



LUBRICANTS CATALOGUE

srtvtoil.com



Product Range
FANFARO



Manufactured by



FANFARO is one of the brands of the SCT Lubricants Group. All products are produced in two own factories in Lithuania (Klaipeda on the Baltic Sea) and in the Republic of Belarus (Minsk).

The company was founded to meet the requirements of the European and Eurasian automotive industry as well as those of the largest engine manufacturers in Europe, Asia and America. The production facilities comply with the latest international standards, including the ISO 9001 standard of the international quality system which guarantees high product quality.



Products

Automotive Oil

- Passenger & Light Vehicles
- Truck & Bus
- Motorbikes & ATVS
- Marine & Outboard

Industrial Oil

- Industrial
- Hydraulic
- Compressor
- Gear
- Agricultural & Construction

Additives & Fluids

- ATF
- MTF & Gear Oil
- Antifreeze & Coolants
- Additives & Service Fluids



AUTOMOTIVE OIL Lubricants

PASSENGER & LIGHT VEHICLES

NSX

FF - 6724

**SAE 0W-20 API SP
(RC) ILSAC GF-6A**

1L FF6724-1
4L FF6724-4
10L FF6724-10
20L FF6724-20
60L FF6724-60
208L FF6724-DR

XTR

FF - 6726

**SAE 0W-30 API SN
ACEA C3 ACEA C2**

1L FF6726-1
5L FF6726-5
20L FF6726-20
208L FF6726-DR

ESX

FF - 6711

**SAE 0W-40 API SN/
CH-4 ACEA A3/B4**

1L FF6711-1
1L FF6711-1ME
4L FF6711-4
4L FF6711-4ME
20L FF6711-20
60L FF6711-60
208L FF6711-DR
1000L FF6711-IBC

JPX

FF - 6715

**SAE 5W-20 API SP
(RC) ILSAC GF-6A**

1L FF6715-1
4L FF6715-4
20L FF6715-20
60L FF6715-60
208L FF6715-DR
1000L FF6715-IBC

LSX

FF - 6701

**SAE 5W-30 API SN
ACEA C3**

1L FF6701-1
4L FF6701-4
5L FF6701-5
20L FF6701-20
60L FF6701-60
208L FF6701-DR
1000L FF6701-IBC

LSX JP

FF - 6703

**SAE 5W-30 API SN
ILSAC GF-6A**

1L FF6703-1
4L FF6703-4
20L FF6703-20
60L FF6703-60
208L FF6703-DR
1000L FF6703-IBC

VDX

FF - 6707

**SAE 5W-30 API SN/
CH-4 ACEA C2 ACEA
C3**

1L FF6707-1
5L FF6707-5
10L FF6707-10
20L FF6707-20
60L FF6707-60
208L FF6707-DR
1000L FF6707-IBC

TSE

FF - 6501

**SAE 5W-30 API SN/
CH-4 ACEA A3/B4**

1L FF6501-1
4L FF6501-4
5L FF6501-5
20L FF6501-20
60L FF6501-60
208L FF6501-DR
1000L FF6501-IBC

VSX

FF - 6702

**SAE 5W-40 API SN/
CH-4 ACEA A3/B4**

1L FF6702-1
4L FF6702-4
5L FF6702-5
20L FF6702-20
60L FF6702-60
208L FF6702-DR
1000L FF6702-IBC

PDX

FF - 6705

**SAE 5W-40 API SN
ACEA C3 ACEA C2**

1L FF6705-1
4L FF6705-4
5L FF6705-5
20L FF6705-20
60L FF6705-60
208L FF6705-DR
1000L FF6705-IBC

VSN

FF - 6721

**SAE 5W-40 API SN/
CF ACEA A3/B4**

1L FF6721-1
4L FF6721-4
20L FF6721-20
60L FF6721-60
208L FF6721-DR
1000L FF6721-IBC

SPX

FF - 6505

**SAE 10W-30 API SN
ACEA A3/B4**

1L FF6505-1
4L FF6505-4
5L FF6505-5
20L FF6505-20
60L FF6505-60
208L FF6505-DR
1000L FF6505-IBC

TSN
FF - 6704

SAE 10W-40
API SN/CH-4
ACEA A3/B4

1L FF6704-1
4L FF6704-4
5L FF6704-5
10L FF6704-10
20L FF6704-20
60L FF6704-60
208L FF6704-DR
1000L FF6704-IBC

TSX
FF - 6502

SAE 10W-40
API SN
ACEA A3/B4

1L FF6502-1
4L FF6502-4
5L FF6502-5
20L FF6502-20
60L FF6502-60
208L FF6502-DR
1000L FF6502-IBC

TDI
FF - 6503

SAE 10W-40
API CH-4/SL
ACEA A3/B4

1L FF6503-1
4L FF6503-4
5L FF6503-5
7L FF6503-7
10L FF6503-10
20L FF6503-20
60L FF6503-60
208L FF6503-DR
1000L FF6503-IBC

