Organic Acid Technology) and hybrid (HOAT-Hybrid Organic Acid Technology) technologies. This range contains both concentrates and ready-to-use solutions, as well as special antifreeze solutions for heavy-duty applications.

## ANTIFREEZE 911 (-40 °C)

Product code: PM0911



### PRE-MIXED COOLANT FLUID (BLUE)

Ready-to-use antifreeze based on mineral inhibitors – IAT (Inorganic Acid Technology) ready-for-use solution (not requiring being diluted and protecting the vehicle cooling system at up to -40 °C). Designed for a year-round use in any modern cooling systems containing copper, brass and aluminium components.

#### Volume: / Art. Nr.:

1L	PM0911-1	5L	PM0911-5
10L	PM0911-10	20L	PM0911-20
60L	PM0911-60	208L	PM0911-DR
1000L	PM0911-IBC		

#### Specifications:

ASTM USA D3306  
BSI GB BS 6580:2010  
AFNOR FRANCE NF R15-601  
VOLKSWAGEN TL 774 C  
BMW GS 94000  
CHRYSLER MS-7170  
MAN 324 NF  
MINI GS 94000  
MTU MTL 5048  
OPEL GMEL 1301  
TESLA  
VAUXHALL GME L1301  
AUDI TL 774 C

## ANTIFREEZE 912+ (-40 °C)

Product code: PM0912



### PRE-MIXED COOLANT FLUID (RED)

Carboxylated (organic – OAT Organic Acid Technology) ready-for-use solution, designed for a year-round use in any modern cooling systems for which the use of ethylene-glycol-based antifreeze is recommended.

#### Volume: / Art. Nr.:

1L	PM0912-1	5L	PM0912-5
10L	PM0912-10	20L	PM0912-20
60L	PM0912-60	208L	PM0912-DR
1000L	PM0912-IBC		

#### Specifications:

##### SAE J1034

JASO M325  
AFNOR FRANCE NF R15-601 (except for RA)  
ASTM USA D3306/D4656/D4985/ D6210  
BSI GB BS 6580:2010  
FVV GERMANY Heft R443  
KSM SOUTH KOREA 2142  
MIL BELGIUM BT-PS-606-A/France DCSEA 615/C  
MIL ITALY E/L-1415B/SWEDEN FSD 8704  
ASTON MARTIN  
VW TL 774 D/774 F  
BEHR  
BERGEN ENGINES 2.13.01  
BMW GS 94000  
CASE NEW HOLLAND MAT 3624  
CATERPILLAR MAK A4.05.09.01  
CUMMINS CES 14439/14603/IS series N14  
DACIA 41-01-001/41-01-001-T  
and many others

## ANTIFREEZE 913 (-40 °C)

Product code: PM0913



### PRE-MIXED COOLANT FLUID (GREEN)

Hybrid (HOAT - Hybrid Organic Acid Technology) high-technology ready-to-use solution (which does not require dilution and protects the car cooling system at temperatures down to -40 °C) with excellent operating characteristics intended for a year-round use.

#### Volume: / Art. Nr.:

1L	PM0913-1	5L	PM0913-5
10L	PM0913-10	20L	PM0913-20
60L	PM0913-60	208L	PM0913-DR
1000L	PM0913-IBC		

#### Specifications:

##### SAE J1034

AFNOR FRANCE NF R15-601  
ASTM USA D3306/D4340/D4985  
BSI GB BS 6580:2010  
NATO S-759  
BMW GS 94000  
CHRYSLER MS-7170  
FORD ESE-M978B4H-A/AF Plus  
GM 1825 M/1899 M  
GM SATURN  
JAGUAR  
JOHN DEERE  
MAN 324 NF  
MB 325.0  
MINI GS 94000  
MTU MTL 5048  
OPEL GME L1301/GM Q1130100  
VAUXHALL GME L1301

## ANTIFREEZE 913+ (-40 °C)

Product code: PM0914



### PRE-MIXED COOLANT FLUID (YELLOW)

Hybrid (HOAT - Hybrid Organic Acid Technology) ready-to-use solution (not requiring being diluted and protecting the vehicle cooling system at up to -40 °C) with excellent operating characteristics intended for a year-round use.

#### Volume: / Art. Nr.:

1L	PM0914-1	5L	PM0914-5
10L	PM0914-10	20L	PM0914-20
60L	PM0914-60	208L	PM0914-DR
1000L	PM0914-IBC		

#### Specifications:

##### SAE J1034

AFNOR FRANCE NF R15-601  
ASTM USA D3306/D4340/D4985  
BSI GB BS 6580:2010  
NATO S-759  
BMW GS 94000  
CHRYSLER MS-7170  
FORD ESE-M978B4H-A  
FORD AF Plus  
GM 1825 M/1899 M/SATURN  
JAGUAR  
JOHN DEERE  
MAN 324 NF  
MB 325.0  
MINI GS 94000  
MTU MTL 5048  
OPEL GME L1301/GM Q1130100  
VAUXHALL GME L1301

## ANTIFREEZE 911

Product code: PM0911C



### CONCENTRATED COOLANT FLUID (BLUE)

Concentrated antifreeze based on mineral inhibitors - IAT (Inorganic Acid Technology). Antifreeze intended for a year-round use in any modern cooling system for which the use of ethylene-glycol-based antifreeze is recommended. It ensures a reliable protection of metals and alloys (brass, copper, alloy-treated steel, cast iron, aluminium) from all forms of corrosion, as well as prevents a high-temperature corrosion of aluminium surfaces of modern engines.