OEM 5W-40
FF - 6723

SAE 5W-40

1L FF6723-1ME
4L FF6723-4ME

OEM 10W-40
FF - 6725

SAE 10W-40
API SN
ACEA A3/B4

1L FF6725-1ME
4L FF6725-4ME
5L FF6725-5ME

OEM 20W-50
FF - 6506

SAE 20W-50
API SN
ACEA A3/B4

1L FF6506-1ME
4L FF6506-4ME

DSX
FF - 6402

SAE 15W-40 API
CH-4/SL ACEA A3/
B3

1L FF6402-1
4L FF6402-4
5L FF6402-5
20L FF6402-20
60L FF6402-60
208L FF6402-DR
1000L FF6402-IBC

GSX
FF - 6401

SAE 15W-40 API SN/
CH-4 ACEA A3/B4

1L FF6401-1
4L FF6401-4
5L FF6401-5
10L FF6401-10
20L FF6401-20
60L FF6401-60
208L FF6401-DR
1000L FF6401-IBC

GSX 50
FF - 6403

SAE 20W-50
API SN/CH-4

1L FF6403-1
1L FF6403-1ME
4L FF6403-4
5L FF6403-5
20L FF6403-20
60L FF6403-60
208L FF6403-DR
1000L FF6403-IBC

METAL SN 5W-30
FF - 6708

SAE 5W-30
API SN
ILSAC GF-5

1L FF6708-1ME
4L FF6708-4ME
60L FF6708-60
208L FF6708-DR
1000L FF6708-IBC

METAL SN 5W-30
FF - 6709

SAE 5W-30

1L FF6709-1ME
4L FF6709-4ME

METAL SN 5W-30
FF - 6710

SAE 5W-30
API SN
ILSAC GF-5

1L FF6710-1ME
4L FF6710-4ME

OEM 5W-30
FF - 6714

SAE 5W-30
API SN/CG-4
ACEA A3/B4

1L FF6714-1ME
4L FF6714-4ME
208L FF6714-DR

OEM 5W-30
FF - 6716

SAE 5W-30
API SN/CF
ACEA A5/B5

1L FF6716-1ME
1L FF6716-1
5L FF6716-5ME
5L FF6716-5
20L FF6716-20
60L FF6716-60
208L FF6716-DR
1000L FF6716-IBC

OEM 5W-30
FF - 6717

SAE 5W-30
API SN/CF
ACEA C3

1L FF6717-1ME
5L FF6717-5ME
20L FF6717-20
60L FF6717-60
208L FF6717-DR
1000L FF6717-IBC

GAZOLIN
FF - 6504

SAE 10W-40
API SG/CD

1L FF6504-1
4L FF6504-4
5L FF6504-5
20L FF6504-20
60L FF6504-60
208L FF6504-DR
1000L FF6504-IBC

SAE 40
FF - 6407

SAE 40
API CH-4/SJ

1L FF6407-1
4L FF6407-4
10L FF6407-10
20L FF6407-20
60L FF6407-60
208L FF6407-DR
1000L FF6407-IBC

SAE 50
FF - 6405

SAE 40
API CH-4/SJ

5L FF6405-5
20L FF6405-20
60L FF6405-60
208L FF6405-DR
1000L FF6405-IBC

OEM 5W-30
FF - 6718

SAE 5W-30
API SN
ACEA A5/B5

1L FF6718-1ME
4L FF6718-4ME
60L FF6718-60
208L FF6718-DR
1000L FF6718-IBC

OEM 5W-30
FF - 6719

SAE 5W-30
API SN
ACEA C3

1L FF6719-1ME
1L FF6719-1
5L FF6719-5ME
5L FF6719-5
10L FF6719-10
20L FF6719-20
60L FF6719-60
208L FF6719-DR
1000L FF6719-IBC

OEM 10W-40
FF - 6720

SAE 10W-40
API SN/CH-4
ACEA A3/B4

5L FF6720-5ME
20L FF6720-20
60L FF6720-60
208L FF6720-DR
1000L FF6720-IBC

SAE 60
FF - 6406

SAE 60
API CH-4

5L FF6406-5
20L FF6406-20
60L FF6406-60
208L FF6406-DR
1000L FF6406-IBC

TRUCK & BUS

TRD SHPD

FF - 6101

<p>SAE 15W-40 API CH-4/SL ACEA A3/B4 ACEA E7</p>	<p>7L FF6101-7 10L FF6101-10 20L FF6101-20 60L FF6101-60 208L FF6101-DR 1000L FF6101-IBC</p>
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TRD 50 SHPD

FF - 6102

<p>SAE 20W-50 API CH-4/SL ACEA A3/B4 ACEA E7</p>	<p>5L FF6102-5 7L FF6102-7 10L FF6102-10 20L FF6102-20 60L FF6102-60 208L FF6102-DR 1000L FF6102-IBC</p>
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TRD -3 SHPD

FF - 6103

<p>SAE 10W-40 API CH-4/SL ACEA A3/B4 ACEA E7</p>	<p>20L FF6103-20 60L FF6103-60 208L FF6103-DR 1000L FF6103-IBC</p>
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TRD-17 UHPD BLUE

FF - 6117

<p>SAE 5W-30 API CK-4 ACEA E8/E11</p>	<p>20L FF6117-20 60L FF6117-60 208L FF6117-DR 1000L FF6117-IBC</p>
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TRD-18 SHPD

FF - 6118

<p>SAE 15W-40 API CK-4 ACEA E8/E11</p>	<p>20L FF6118-20 208L FF6118-DR 1000L FF6118-IBC</p>
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TRD-20 SHPD

FF - 6120

<p>SAE 10W-30 API CJ-4/CK-4 ACEA E8/E11</p>	<p>20L FF6120-20 208L FF6120-DR 1000L FF6120-IBC</p>
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TRD SUPER SHPD

FF - 6104

<p>SAE 15W-40 API CI-4 PLUS API CI-4/CH-4/ SL ACEA A3/B4 ACEA E7 JASO DH-1</p>	<p>5L FF6104-5 7L FF6104-7 10L FF6104-10 20L FF6104-20 60L FF6104-60 208L FF6104-DR 1000L FF6104-IBC</p>
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TRD-W UHPD

FF - 6105

<p>SAE 10W-40 API CI-4 PLUS API CI-4/CH-4/ SL ACEA A3/B4 ACEA E7 JASO DH-1</p>	<p>5L FF6105-5 7L FF6105-7 10L FF6105-10 20L FF6105-20 60L FF6105-60 208L FF6105-DR 1000L FF6105-IBC</p>
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TRD E4 UHPD

FF - 6106

<p>SAE 10W-40 API CI-4 ACEA E4/ E7</p>	<p>10L FF6106-10 20L FF6106-20 208L FF6106-DR 1000L FF6106-IBC</p>
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TRD-21 SHPD

FF - 6121

<p>SAE 10W-30 API CK-4/SN API CJ-4/ CI-4 PLUS ACEA E8/E11 JASO DH-2</p>	<p>20L FF6121-20 208L FF6121-DR 1000L FF6121-IBC</p>
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TRD E6 UHPD

FF - 6107

<p>SAE 10W-40 API CK-4/ CJ-4 ACEA E8/ E11</p>	<p>10L FF6107-10 20L FF6107-20 60L FF6107-60 208L FF6107-DR 1000L FF6107-IBC</p>
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TRD-8 UHPD

FF - 6108

<p>SAE 5W-30 API CI-4 ACEA E4/E7</p>	<p>10L FF6108-10 20L FF6108-20 208L FF6108-DR 1000L FF6108-IBC</p>
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TRD-10 UHPD

FF - 6110

<p>SAE 5W-40 API CI-4/SL ACEA E4/E7</p>	<p>5L FF6110-5 10L FF6110-10 20L FF6110-20 208L FF6110-DR 1000L FF6110-IBC</p>
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MOTORBIKES & ATVS

TRD-12 SHPD

FF - 6112

<p>SAE 10W-30 API CI-4 PLUS API CI-4/CH-4/SL ACEA A3/B4 ACEA E7</p>	<p>20L FF6112-20 208L FF6112-DR 1000L FF6112-IBC</p>
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TRD-14 UHPD

FF - 6114

<p>SAE 15W-40 API CK-4 ACEA E6/E7/E9</p>	<p>20L FF6114-20 208L FF6114-DR 1000L FF6114-IBC</p>
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TRD-15 SHPD

FF - 6115

<p>SAE 20W-50 API CI-4 PLUS API CI-4/CH-4/SL ACEA A3/B4 ACEA E7 JASO DH-1</p>	<p>10L FF6115-10 20L FF6115-20 60L FF6115-60 208L FF6115-DR</p>
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M-4T+

FF - 6201

<p>SAE 10W-40 API SL JASO MA/MA2</p>	<p>1L FF6201-1 20L FF6201-20 60L FF6201-60 208L FF6201-DR</p>
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S-4T+

FF - 6208

<p>SAE 0W-30 API SN ACEA C3 ACEA C2</p>	<p>1L FF6208-1 5L FF6208-5 20L FF6208 -20 208L FF6208-DR 1000L FF6208-IBC</p>
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M-2T

FF - 6202

<p>API TC JASO FB ISO-L-EGB</p>	<p>1L FF6202-1 20L FF6202 -20 60L FF6202-60 208L FF6202-DR 1000L FF6202-IBC</p>
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MARINE & OUTBOARD

OUTBOARD 2T

FF - 6203

API TD
NMMA TC-W3

1L FF6203-1
20L FF6203 -20
60L FF6203-60
208L FF6203-DR

MARINE 09 (SAE 30)

FF - 2401

SAE 30
API CF
TBN 9

Contact for quantity and volume details

MARINE 09 (SAE 40)

FF - 2402

SAE 40
API CF
TBN 9

Contact for quantity and volume details

MARINE 09 (SAE 50)

FF - 2403

SAE 50
API CF
TBN 9

Contact for quantity and volume details

MARINE 12 (SAE 30)

FF - 2404

SAE 30
API CF-4
TBN 12

Contact for quantity and volume details

MARINE 12 (SAE 40)

FF - 2405

SAE 40
API CF-4
TBN 12

Contact for quantity and volume details

MARINE 30 (SAE 40)

FF - 2406

SAE 40
API CF-4
TBN 30

Contact for quantity and volume details

MARINE X70 (SAE 50)

FF - 2407

SAE 50
API CF
TBN 70

Contact for quantity and volume details





INDUSTRIAL OIL Lubricants

INDUSTRIAL

M.O. SERIES (SAE 10W)

FF - 3101

SAE 10W	20L FF3101-20 208L FF3101-DR 1000L FF3101-IBC
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M.O. SERIES (SAE 20W)

FF - 3102

SAE 20W	FF3102
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M.O. SERIES (SAE 30)

FF - 3103

SAE 30	FF3103
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M.O. SERIES (SAE 40)

FF - 3104

SAE 40	FF3104
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M.O. SERIES (SAE 50)

FF - 3105

SAE 50	FF3105
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TURBINE SERIES (ISO 32)

FF - 2301

ISO 32	ISO 32 FF2301
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TURBINE SERIES (ISO 46)

FF - 2302

ISO 46	ISO 46 FF2302
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TURBINE SERIES (ISO 68)

FF - 2303

ISO 68	ISO 68 FF2303
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KETTENOEL

FF - 1101

ISO Viscosity Grade 100	4L FF1101-4 20L FF1101-20 208L FF1101-DR
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TO-4 POWERTRAIN

FF - 2601

SAE 10W	20L FF2601-20 208L FF2601-DR 1000L FF2601-IBC
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TO-4 POWERTRAIN

FF - 2602

SAE 30	20L FF2602-20 208L FF2602-DR 1000L FF2602-IBC
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TO-4 POWERTRAIN

FF - 2603

SAE 50	20L FF2603-20 1000L FF2603-IBC
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HYDRAULIC

HYDRO SERIES (ISO 32)

FF - 2101

ISO 32 | 5L FF2101-5
10L FF2101-10
20L FF2101-20
60L FF2101-60
208L FF2101-DR
1000L FF2101-IBC

HYDRO SERIES (ISO 46)

FF - 2102

ISO 46 | 5L FF2102-5
10L FF2102-10
20L FF2102-20
60L FF2102-60
208L FF2102-DR
1000L FF2102-IBC

HYDRO SERIES (ISO 68)

FF - 2103

ISO 68 | 10L FF2103-10
20L FF2103-20
60L FF2103-60
208L FF2103-DR
1000L FF2103-IBC

HYDRO SERIES (ISO 100)

FF - 2104

ISO 100 | ISO 100 FF2104

HYDRO SERIES (ISO 150)

FF - 2105

ISO 150 | ISO 150 FF2105

HYDRO SERIES HV (ISO 32)

FF - 2201

ISO 32 | 10L FF2201-10
20L FF2201-20
208L FF2201-DR
1000L FF2201-IBC

HYDRO SERIES HV (ISO 46)

FF - 2202

ISO 46 | 10L FF2202-10
20L FF2202-20
60L FF2202-60
208L FF2202-DR
1000L FF2202-IBC

HYDRO SERIES HV (ISO 68)

FF - 2203

ISO 68 | 20L FF2203-20
208L FF2203-DR
1000L FF2203-IBC

HYDRO SERIES HV (ISO 22)

FF - 2204

ISO 22 | 20L FF2204-20
208L FF2204-DR
1000L FF2204-IBC

HYDRO SERIES HV ZINC FREE (ISO 46)

FF - 2206

ISO 46 | 20L FF2206-20
208L FF2206-DR
1000L FF2206-IBC

HYDRO SERIES HV ZINC FREE (ISO 32)

FF - 2208

ISO 32 | 20L FF2208-20
208L FF2208-DR
1000L FF2208-IBC

COMPRESSOR

COMPRESSOR SERIES (ISO 46)

FF - 2901

ISO 46 | 20L FF2901-20
208L FF2901-DR
1000L FF2901-IBC

COMPRESSOR SERIES (ISO 100)

FF - 2902

ISO 100 | 20L FF2902-20
208L FF2902-DR
1000L FF2902-IBC

COMPRESSOR SERIES (ISO 150)