#### Volume: / Art. Nr.:

1L	PM0911C-1	5L	PM0911C-5
20L	PM0911C-20	60L	PM0911C-60
208L	PM0911C-DR		

#### Specifications:

AFNOR FRANCE NF R15-601  
ASTM USA D3306  
BSI GB BS 6580:2010  
VOLKSWAGEN TL 774 C  
BMW GS 94000  
CHRYSLER MS-7170  
MAN 324 NF  
MINI GS 94000  
MTU MTL 5048  
OPEL GME L1301  
VAUXHALL GME L1301  
AUDI TL 774 C  
TESLA

## ANTIFREEZE 912+

Product code: PM0912C



### CONCENTRATED ANTIFREEZE (RED)

Carboxylated (organic – OAT Organic Acid Technology) concentrated antifreeze intended for a year-round use in any modern cooling system for which the use of ethylene-glycol-based antifreeze is recommended. It ensures a reliable protection of any cooling system.

#### Volume: / Art. Nr.:

1L	PM0912C-1	5L	PM0912C-5
20L	PM0912C-20	60L	PM0912C-60
208L	PM0912C-DR	1000L	PM0912C-IBC

#### Specifications:

##### SAE J1034

JASO M325  
AFNOR FRANCE NF R15-601 (except for RA)  
ASTM USA D3306/D4656/D4985/D6210  
BSI GB BS 6580:2010  
FVV GERMANY Heft R443  
KSM SOUTH KOREA 2142  
MIL BELGIUM BT-PS-606-A  
MIL FRANCE DCSEA 615/C  
MIL ITALY E/L-1415b  
MIL SWEDEN FSD 8704  
NATO S-759  
OENORMAUSTRIA V5123  
UNE SPAIN 26-361-88/1  
ASTON MARTIN  
VOLKSWAGEN TL 774 D/TL 774 F  
BEHR  
and many others

## ANTIFREEZE 913

Product code: PM0913C



### CONCENTRATED ANTIFREEZE (GREEN)

Hybrid (HOAT – Hybrid Organic Acid Technology) high-technology concentrated antifreeze with excellent operating characteristics intended for a year-round use in any modern cooling system for which the use of mono-ethylene-glycol-based antifreeze is recommended.

#### Volume: / Art. Nr.:

20L	PM0913C-20	60L	PM0913C-60
208L	PM0913C-DR	1000L	PM0913C-IBC

#### Specifications:

##### SAE J1034

AFNOR FRANCE NF R15-601  
ASTM USA D3306/D4340/D4985  
BSI GB BS 6580:2010  
NATO S-759  
BMW GS 94000  
CHRYSLER MS-7170  
FORD ESE-M978B4H-A  
FORDAF Plus  
GM 1825 M/1899 M/SATURN  
JAGUAR  
JOHN DEERE  
MAN 324 NF  
MB 325.0  
MINI GS 94000  
MTU MTL 5048  
OPEL GME L1301  
OPEL GM QI 130100  
VAUXHALL GME L1301

## ANTIFREEZE 913+

Product code: PM0914C



### CONCENTRATED ANTIFREEZE (YELLOW)

Hybrid (HOAT – Hybrid Organic Acid Technology) high-technology concentrated antifreeze with excellent operating characteristics intended for a year-round use in any modern cooling system for which the use of mono-ethylene-glycol-based antifreeze is recommended.

#### Volume: / Art. Nr.:

20L	PM0914C-20	60L	PM0914C-60
208L	PM0914C-DR	1000L	PM0914C-IBC

#### Specifications:

##### SAE J1034

AFNOR FRANCE NF R15-601  
ASTM USA D3306/D4340/D4985  
BSI GB BS 6580:2010  
NATO S-759  
BMW GS 94000  
CHRYSLER MS-7170  
FORD ESE-M978B4H-A  
FORDAF Plus  
GM 1825 M/1899 M  
GM SATURN  
JAGUAR  
JOHN DEERE  
MAN 324 NF  
MB 325.0  
MINI GS 94000  
MTU MTL 5048  
OPEL GME L130100/GM QI130100  
VAUXHALL GME L1301

## TRUCK ANTIFREEZE 911

Product code: PM9115C



### CONCENTRATED ANTIFREEZE (BLUE)

Inorganic (IAT Inorganic Acid Technology) antifreeze concentrate specially developed for heavy duty vehicles. Designed for all-year-round use in all modern cooling systems containing copper, brass and aluminium components for which the use of antifreeze based on ethylene glycol is recommended.

#### Volume: / Art. Nr.:

20L	PM9115C-20	208L	PM9115C-DR
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#### Specifications:

SAE J1034  
ASTM USA D3306  
ASTM USA D4340  
ASTM USA D4985  
NATO S-759  
VOLKSWAGEN TL 774 C

## TRUCK ANTIFREEZE 912+

Product code: PM9126C



### CONCENTRATED ANTIFREEZE (RED)

Carboxylate (OAT – Organic Acid Technology) antifreeze concentrate specially developed for heavy-duty vehicles. Designed for all-year-round use in all modern cooling systems for which the use of antifreeze based on ethylene glycol is recommended.