FF - 2903

ISO 150 | 20L FF2903-20
208L FF2903-DR
1000L FF2903-IBC

COMPRESSOR SERIES (ISO 220)

FF - 2904

ISO 220 | 20L FF2904-20
208L FF2904-DR
1000L FF2904-IBC

GEAR OIL

GEAR OIL

FF - 2801

ISO 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 | 20L FF2801-20
208L FF2801-DR
1000L FF2801-IBC

AGRICULTURAL & CONSTRUCTION

STOU MULTIFARM

FF - 2501

SAE 10W-30/10W-40	10L FF2501-10 20L FF2501-20 208L FF2501-DR 1000L FF2501-IBC
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STOU MULTIFARM

FF - 2502

SAE 10W-30/10W-40	10L FF2502-10 20L FF2502-20 208L FF2502-DR 1000L FF2502-IBC
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UTTO MULTI WB 101

FF - 2701

SAE 10W-30/10W-40	10L FF2701-10 20L FF2701-20 208L FF2701-DR 1000L FF2701-IBC
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ADDITIVES & FLUIDS
Lubricants

ATF

CVT

FF - 8601

- 1L FF8601-1
- 20L FF8601-20
- 60L FF8601-60
- 208L FF8601-DR

ATF

FF - 8602

- 1L FF8602-1
- 20L FF8602-20
- 60L FF8602-60
- 208L FF8602-DR

ATF II D

FF - 8604

- 1L FF8604-1
- 20L FF8604-20
- 60L FF8604-60
- 208L FF8604-DR

ATF III

FF - 8603

- 1L FF8603-1
- 4L FF8603-4
- 10L FF8603-10
- 20L FF8604-20
- 60L FF8604-60
- 208L FF8604-DR
- 1000L FF8603-IBC

ATF VI

FF - 8615

- 1L FF8615-1
- 20L FF8615-20
- 208L FF8615-DR
- 1000L FF8615-IBC

ATF SP III

FF - 8607

- 1L FF8607-1
- 20L FF8607-20
- 208L FF8607-DR
- 1000L FF8607-IBC

ATF SP-IV

FF - 8605

- 1L FF8605-1
- 20L FF8604-20
- 208L FF8604-DR

ATF T-IV

FF - 8610

- 1L FF8610-1
- 20L FF8610-20
- 60L FF8610-60
- 208L FF8610-DR
- 1000L FF8610-IBC

AZF 8

FF - 8614

- 1L FF8614-1
- 20L FF8610-20
- 208L FF8610-DR

AZF 6

FF - 8613

- 1L FF8613-1
- 20L FF8613-20
- 208L FF8613-DR

AZF 5

FF - 8612

- 1L FF8612-1
- 20L FF8612-20
- 208L FF8612-DR

DCT

FF - 8616

- 1L FF8616-1
- 20L FF8616-20
- 208L FF8616-DR

MTF & GEAR OIL

MAX 7

FF - 8710

SAE 75W-80 API GL-4
 1L FF8710-1
 20L FF8710-20
 208L FF8710-DR

MAX 6+

FF - 8707

SAE 75W-140 API GL-5 LS (Limited Slip)
 1L FF8707-1
 20L FF8707-20
 60L FF8707-60
 208L FF8707-DR
 1000L FF8707-IBC

MAX 6

FF - 8706

SAE 75W-140 API GL-5 LS (Limited Slip)
 1L FF8706-1
 20L FF8706-20
 60L FF8706-60
 208L FF8706-DR
 1000L FF8706-IBC

MAX 5

FF - 8703

SAE 75W-90 API GL-4/GL-5
 1L FF8703-1
 4L FF8703-4
 10L FF8703-10
 20L FF8703-20
 60L FF8703-60
 208L FF8703-DR
 1000L FF8703-IBC

MAX 4+

FF - 8702

SAE 75W-90 API GL-4+
 1L FF8702-1
 4L FF8702-4
 20L FF8702-20
 60L FF8702-60
 208L FF8702-DR

MAX 4

FF - 8701

SAE 80W-90 API GL-4 MIL L 2105
 1L FF8701-1
 4L FF8701-4
 20L FF8701-20
 60L FF8701-60
 208L FF8701-DR
 1000L FF8701-IBC

MAX 2

FF - 8712

SAE 140 API GL-1
 1L FF8712-1
 20L FF8712-20
 208L FF8712-DR
 1000L FF8712-IBC

MAX 1

FF - 8711

SAE 90 API GL-1
 1L FF8711-1
 20L FF8711-20
 208L FF8711-DR
 1000L FF8711-IBC

LSD

FF - 8708

SAE 85W-140 API GL-5 LS (Limited Slip) MIL-L 2105 D
 10L FF8708-10
 20L FF8708-20
 60L FF8708-60
 208L FF8708-DR