#### Volume: / Art. Nr.:

20L	PM9126C-1	208L	PM9126C-DR
1000L	PM9126C-IBC		

#### Specifications:

SAE J1034  
AFNOR FRANCE NF R15-601  
AS AUSTRALIA AS 2108  
ASTM USA D3306, D4340, D4985  
BSI GB BS 6580  
CUNA ITALY NC 956-16  
FVV GERMANY Heft R443  
MAN 324 SNF  
MB 325.3  
FORD WSS-M97B44-D  
GM 6277 M  
RENAULT 41-01-001  
VOLKSWAGEN TL 774 D/F  
MAZDA  
VOLVO

## TRUCK ANTIFREEZE 913

Product code: PM9137C



### CONCENTRATED ANTIFREEZE (GREEN)

Hybrid high-tech antifreeze concentrate (HOAT – Hybrid Organic Acid Technology) with excellent performance especially developed for heavy-duty vehicles. Designed for all-year-round use in all modern cooling systems for which the use of mono-ethylene glycol-based antifreeze is recommended.

#### Volume: / Art. Nr.:

20L	PM9137C-20	60L	PM9137C-60
208L	PM9137C-DR		

#### Specifications:

SAE J1034  
ASTM USA D3306/D4340/D4985  
NATO S-759  
BMW  
DAF  
FORD ESE-M978B4H-A  
FORDAF Plus  
GM 1825 M/1899 M  
M SATURN  
JAGUAR  
JOHN DEERE  
MAN 324 NF  
MB 325.0  
RENAULT Typ D  
ROVER  
SAAB



## OILS FOR AGRICULTURAL MACHINERY

These are multi-purpose universal tractor engine-and-transmission oils, universal transmission-and-hydraulic oils and special chain saw oils.

### MULTIFARM STOU SAE 10W-30

Product code: PM2501



#### ENGINE-TRANSMISSION OIL

Universal engine-transmission all-season semi-synthetic (HC-synthese) engine oil for modern diesel-powered engines of agricultural equipment with and without a turbocharger operating under harsh conditions as well as for manual transmissions, wet-type brake systems and even hydraulic systems of tractors.

#### Volume: / Art. Nr.:

20L	PM2501-20	208L	PM2501-DR
1000L	PM2501-IBC		

#### Specifications:

**SAE 10W-30**  
**API CG-4/CF-4/CF/CE/CD/SF, API GL-4**  
**ACEA E3**  
 DIN 51524-3 HVLP  
 FORD NEW HOLLAND 82009201/82009202  
 FORD WSS-M2C159-B/-C  
 FORD ESN-M2C86-B/-C/FORD ESN-M2C134-D  
 JOHN DEERE J27/J20C/J20D  
 MASSEY FERGUSON M 1139/1144/1135/1143/1145  
 MB 227.1/228.1  
 ALLISON C-4  
 NEW HOLLAND MAT 3525/3526  
 EATON I-286-S/M-2950-S  
 CASE I H MS 1204/1206/1207/1209  
 CASE NEW HOLLAND MAT 3526/3525  
 CATERPILLAR TO-2  
 VOLVO WB 101  
 Others VOLVO WB 101, suitable for wet brakes and many others

### MULTIFARM STOU SAE 10W-40

Product code: PM2502



#### ENGINE-TRANSMISSION OIL

Universal all-weather semi-synthetic motor-transmission (HC-synthes) engine oil for modern diesel engines of agricultural machinery with and without turbocharger operating in difficult conditions, as well as for mechanical transmissions, wet-type braking systems and even tractor hydraulic systems.

#### Volume: / Art. Nr.:

20L	PM2502-20	60L	PM2502-60
208L	PM2502-DR	1000L	PM2502-IBC

#### Specifications:

**SAE 10W-40**  
**API CG-4/CF-4/CF/CE/CD/SF, API GL-4**  
**ACEA E3**  
 DIN 51524-3 HVLP  
 FORD NEW HOLLAND 82009201/82009202  
 FORD WSS-M2C159-B/-C  
 FORD ESN-M2C86-B/-C/FORD ESN-M2C134-D  
 JOHN DEERE J27/J20C/J20D  
 MASSEY FERGUSON M 1139/1144/1135/1143/1145  
 MB 227.1/228.1  
 ALLISON C-4  
 NEW HOLLAND MAT 3525/3526  
 EATON I-286-S/M-2950-S  
 CASE I H MS 1204/1206/1207/1209  
 CASE NEW HOLLAND MAT 3526/3525  
 CATERPILLAR TO-2  
 VOLVO WB 101  
 Others VOLVO WB 101, suitable for wet brakes and many others

## MULTI UTTO WB 101

Product code: PM2701



### MINERAL TRACTOR OIL

Universal and multi-functional mineral all-season tractor oil for farm holdings and tractors, agricultural vehicles with very high operating characteristics. Its main purpose: an oil for on-board gearboxes with a standard replacement interval.

#### Volume: / Art. Nr.:

20L	PM2701-20	208L	PM2701-DR
1000L	PM2701-IBC		

#### Specifications:

##### API GL-4

DIN 51524-2

VOLVO VCE WB 101, 97303

ALLISON C4

CASE IH MS 1204/1206/1207/1209

CASE NEW HOLLAND MAT 3525/3526

CATERPILLAR TO-2

FORD NEW HOLLAND ESN-M2C41-B

FORD NEW HOLLAND ESN-M2C86-A/-B

FORD NEW HOLLAND ESN-M2C134-A/-C/-D

JOHN DEERE 20C/20D

MASSEY FERGUSON CMS M 1135/1141/1143/1145

NEW HOLLAND NH 420A/410B

SAUER SUNDSTRAND DANFOSS Hydro Static Trans Fluid

KUBOTAUDT Fluid

## KETTENOEL

Product code: PM1101



### MINERAL CHAINSAW OIL

A highly-purified mineral-based oil for the lubrication of cutting edges of petrol and electric saws with a manual and automatic oil supply. It is designed for use in all types of powerful motorized chain saws under extreme conditions, including hardwood sawing.