ANTIFREEZE & COOLANTS

G12+ COOLANT

FF - 4212

1L FF4212-1
 5L FF4212-5

G13 COOLANT

FF - 4213

1L FF4213-1
 5L FF4213-5

TRUCK AFG

FF - 4305

SAE J1034
 ASTM USA D3306
 ASTM USA D4340
 ASTM USA D4985
 VW TL 774 C
 NATO S-759
 20L FF4305-20
 208L FF4305-DR

TRUCK AFG

FF - 4306

20L FF4306-20
 208L FF4306-DR
 1000L FF4306-IBC

TRUCK AFG SUPER

FF - 4307

20L FF4306-20
 208L FF4306-DR



ADDITIVES & SERVICE FLUIDS

ADBLUE

FF - 3001

IN 70070
ISO 22241-1/-2/-3

10L AD3001-10
20L AD3001-20
1000L AD3001-IBC



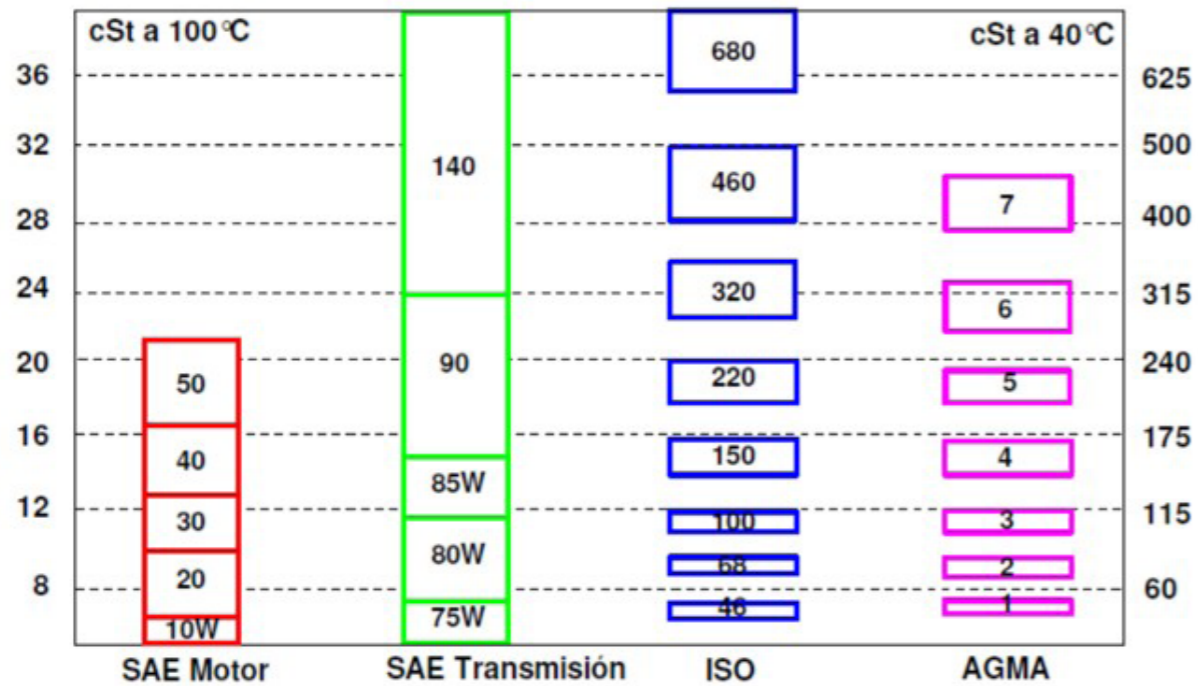
THE CONCISE GUIDE TO LUBRICANTS

There are several scales for measuring the viscosity of a fluid. The most commonly used are SAE and ISO. On the following pages we can see three types of scales.

- SAE grade scales for engine oils.
- SAE grade scales for gear oils

· ISO grade scales for hydraulic or industrial oils The ISO and SAE classifications are based on the measurement of viscosities at different reference temperatures (40°C and 100°C respectively). In order to establish a correlation, it is necessary to assume a certain viscosity index. For example, the following comparison chart is based on IV= 95.

The AGMA classification corresponds to the classification developed by the American Gear Manufacturers Association.



SAE classification

Viscosity classification using the Centistoke (cSt) at 100°C as the unit of measurement. This system is used to classify:

- Lubricants used for the lubrication of internal combustion engines
- Automotive gear lubrication oils.

The SAE index indicates how the oil flows at certain temperatures, i.e. its viscosity. This has nothing to do with oil quality, additive content, performance or application for specialised service conditions.

The SAE classification is based on the viscosity of the oil at two temperatures, in degrees Fahrenheit, 0°F and 210°F, equivalent to -18° C and 99° C, establishing eight SAE grades for monograde and six for multigrade.

SAE viscosity numbers are classifications of lubricating oils in terms of viscosity only. The official values of 0°F and 210°F are those specified in the classification. Centistokes grades represent kinematic viscosity and centipoises represent dynamic viscosity.

SAE Classification Engine Oils

Engine oils are classified by viscosity into “summer” and “winter” grades. Winter grades are identified by a number accompanied by the letter W. Summer grades are identified by a number. In both cases, the higher the number, the higher the viscosity of the oil.

SAE Grade	Dynamic viscosity (cP) at T (°C)	Limit Temperature Pumping (°C)	Kinematic Viscosity (cSt) at 100°C		Dynamic Viscosity (cP) at 150°C
			Minimum	Maximum	
OW	Maximum 3250 a -30	Maximum -35	3.8	<9.3	2.6
5W	3500 a -25	-30	3.8	<12.5	2.9
10W	3500 a -20	-25	4.1	<16.3	3.7
15W	3500 a -15	-20	5.6	<21.9	3.7
20W	3500 a -10	-15	95.6	<26.1	3.7
25W	6000 a -5	-10	9.3		
20			5.6		
30			9.3		
40			12.5		
50			16.3		
60			21.9		

SAE Classification Gear Oils

Transmission oils are classified by their viscosity into “summer” grades and “winter” grades. Winter grades are identified by a number accompanied by the letter W. Summer grades are identified by a number. In both cases, the higher the number, the higher the viscosity of the oil.

SAE Grade	Max temperature (°C) for viscosity 15000 cP	Kinematic viscosity (cSt) at 100°C	
		Minimum	Maximum
70W	-40	4,1	<11,0
75W	-40	4,1	<13,5
80W	-26	7,0	<24,0
85W	-12	11,0	<41,0
80		7,0	
85		11,0	
90		13,5	
140		24,0	
250		41,0	

According to the SAE viscosity grade, oils are classified as follows:

a. Monograde oils.

They are characterised by having only one degree of viscosity. When accompanied by the letter W (Winter) it indicates that the oil allows easy starting of the engine in cold weather (temperature below 0°C).

According to the ambient temperature below 0°C, the SAE grade is selected with the letter W, as each of these grades is a function of the ambient temperature.

The lower the winter viscosity grade (OW, 5W, 15W, 20W, 25W, etc.) the more fluid the oil is at low temperatures, thus facilitating lubrication at start-up when the engine is cold or at low temperatures.

The other SAE grades without the letter W are used for operations in hot climates and under severe operating conditions.

b. Multigrade oils.

These oils have more than one SAE viscosity grade.

They have a high viscosity index which gives them a uniform behaviour at different temperatures, both in cold and warm climates.

For example, an SAE 10W 50 oil indicates the viscosity of the oil measured at -18 degrees and at 100 degrees, in that order. It tells us that the oil behaves like an SAE 10 when cold and like an SAE 50 when hot.

So, for greater cold protection, an oil with the lowest possible first number should be used, and for a higher degree of hot protection, an oil with a high second number should be used. The higher the summer viscosity (W20, W30, W40, W50, W60, etc.) the higher the viscosity at high temperatures, which provides greater engine protection in hot temperatures.

One of the most important advantages of multigrade oils over monograde oils is the fuel saving due to the reduction of friction in the different parts of the engine, mainly in the upper part of the piston. In addition, a multigrade lubricant is also more stable in the face of the great changes in temperature to which an engine is subjected, avoiding its decomposition due to thermal shock and being more thermally stable. For this reason, multigrade oils last longer than monograde oils, as well as extending the life of the equipment.