#### Volume: / Art. Nr.:

20L	PM1101-20	208L	PM1101-DR
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#### Specifications:

ISO Viscosity Grade 100



## INDUSTRIAL OILS AND FLUIDS

This range contains engine oils for industrial stationary internal combustion engines, oils for piston and industrial screw compressors, oils for hydraulic and gear-hydraulic systems in mobile and stationary machinery, and special oils for marine diesel engines and industrial turbines.

### M.O. SAE 10W/30/40/50

Product code: PM3101/PM3103/PM3104/PM3105



#### MINERAL ENGINE OIL

Special highest-quality monograde (winter) mineral engine oil for medium-load diesel-powered engines with and without a turbo-charger operating under various conditions at ambient temperatures. It was designed especially for VOLVO and CATERPILLAR equipment that requires the presence of corresponding specifications.

##### Volume: / Art. Nr.:

20L		PM3104-20	PM3105-20
208L	PM3101-DR	PM3103-DR	PM3104-DR PM3105-DR
1000L	PM3101-IBC	PM3104-IBC	

##### Specifications:

SAE 10W/30/40/50  
API CH-4  
MIL-L-2104 C  
CATERPILLAR Series 3  
DAVID BROWN DB OM 616  
MACK EO-J  
VOLVO B20

### GEAR OIL ISO 220

Product code: PM2801



#### MINERAL REDUCTION GEAR OIL

Industrial mineral reduction gear oil for use in gear transmissions of modern imported and domestic equipment requiring the use of high-quality oils with enhanced antiwear and anti-scuffing EP (Extreme Pressure) properties. It has excellent antiwear and anti-scuffing properties due to the use of the modern antiwear and antifriction additive package.

##### Volume: / Art. Nr.:

20L	PM2801-20	208L	PM2801-DR
1000L	PM2801-IBC		

##### Specifications:

ISO Viscosity Grade 220  
DIN 51517-3  
ISO 6743-6 (CKC)  
ISO 12925-1 Type CKC  
ISO 12925-1 Type CKD  
ANSI AGMA 252.04  
US STEEL 224

## TO-4 POWERTRAIN OIL

SAE 10W/30/50

Product code: PM2601/PM2602/PM2603



### MINERAL TRANSMISSION-HYDRAULIC OIL

Special all-season transmission-hydraulic mineral oil designed for use in hydraulic systems, transmissions and gearboxes (including power ones), on-board gearboxes of other devices of off-road equipment with and without low-load brakes (clutches). It complies with strict Cat TO-4, requirements imposed for TDTO (Transmission/Drive Train Oil) lubricants by the CATERPILLAR company. The specification TO-4 is the industry standard. The specification determines operating requirements imposed on hydraulic fluids for their use in CAT and analogous equipment.

#### Volume: / Art. Nr.:

20L	PM2601-20	PM2602-20	PM2603-20
208L	PM2601-DR	PM2602-DR	PM2603-DR

#### Specifications:

##### SAE 10W/30/50

ALLISON C4 (off-road)  
CATERPILLAR TO-4  
KOMATSU KES 07.868.1

## HYDRO ISO 32/46/68/100/150

Product code: PM2101/PM2102/PM2103  
PM2104\*/PM2105\*



### MINERAL HYDRAULIC OIL

All-season mineral hydraulic oil created for hydraulic devices of stationary and mobile equipment operating in standard and high operating temperatures. It was developed taking into account the requirements for industrial hydraulic systems operating in the conditions of high loads, pressures, temperatures and/or velocities.

#### Volume: / Art. Nr.:

10L	PM2101-10	PM2102-10	PM2103-10
20L	PM2101-20	PM2102-20	PM2103-20
60L	PM2101-60	PM2102-60	PM2103-60
208L	PM2101-DR	PM2102-DR	PM2103-DR
1000L	PM2101-IBC	PM2102-IBC	PM2103-IBC

\*Contact our sales department for quantity and volume details.

#### Specifications:

##### ISO Viscosity Grade 32/46/68/100/150

DIN 51524-2 (HLP)  
ISO 11158 (HM)  
AFNOR FRANCE NF E 48-603  
CONESTOGA ISO 20763  
EATON I-286-S  
MAG CINCINNATI P-68/P-69/P-70  
PARKER DENISON HF-0/-1/-2  
PARKER DENISON Filterability TP 02100  
SPERRY VICKERS I-286-S  
US STEEL 126/127

## HYDRO HV ISO 32/46/68

Product code: PM2201/PM2202/PM2203



### MINERAL HYDRAULIC OIL

All-season mineral hydraulic oil created for hydraulic devices of stationary and mobile equipment operating in standard and high operating temperatures. It was developed taking into account the requirements for industrial hydraulic systems operating in the conditions of high loads, pressures, temperatures and/or velocities.

#### Volume: / Art. Nr.:

10L	PM2201-10	PM2202-10	
20L	PM2201-20	PM2202-20	PM2203-20
60L		PM2202-60	
208L	PM2201-DR	PM2202-DR	PM2203-DR
1000L	PM2201-IBC	PM2202-IBC	

#### Specifications:

##### ISO Viscosity Grade 32/46/68

##### SAE MS 1004

DIN 51524-2 (HM)/51524-3 (HVLP)  
ISO 11158 (HM, HV, HVLP)  
ASTM USA D6158  
ANSI AGMA 9005-E02-RO  
AIST 126/127  
JCMAS P041 HK Hydraulic specification  
GERMAN STEEL INDUSTRY SEB 181222  
BOSCH REXROTH RE 90220  
EATON M-2950-S/I-286-S3  
GMLS2  
MAG CINCINNATI P-68/69/70  
PARKER DENISON HF-0/-1/-2  
SPERRY VICKERS M-2950-S/I-286-S3



## HYDRO HV ISO 22 VI 245

Product code: PM2204



### SYNTHETIC HYDRAULIC OIL

Arctic hydraulic synthetic-based oil with an extra-high viscosity index (no less than 245) and exceptional low-temperature properties created for hydraulic devices of the mobile equipment operating at most extreme possible operating temperatures and extremely low ambient temperatures.

#### Volume: / Art. Nr.:

20L	PM2204-20	208L	PM2204-DR
1000L	PM2204-IBC		

#### Specifications:

##### ISO Viscosity Grade 22 SAE MS 1004

Viscosity Index 245  
DIN 51524-2/-3 (HVLP)  
ISO 11158 (HM, HV, HVLP)  
ASTM USA D6158  
ANSI AGMA 9005-E02-RO  
AIST 126/127  
JCMAS P041 HK Hydraulic specification  
GERMAN STEEL INDUSTRY SEB 181222  
BOSCH REXROTH RE 90220  
EATON M-2950-S/I-286-S3  
GM LS2  
MAG CINCINNATI P-68/-69/-70  
PARKER DENISON HF-0/-1/-2  
SPERRY VICKERS M-2950-S/I-286-S3

## HYDRO HV ISO 22 VI 150

Product code: PM2210



### SYNTHETIC HYDRAULIC OIL

Synthetic all-season hydraulic oil with an increased viscosity index (at least 145) and improved low-temperature properties, designed for hydraulic equipment of mobile machines operating at ultra-high environment and low ambient temperatures. Designed to meet the requirements of industrial hydraulic systems operating under ultra-high loads, pressures, temperatures and/or speeds, and especially under extremely variable temperatures.

#### Volume: / Art. Nr.:

20L	PM2210-20	208L	PM2210-DR
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#### Specifications:

##### ISO Viscosity Grade 22 SAE MS 1004

Viscosity Index 150  
DIN 51524-2/51524-3 (HVLP)  
ISO 11158 (HM, HV, HVLP)  
ASTM USA D6158  
ANSI AGMA 9005-E02-RO  
AIST 126/127  
JCMAS P041 HK Hydraulic specification  
GERMAN STEEL INDUSTRY SEB 181222  
BOSCH REXROTH RE 90220  
EATON M-2950-S/I-286-S3  
GM LS2  
MAG CINCINNATI P-68/-69/-70  
PARKER DENISON HF-0/-1/-2  
SPERRY VICKERS M-2950-S/I-286-S3

## HYDRO HV ISO 46 Zinc Free

Product code: PM2206



### MINERAL HYDRAULIC OIL

Mineral hydraulic oils created on the basis of highly-purified basic oils with a high viscosity index and a zinc-free additive package for the most full compliance with specific operating requirements of modern high-load and heat-stressed precision hydraulic systems, including the ones equipped with servo mechanisms and servo valves used in industrial and mobile equipment for which the manufacturer recommends using "zinc-free" hydraulic oils.

#### Volume: / Art. Nr.:

20L	PM2206-20	208L	PM2206-DR
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#### Specifications:

##### ISO Viscosity Grade 46 SAE MS 1004

DIN 51524-2 (HM)  
DIN 51524-3 (HVLP)  
ISO 11158 (HM, HV, HVLP)  
ASTM USA D6158  
ANSI AGMA 9005-E02-RO  
AIST 126/127  
JCMAS P041 HK Hydraulic specification  
GERMAN STEEL INDUSTRY SEB 181222  
BOSCH REXROTH RE 90220  
EATON M-2950-S/I-286-S3  
GM LS2  
MAG CINCINNATI P-68/-69/-70  
PARKER DENISON HF-0/-1/-2  
SPERRY VICKERS M-2950-S/I-286-S3

## HYDRO HV ISO 32 Zinc Free

Product code: PM2208



### MINERAL HYDRAULIC OIL

All-season mineral hydraulic oils created on the basis of highly-purified basic oils with a high viscosity index and a zinc-free (low-ash) additive package for the most full compliance with specific operating requirements of modern high-load and heat-stressed precision hydraulic systems, including the ones equipped with servo mechanisms and servo valves used in industrial and mobile equipment for which the manufacturer recommends using "zinc-free" hydraulic oils.

#### Volume: / Art. Nr.:

20L	PM2208-20	208L	PM2208-DR
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#### Specifications:

##### ISO Viscosity Grade 32

##### SAE MS 1004

DIN 51524-2 (HM)  
DIN 51524-3 (HVLP)  
ISO 11158 (HM, HV, HVLP)  
ASTM USA D6158  
ANSIAGMA 9005-E02-RO  
AIST 126/127  
JCMAS P041 HK Hydraulic specification  
GERMAN STEEL INDUSTRY SEB 181222  
BOSCH REXROTH RE 90220  
EATON M-2950-S/I-286-S3  
GMLS2  
MAG CINCINNATI P-68/-69/-70  
PARKER DENISON HF-0/-1/-2  
SPERRY VICKERS M-2950-S/I-286-S3

## COMPRESSOR OIL ISO 46

Product code: PM2901



### MINERAL COMPRESSOR OIL

Specials highly-purified paraffin ashless mineral compressor oil with an extended replacement age. It ensures a stable and continuous operation of the equipment throughout the entire operation period.