· Winter Viscosity Grade Requirements:

- Low temperature start-up
- Ease of pumping
- Minimal viscosity at high temperatures

· Summer Viscosity Grade Requirements:

- Minimal viscosity at high temperatures
- High temperature/high shear stress viscosity The SAE viscosity grade is not a measure of the quality of the oil but gives an indication of the correct application of the lubricant.

If the expected outside temperature is lower than	Typical SAE viscosity grades for passenger cars
0°C	5W20 / 5W30 / 10W30 / 10W40 / 20W50
-18°C	5W20 / 5W30 / 10W30 / 10W40
Below -18°C	5W20 / 5W30

ISO classification

Viscosity classification of oils, using the Centistoke (cSt) at 40°C as the unit of measurement.

This system classifies only industrial oils and makes it possible to quickly and accurately find the viscosity equivalent of an oil in another brand without fear of movement.

Industrial lubricants are classified by viscosity into 18 grades according to a system specified by ISO (International Organisation for Standardisation). Each grade covers a range of kinematic viscosities measured in cSt at 40°C. The mid-point viscosity of each grade is approximately 50 % higher than that of the preceding grade.

ISO Grade	Kinematic viscosity mid-point (cSt) at 40°C	Viscosity Limits kinematic (cSt) at 40°C	
		Minimum	Maximum
2	2,2	1,98	2,42
3	3,2	2,88	3,52
5	4,6	4,14	5,06
7	6,8	6,12	7,48
10	10,0	9,00	11,0
15	15,0	13,5	16,5
22	22,0	19,8	24,2
32	32,0	28,8	35,2
46	46,0	41,4	50,6
68	68,0	61,2	74,8
100	100,0	90,0	110,0
150	150,0	135,0	165,0
220	220,0	198,0	242,0
320	320,0	288,0	352,0
460	460,0	414,0	506,0
680	680,0	612,0	748,0
1000	1000,0	900,0	1100,0
1500	1500,0	1350,0	1650,0

API Classification

Classification system based on the quality level of the product. The API (AMERICAN PETROLEUM INSTITUTE) is a technical and trade organisation representing petroleum product manufacturers in the USA. Through partnership with the SAE (SOCIETY OF AUTOMOTIVE ENGINEERS) and ASTM (AMERICAN SOCIETY FOR TESTING MATERIALS) they have developed various tests to correlate to everyday use.

Use: Automotive oils.

Petrol engine oils (S)

The API classifies them with 2 letters, the first letter indicates the type of engine, in this case a petrol engine, and the second, following the alphabetical order, is in accordance with the technological advance of the engines. The classification is as follows:

SA	Petrol engines manufactured before 1930. Automotive oils composed solely of the lubricant base. Contains no additives. DESIGNATION OUT OF SERVICE.
SB	Petrol engines manufactured before 1951 Automotive oils composed of the lubricant base and anti-rust and anti-corrosion additives. DESIGNATION OUT OF SERVICE.
SC	Petrol engines manufactured before 1967. Meets lubrication requirements for engines manufactured between 1964 and 1967. DESIGNATION OUT OF SERVICE.
SD	Petrol engines manufactured before 1971. Meets lubrication requirements for engines manufactured between 1968 and 1971 DESIGNATION OUT OF SERVICE.
SE	Petrol engines manufactured before 1979. Meets lubrication requirements for engines manufactured between 1972 and 1979 DESIGNATION OUT OF SERVICE.
SF	Petrol engines manufactured before 1988. Meets lubrication requirements for engines manufactured between 1980 and 1988 DESIGNATION OUT OF SERVICE.
SG	Petrol engines manufactured before 1993. Meets lubrication requirements for engines manufactured between 1989 and 1993 DESIGNATION OUT OF SERVICE.
SH	Petrol engines manufactured before 1996. Meets lubrication requirements for engines manufactured between 1994 and 1996 DESIGNATION OUT OF SERVICE.
SJ	Petrol engines manufactured before 2001.
SL	Petrol engines manufactured before 2004.
SM	Petrol engines manufactured before 2010.
SN	Petrol engines manufactured from 2011 onwards. Designed to provide improved high temperature deposit protection for pistons, tighter sludge control and sealing compatibility. API SN with Resource Conserving matches ILSAC GF-5 by combining the performance of API SN with improved fuel economy, turbocharger protection, emission control system compatibility and protection of engines running on fuels containing ethanol up to E85.
SP	SP is the API's newest service category. And applies to those heavier viscosity grades like 10W40 and 20W50. API SP is fully backwardcompatible with previous API service categories, including API SN PLUS, SN, SM, SL or SJ.

Diesel engine oils (C)

The API classifies them with two letters. The first (C) indicates the type of engine, in this case Diesel, and the second the conditions under which the engine operates.

CA	Naturally aspirated diesel engines. Minimal protection against corrosion, wear and deposits. DESIGNATION OUT OF SERVICE.
CB	Naturally aspirated diesel engines For diesel engines which are subjected to moderate duty (trucks, buses, etc.) and use good quality fuel. DESIGNATION OUT OF SERVICE.
CC	Naturally aspirated, turbocharged or supercharged diesel engines. Moderate to severe engine conditions. Provides protection against corrosion, rust and deposit formation. DESIGNATION OUT OF SERVICE.
CD	Naturally aspirated, turbocharged or supercharged diesel engines, which require increased and effective control of deposits and wear. DESIGNATION OUT OF SERVICE.
CD - II	Two-stroke diesel engines requiring effective wear and deposit control. DESIGNATION OUT OF SERVICE.
EC	Turbocharged or supercharged diesel engines for severe duty. Control of oil consumption and thickening, deposit and wear. Aimed at multigrades. DESIGNATION OUT OF SERVICE.
CF	Naturally aspirated, turbocharged or supercharged diesel engines, which can use diesel with different sulphur contents. Effective control of piston deposits, wear and corrosion in bearings. Replaces CD level. DESIGNATION OUT OF SERVICE.
CF - 2	Two-stroke diesel engines requiring effective control of ring and cylinder wear and deposit formation. Replaces CD - II level. DESIGNATION OUT OF SERVICE.
CF - 4	Turbocharged or supercharged diesel engines for severe service, especially on-road. They replace the CE level with better control of oil consumption and piston deposit formation. DESIGNATION OUT OF SERVICE.
GC - 4	Diesel engines for extreme service, both on-road - low sulphur content: 0.05% p - and off-road - maximum sulphur content 0.5% - Effective control of high temperature deposits, wear, corrosion, foaming, oil oxidation and soot accumulation. DESIGNATION OUT OF SERVICE.