#### Volume: / Art. Nr.:

20L	PM2901-20	208L	PM2901-DR
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#### Specifications:

##### ISO Viscosity Grade 46

BROWN BOVERI HTGD 90117  
ISO DP 6521 (L-DAA), 6521 (L-DAB)  
ISO DP 6521 (L-DAG), 6521 (L-DAH)  
DIN 51506 (VBL), 51506 (VCL), 51506 (VDL)  
DIN 51515-1 (L-TD), 51515-2 (L-TG)  
DIN 51517-2 (CL), 51524-1, 51524-2  
VDMA 24568  
SIEMENS TLV 9013  
MAG CINCINNATI P-38, P-55, P-54, P-57, P-62  
BSI GB BS 489  
GE GEK 32568 A, GEK 32568 C  
CEGB 207001  
US STEEL 120  
MITSUBISHI E00-87182  
MIL L 17672 D  
PARKER DENISON HF-0  
AFNOR FRANCE NF E 48-603

## COMPRESSOR OIL ISO 100

Product code: PM2902



### MINERAL COMPRESSOR OIL

Highly-purified paraffin low-ash mineral compressor oil with an extended replacement age. It ensures a stable and continuous operation of the equipment throughout the entire operation period.

#### Volume: / Art. Nr.:

20L	PM2902-20	208L	PM2902-DR
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#### Specifications:

##### ISO Viscosity Grade 100

BROWN BOVERI HTGD 90117  
ISO DP 6521 (L-DAA), 6521 (L-DAB)  
ISO DP 6521 (L-DAG), 6521 (L-DAH)  
DIN 51506 (VBL), 51506 (VCL), 51506 (VDL)  
DIN 51515-1 (L-TD), 51515-2 (L-TG)  
DIN 51517-2 (CL), 51524-1, 51524-2  
VDMA 24568  
SIEMENS TLV 9013  
MAG CINCINNATI P-38, P-55, P-54, P-57, P-62  
BSI GB BS 489  
GE GEK 32568 A, GEK 32568 C  
CEGB 207001  
US STEEL 120  
MITSUBISHI E00-87182  
MIL L 17672 D  
PARKER DENISON HF-0  
AFNOR FRANCE NF E 48-603

## COMPRESSOR OIL ISO 150

Product code: PM2903\*



### MINERAL COMPRESSOR OIL

Highly-purified paraffin low-ash mineral compressor oil with an extended replacement age. It ensures a stable and continuous operation of the equipment throughout the entire operation period.

#### Volume: / Art. Nr.:

208L PM2903-DR

\*Contact our sales department for quantity and volume details.

#### Specifications:

##### ISO Viscosity Grade 150

DIN 51506 (VBL)  
DIN 51506 (VCL)  
DIN 51506 (VDL)  
ISO DP 6521 L-DAA  
ISO DP 6521 L-DAB  
ISO DP 6521 L-DAG  
ISO DP 6521 L-DAH

## COMPRESSOR OIL ISO 220

Product code: PM2904\*



### MINERAL COMPRESSOR OIL

Highly-purified paraffin low-ash mineral compressor oil with an extended replacement age. It ensures a stable and continuous operation of the equipment throughout the entire operation period.

#### Volume: / Art. Nr.:

208L PM2904-DR

\*Contact our sales department for quantity and volume details.

#### Specifications:

##### ISO Viscosity Grade 220

DIN 51506 (VBL)  
DIN 51506 (VCL)  
DIN 51506 (VDL)  
ISO DP 6521 L-DAA  
ISO DP 6521 L-DAB  
ISO DP 6521 L-DAG  
ISO DP 6521 L-DAH

## TURBINE ISO 32/46/68

Product code: PM2301\*/PM2302\*/PM2303\*



### INDUSTRIAL TURBINE OIL

High-quality turbine oil with an increased replacement age designed for the lubrication and cooling of bearings in stationary steam and water turbines at normal and elevated temperatures and manufactured on a highly-purified base.

#### Volume: / Art. Nr.:

208L PM2301-DR PM2302-DR PM2303-DR

\*Contact our sales department for quantity and volume details.

#### Specifications:

##### ISO Viscosity Grade 32/46/68

DIN 51524-1/-2/-3  
DIN 51517-2  
DIN 51506 (VBL, VCL, VDL)  
DIN 51515-1 (L-TD)/-2 (TG)  
ISO DP 6521 (DAA/DAB/DAH/DAG)  
AFNOR FRANCE NF E 48-603  
BSI GB BS 489  
CEGB 207001  
MIL L 17672 D  
VDMA 24568  
BROWN BOVERI HTGD 90117  
GE GEK 32568 A/GEK 32568 C  
MAG CINCINNATI P-38/-55/-54/-57/-62  
MITSUBISHI E00-87182  
PARKER DENISON HF-0  
SIEMENS TLV 9013  
US STEEL 120

## MARINE 09-SERIES

Product code: PM2401\*/PM2402\*/PM2403\*



### MARINE OIL

Highly-purified paraffin low-ash mineral compressor oil with an extended replacement age. It ensures a stable and continuous operation of the equipment throughout the entire operation period.