CH - 4	High-speed, four-stroke cycle diesel engines designed to meet 1998 exhaust emission standards. They are specifically composed for use with diesel fuels ranging in sulphur content up to 0,5 % by weight. Can be used in place of CD, CE, CF-4 and CG-4 oils.
IQ - 4	High-speed, four-stroke cycle diesel engines designed to meet the 2004 exhaust emission standards implemented in 2002. They are formulated to maintain engine durability where exhaust gas recirculation (EGR) is used and are intended for use with diesel fuels ranging in sulphur content up to 0,5 % by weight. They may be used in place of CD, CE, CF-4, CG-4 and CH-4 oils. Some CI-4 oils may also qualify for CI-4 PLUS designation.
CJ - 4	High-speed, four-stroke cycle diesel engines designed to meet 2010 model year on-road and Tier 4 off-road exhaust emission standards, as well as for previous model year diesel engines. These oils are formulated for use in all applications with diesel fuels ranging in sulphur content up to 500 ppm (0,05 % by weight). However, the use of these oils with more than 15 ppm (0.0015 % by weight) of sulphur fuel may affect the durability of the exhaust aftertreatment system or the oil drain interval. API CJ-4 oils exceed the performance criteria of API CI-4 oils with CI-4 PLUS, CI-4, CI-4, CH-4, CG-4 and CF-4, and can effectively lubricate engines requiring those API service categories.
CK - 4	High-speed, four-stroke cycle diesel engines designed to meet 2017 model year on-road and Tier 4 off-road exhaust emission standards, as well as for previous model year diesel engines. These oils are formulated for use in all applications with diesel fuels ranging in sulphur content up to 500 ppm (0,05 % by weight). However, the use of these oils with more than 15 ppm (0.0015 % by weight) of sulphur fuel may affect the durability of the exhaust aftertreatment system or the oil drain interval. These oils are especially effective in maintaining emission control system durability when particulate filters and other advanced after-treatment systems are used. They are designed to provide enhanced protection against oil oxidation, viscosity loss due to oil shear and aeration, as well as protection against catalyst poisoning, particulate filter blockage, engine wear, piston deposits, low or high temperature property degradation, and soot-related viscosity increase. API CK-4 oils exceed the performance criteria of API CJ-4, CI-4 with CI-4 PLUS, CI-4 and CH-4 oils, and can effectively lubricate engines requiring those API service categories.

Example: A lubricating oil is marked SAE 50 and API CF/SF. This means that it has a viscosity grade (Unigrade) SAE 40 and is suitable for lubricating supercharged and turbocharged Diesel (CD) engines as well as gasoline (SF) engines.

Gear Oils (GL)

The API established a set of specifications to determine the quality level of automotive gear oils. These specifications are based on the type of unit that makes up the gears and the degree of anti-wear protection required.

For identification purposes, these specifications consist of two letters (GL: Gear Lubrication) and a number. The two letters indicate that the oil is for mechanical transmissions and the number indicates the quality level, 1 being the lowest.

GL-1	Manual transmissions operating under light conditions. Mineral oils are used where friction modifiers or extreme pressure additives are not permitted. DESIGNATION OUT OF SERVICE.
GL-2	Worm gears operating under load conditions at temperature and sliding speeds, where GL-1 type lubricants do not perform satisfactorily. DESIGNATION OUT OF SERVICE.
GL-3	Manual transmissions and differentials with bevel gears operating under moderate load and speed conditions, where a GL-2 oil will not perform satisfactorily. The level of service is lower than GL-4. DESIGNATION OUT OF SERVICE.
GL-4	Manual transmissions and differentials with bevel gears operating under moderate load and speed conditions, where a GL-2 oil will not perform satisfactorily. The level of service is lower than GL-4. DESIGNATION OUT OF SERVICE.
GL-5	Manual transmissions and differentials with hypoid gearing of passenger cars and other similar equipment operating under high-speed low-torque and low-speed high-torque conditions. Lubricants for this service contain high activity extreme pressure additives and additives that protect against scuffing.
GL-6	Hypoid differentials with large crown and pinion gear wheelbases DESIGNATION OUT OF SERVICE.
MT-1	Non-synchronised manual gearboxes operating in very severe service (Buses and heavy-duty trucks). They provide protection against the combination of thermal degradation, component wear and oil seal deterioration, which is not provided by lubricants that meet API GL-4 and API GL-5 requirements only. Less oxidation and longer life than a GL-4 or GL-5.

ILSAC classification

The INTERNATIONAL LUBRICANT STANDARDISATION AND APPROVAL COMMITTEE (ILSAC) is an organisation founded in 1992 that develops minimum performance standards for gasoline engine oils. ILSAC standards, denoted by the terminology ILSAC GF-x, are based on API service categories and bring additional performance requirements, e.g. fuel economy improvements and restrictions on viscosity grades that can claim to meet an ILSAC standard.

ILSAC uses the API Engine Oil Licensing and Certification System (EOLCS) which is a voluntary licensing and certification programme that authorises engine oil marketers who meet specified requirements to use the API Engine Oil Quality Marks.

GF-1	Corresponding to an API SH oil. In order to obtain the "Energy Conserving" designation and to be able to promote it together with the API symbol, an oil of a certain viscosity had to provide a fuel saving of 1.5% compared to another oil of the same viscosity but which did not achieve this Energy Conserving certification. Fuel economy improvements are always measured against a reference oil. DESIGNATION OUT OF SERVICE.
GF-2	Corresponding to an API SJ oil replacing GF-1. This licence required an additional fuel economy of 0.5% at viscosities of 0.5%. 10W30 and 1.1% in SAE 5W30. DESIGNATION OUT OF SERVICE.
GF-3	Corresponding to an API SL oil, This licence reduces the Phosphorus and other anti-wear content compared to its predecessor and improves the oil's share of emissions. It improves oil stability at high temperatures (higher Viscosity indexes) and carbon deposits. DESIGNATION OUT OF SERVICE.
GF-4	It corresponds to an API SM oil, although during the period of API SM's emergence, some API SJ lubricants were ILSAC GF-4 compliant. DESIGNATION OUT OF SERVICE.
GF-5	The ILSAC GF-5 standard is the most recent (2010). It corresponds to an API SN oil. Improved high-temperature deposit protection for pistons and turbochargers, tighter sludge control, improved fuel economy, improved emission control system compatibility, sealing compatibility and protection of engines running on fuels containing ethanol up to E85.
GF-6	GF-6 will replace GF-5 category and is divided into two sub-categories: - GF-6A: Fully backward-compatible for older vehicles that previously used GF-5 oils. - GF-6B: Covers the new, lower-viscosity oil grade OW-16 and will NOT be backward-compatible in most cases (unless specified by the OEM).