#### Volume: / Art. Nr.:

PM2401 PM2402 PM2403

\*Contact our sales department for quantity and volume details.

#### Specifications:

SAE 30/40/50  
API CF-4  
TBN 9

## MARINE 12-SERIES

Product code: PM2404\*/PM2405\*



### MARINE OIL

High performance diesel engine oil developed for use on low sulphur distillate fuels in marine and industrial applications. They are formulated to have excellent resistance to oxidation and viscosity increase over a long period of service. They have superior water separating properties and provide excellent corrosion protection. PEMCO Marine 1230 is formulated with base oils having proven successful performance in diesel engines. The additive system is balanced to provide excellent resistance to thermal degradation under moderately severe operating conditions. They also provide good engine cleanliness and superior wear protection.

#### Volume: / Art. Nr.:

PM2404 PM2405

\*Contact our sales department for quantity and volume details.

#### Specifications:

SAE 30/40  
API CF-4  
TBN 12

## MARINE 3040

Product code: PM2406\*



### MARINE OIL

High-alkaline mineral motor oil for medium-speed heavy marine diesel engines operating on fuel oil with a sulfur content of up to 4.0 %. Applicable for auxiliary engines. It has excellent anti-friction, anti-wear and extreme pressure properties, which significantly extends the life of the equipment in all, even the most extreme, operating modes and provides significant fuel economy. Excellent protection against wear on the camshaft and bearings.

#### Volume: / Art. Nr.:

PM2406

\*Contact our sales department for quantity and volume details.

#### Specifications:

SAE 40  
API CF-4  
TBN 30

## MARINE X70

Product code: PM2407\*



### MARINE OIL

Superior quality, extra high performance, marine diesel engine cylinder oil. This bold new approach in cylinder lubricant technology provides maximum protection from adhesive and corrosive wear at the higher operating temperatures and pressures of today's modern crosshead engines. Marine X70 employs additives with substantially greater thermal stability and superior acid-corrosion protection. Through the use of unique formulation technology, this higher viscosity is attained with little or no use of thermally less stable, deposit-producing bright stock.

#### Volume: / Art. Nr.:

PM2407

\*Contact our sales department for quantity and volume details.

#### Specifications:

SAE 50  
API CF  
TBN 70

## EMULSION

Product code: PM1103



### GREASING AND COOLING FLUID

Water-miscible greasing and cooling fluid (GCF) with a high content of mineral oil and a highly effective additive package, providing multi functionality and stability of the emulsion for machining ferrous and non-ferrous metals. Mixes easily with water, has long service life of the emulsion. Economical to use.

#### Volume: / Art. Nr.:

20L PM1103-20 208L PM1103-DR

#### Specifications:

TYPE Water-miscible emulsion

# THE CONCISE GUIDE TO LUBRICATION

The development of ultra-modern engine technology, with high performance density, minimal oil volume and oil change intervals of up to 30,000 km in the passenger car sector, would be inconceivable without advanced high-performance lubricants. The lubricant "engine oil" is an integral component of the engine currently costing between Euro 5,000 and 15,000 on modern vehicles.

This fact alone should be reason enough not to be tempted to make false economies. The operating life of an engine depends substantially on the basic oil used, and on the viscosity of the engine oil. Whether the oil takes 2.8 seconds to reach the most remote point of the engine at low temperatures in the case of 0W-XX oils or 48 seconds in the case of 15W-XX oils has a decisive influence on the engine's operating life. If the engine is not lubricated thoroughly, the metallic surfaces which slide against each other will make contact. The engine service life is shortened significantly as a result. In the field of lubrication technology, this process is referred to as mixed friction. You, the owner of a vehicle, need to play your part in keeping any periods of mixed friction in the engine as short as possible.

Advantages of synthetic engine oils: easier starting, better flow properties at low temperatures, superior wears protection behaviour, greater stability at high temperatures, lower fuel and oil consumption.

## SAE CATEGORIES

Engine and transmission oils are described by means of SAE categories (SAE = Society of Automotive Engineers), which are used as a form of viscosity designation. Two series of designations are used.

The letter "W" stands for winter. Figures such as 0W, 5W, 10W, 15W, 20W and 25W at engine oils such as 70W, 75W, 80W, 85W, 90W, 140W at transmission oils describe a specified flow behaviour based on the maximum low-temperature viscosity, the maximum limit point temperature and the minimum viscosity at 100 °C. The second figure after the "W", such as 20, 30, 40, 50, 60 at engine oils such as 80, 85, 90, and 140 at transmission oils denotes the viscosity of engine and transmission oils at a temperature of 100 °C. As these temperatures do not adequately reflect the conditions in which engine oils are used, the high temperature viscosity HTHS (high temperature high shear) at 150 °C at high shear (high engine speed) is calculated. The purpose of determining the limit values of HTHS is that multigrade oils with VI improvers likewise assure the necessary degree of lubricating reliability at high oil temperatures and high engine speeds.

## PERFORMANCE CATEGORIES

There are numerous test specifications and testing methods for determining the performance of engine oils in realistic test runs. Various vehicle engines are used for test purposes. The US classifications of the API, the European specifications of the ACEA committee, international specifications of ILSAC and the specifications of the individual vehicle manufacturers are in common use worldwide.

## API (American Petroleum Institute)

The "American Petroleum Institute" divides engine oils into two performance categories: the classification for gasoline or spark ignition engines denoted by the letter "S" (Service Classes), and

the classification for diesel engines denoted by the letter "C" (Commercial Classes). A further letter, from an ascending alphabetical sequence, is then appended to the initial "S" or "C" to indicate the performance level. The highest classification currently in use for spark-ignition engines is API SN. In the case of diesel engines, API CK-4, represents the highest performance level. Engine oils meeting the requirements of API SP will deliver several performance advantages versus current API SN and API SN PLUS categories for spark-ignited internal combustion engines.

The currently valid performance categories:

•API SN, API SP, SN plus, SM, SL, SJ.

•API CK-4, CJ-4, CI-4+, CI-4, CG-4, CF-4, CF. In connection with the API classifications it should be noted that the tests are designed predominantly for US vehicles and their operating conditions. The API classifications are consequently of only limited use for European countries.

**ACEA (Association des Constructeurs Europeens d'Automobiles)** The ACEA specifications describe the minimum requirements for present-day, ultramodern engine oils for motor vehicles; these are the toughest in the world. The ACEA committee comprises European vehicle manufacturers, the European Association of Lubricant Manufacturers, additives manufacturers and test developers.

**Engine oils are divided into four performance categories in this case:**

•ACEA A = for spark-ignition or gasoline engines.

•ACEA B = for diesel engines in passenger cars and light commercial vehicles.

•ACEA C = for gasoline engines or diesel engines with Exhaust fume follow-up treatment e. g. diesel particulate filter.

•ACEA E = for diesel engines in heavy commercial vehicles the letters "A", "B", "C" or "E" are then followed by a digit, e.g. 1, 2, 3, 4 or for commercial vehicles 5, 6, 7, 9, which serves as an indication of the oil's performance. It is not necessarily the case that the higher the digit, the higher the quality (see table "ACEA Specifications"). In addition, the digit indicating the performance level for the oil industry is followed by the year of introduction and possibly by the issue reference.

## ILSAC (International Lubricants Standardization and Approval Committee)

ILSAC is formed in 1992 by AAMA (American Automobile Manufacturers Association, representatives of Ford Motor Company and General Motors Corporation) and JAMA (Japan Automobile Manufacturers Association) to define the need, parameters, licensing and administration of lubricant specifications.

**ILSAC standards are divided into five performance categories:**

•ILSAC GF-1 standard indicates the oil meets both API SH and the Energy Conserving II (EC-II) requirements.

•ILSAC GF-2. The oil must meet both API SJ and EC-II requirements. The GF-2 standards require 0W-30, 0W-40, 5W-20, 5W-30, 5W-40, 5W-50, 10W-30, 10W-40, 10W-50 motor oils to meet stringent requirements for phosphorus content, low temperature operation, high temperature deposits, foam control.

•ILSAC GF-3 oil must meet both API SL and the EC-II requirements. The GF-3 standard has more stringent parameters regarding long-term effects of the oil on the vehicle emission system, improved fuel economy and improved volatility, deposit control and viscosity performance. The standard also requires less additive degradation and reduced oil consumption rates over the service life of the oil.

•ILSAC GF-4 is similar to the API SM service category, but it requires an additional sequence VIB Fuel Economy Test (ASTM D6837).

•ILSAC GF-5. Designed to provide improved high temperature deposit protection for pistons and turbochargers, more stringent sludge control, improved fuel economy, enhanced emission control system compatibility, seal compatibility, and protection of engines operating on ethanol-containing fuels up to E85.

•ILSAC GF-6 was designed to reduce the premature ignition at low rpm (LSPI) observed in vehicles equipped with GDI engines. The new ILSAC GF-6 has balanced these equally important needs: fuel economy and fuel economy retention, emission system compatibility, engine oil robustness to protect engines from wear related to idle stop and failures related to LSPI and turbocharger depositing.

## LOW-VISCOSITY OILS

The designation "low-viscosity oil" depends not on the grade of basic oil used (fully synthetic, semi-synthetic), but solely on the low-temperature viscosity. Low-viscosity oils are year-round oils with a low-temperature viscosity of SAE 0W-XX, 5W-XX and 10W-XX. Low-viscosity engine oils reduce the friction in the engine, thus saving fuel. The engine in addition becomes fully lubricated more rapidly, significantly reducing wear and extending its operating life. Mineral engine oils. Engine oils are conventionally made from mineral oils. However, these oils are limited in terms of their performance capability due to increasing requirements such as extended oil change intervals, high engine output and demands for low-viscosity properties. Typical viscosities: 10W-40, 15W-40 or 20W-50.

## SEMI-SYNTHETIC ENGINE OILS

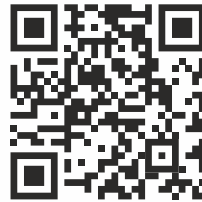
Semi-synthetic engine oils are a blend of mineral and synthetic basic oils. They improve cold-starting properties, keep the engine clean and afford excellent protection against wear. Typical viscosity categories: SAE 10W-40.

## HC SYNTHETIC ENGINE OILS

HC Synthetic engine oils are based on oils which have been further processed at the refinery using elaborate methods. Through the constant further development of these base oils, it was possible to meet the high requirements of state-of-the-art engine design. These days a lubricant using this technology is required in almost all new vehicles. Typical viscosity categories: SAE 5W-XX or 10W-XX.

## FULLY SYNTHETIC ENGINE OILS

Synthetic base oils nowadays only sometimes serve as the basis and prerequisite for advanced engine technology. Despite the increasing performance density, they enable long oil change intervals, lower oil and fuel consumption as well as a long engine service life. Typical viscosity categories: SAE 0W-XX, 5W-XX.



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