ACEA Classification

ACEA (ASSOCIATION OF EUROPEAN AUTOMOBILE BUILDERS) tests are based on laboratory and dynamometer tests. Some of these tests are the same as those used by the API, others are not.

The parameters tested are:

- Wear protection
- Engine cleaning
- Oxidation resistance
- Resistance to increase in viscosity (due to thickening by soot)
- Shear stability (resistance of the oil to high stresses)
- Mechanics
- High temperature viscosity and high shear strength
- Elastomer compatibility
- Tendency to foam formation

Each product is designated by a code comprising:

- A letter to define the CLASS (e.g. C) and
- A number to define the CATEGORY (e.g. C1).

In addition, for industrial use, each sequence has a two-digit number to identify the YEAR of application of that severity level (e.g. A3/B4-16).

Class

Indicates oil intended for a general type of engine - currently available:

- A/B: Petrol and light diesel engines
- C: Catalyst compatible oils for petrol and light diesel engines with aftertreatment devices.
- E: Heavy diesel engines

Additional classes may be added in the future if, for example, natural gas engines require oil characteristics that cannot be easily incorporated into existing classes.

Category

Indicates different purposes or applications within that general class, related to some aspect(s) of the performance level of the oil.

The specific applications of each sequence are the responsibility of each engine manufacturer for their own vehicles and engines. Oils of one category may also meet the requirements of another category, but some engines may only be suitable for oils of one category within a class.

Number

ACEA Sequence year numbers are intended for industrial use only and indicate the year of application of that severity level for the particular category. A new year number will indicate, for example, that a new test, parameter or limit has been incorporated into the category to satisfy new or updated performance requirements, while still being compatible with existing applications. An update must always satisfy the applications of the previous edition. Otherwise, a new category will need to be created.

Petrol (A)/ Light Diesel (B) Engine Oil

A1/B1	Standard quality. Fuel saver.	0/5W20/30	Utility and small vehicles urban. They may not be suitable for some engines.
A3/B3	Standard quality. Without fuel economy requirements.	0/15/20W/30/40/50	Low-performance petrol engines performance and diesel with indirect injection.
A3/B4	High level of quality and performance. Synthetic and semi-synthetic oils.	0/5/10W/20/30/40	All high-performance engines with long oil change intervals, petrol and diesel with direct injection.
A5/B5	Highest level of quality and performance. Synthetic, fuel-saving oils fuel.	0/5W20/30	High performance vehicles with long oil change intervals, petrol and diesel with direct injection. These lubricants may not be suitable for some engines.

Light Diesel Engine Oils with particulate filters (C)

C1	Very high quality level. Low ash content and fuel saving.	0/5W20/30	Compatible with aftertreatment systems and particulate filters (DPF, FAP, CRT, CAT). May not be suitable for engines requiring high viscosity.
C2	Very high quality level. Low ash content and fuel saving.	5/10/15W/30/40	Compatible with aftertreatment systems and particulate filters (DPF, FAP, CRT, TWC, CAT). May not be suitable for some engines.
C3	Very high quality level. Low ash content and fuel saving.	0/10/15W/30/40	Compatible with aftertreatment systems and particulate filters (DPF, FAP, CRT, TWC, CAT). May not be suitable for some engines.
C4	Very high quality level. Low ash content and fuel saving.	0/5W20/30	Compatible with aftertreatment systems and particulate filters (EGR, DPF, FAP, CRT, CAT). Suitable for all engine types.
C5	Stable, permanent quality engine oil with medium SAPS level to further improve fuel economy.	0/5W20/3	Compatible with catalytic converters at extended change intervals in vehicles with all types of modern aftertreatment systems and high-performance DI petrol and diesel passenger car and light van engines designed to be suitable and approved by OEMs for the use of low viscosity oils with a minimum HTHS viscosity of 2.6 mPas.

Heavy Diesel Engine Oils (E)

E4	Performance Lubricant Ultra-high. Extremely high stable, maintaining its viscosity grade. They boost fuel economy, provide better piston cleanliness, better antiwear properties and better soot control than E3.	10W-40	Heavy-duty diesel engines with high power output under very severe operating conditions complying with Euro I, Euro II, Euro III and Euro IV standards. Suitable for engines without particulate filter, some engines equipped with EGR and some equipped with SCR for NOx reduction. They allow a considerable lengthening of the drain periods according to the manufacturer's recommendations.
E6	Highly stable lubricant for remain with the SAE grade. Provide excellent control of cleaning of the pistons, wear, soot management, and lubricant stability. Lubricant with levels of sulphate ash, phosphorus, and low sulphur (Low SAPS).	10W-40	Heavy-duty, high-performance diesel engines under extremely demanding operating conditions which comply with Euro I, Euro II, Euro III and Euro IV standards. Suitable for engines with EGR with or without particulate filter (strongly recommended for engines with DPF particulate filter) and for engines equipped with SCR. For use in low sulphur diesel fuels (≤ 50 ppm). For significantly extended drain periods following manufacturer's recommendations.
E7	Highly stable lubricant for remain with the SAE grade. Provide effective control of the cleaning of the pistons, the liner polishing and lubricant stability, excellent control of turbocharger wear and deposits, soot management. Contains many elements of API CI4 specification.	5/10/15W-40	High power diesel engines under very severe operating conditions complying with Euro I, Euro II, Euro III and Euro IV standards. Suitable for engines without particulate filter and for most engines with EGR and SCR. For significantly extended drain periods following manufacturer's recommendations.
E9	Lubricants with low levels of sulphated ash, phosphorus and sulphur (Low SAPS). It contains many elements API CJ-4 specification.	5/10/15W/40/30	Engines with after-treatment system or DPF, EGR and/or SCR aftertreatment, in combination with low sulphur fuel. Prolonged drainage periods. For Euro VI engines.



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