

I am protected by **AISIN**
Japanese Premium Quality Lubricants



0W-30 SN/CF 0W-40 SN/CF 5W-30 SN/CF 5W-40 SN/CF

FULLY - PAO & ESTER



0W-20 SN Eco 5W-30 Eco 5W-40 5W-30 SN/CF 5W-40 SN/CF 5W-50 SN/CF

FULLY SYNTHETIC



10W-30 SN/CF NGV 15W-40 SL 10W-40 SN/CF Eco 10W-30 SN/CF 20W-50 SN/CF Eco 15W-40 CI-4/SL 15W-40 CI-4/SL

SEMI SYNTHETIC

AISIN PAO & ESTER
Premium Fully-Synthetic Engine Oil

- 100% Poly-Alpha-Olefin (PAO) Group IV base oil formulation synthetic oil which is mainly use for Aircraft engine oil.
- 100% Ester Based synthetic Group V base oil which is use to balance the effect of seals, solubilize additives and improve energy efficiency through higher lubricity.
- PERFORMANCE STANDARD: SN/CF



DESCRIPTION

Premium performance, multi-grade motor oil formulated from selected synthetic base fluids and race-proven additive technology for use in passenger car and light truck gasoline engines and passenger car diesel engines under all operating conditions.

WIDE RANGE & MULTI-PURPOSE APPLICATIONS

Naturally aspirated Gasoline engines, LPG and Diesel engines in passenger cars, RV and SUVs (Sport Utility Vehicles), light truck gasoline and diesel engines (Four-stroke gasoline engines in Motorcycles and portable power equipment where the manufacturer recommends conventional passenger car motor oils).

SUPERIOR PROPERTIES

SAE Grade	0W-30	0W-40	5W-30	5W-40
Density, kg/L @15°C	0.755	0.804	0.803	0.833
Kinematic Viscosity, mm ² /s @ 40°C	60.22	85.42	60.23	70.45
Kinematic Viscosity, mm ² /s @ 100°C	10.87	14.94	11.65	14.57
Viscosity Index	176	193	173	177
Pour Point °C	-48	-54	-45	-45
Flash Point °C	211	210	222	221
Package (Liters)	1L, 4L, 200L	1L, 4L, 200L	1L, 4L, 200L	1L, 4L, 200L

UNIQUE ADVANTAGES

Poly-Alpha-Olefin (PAO)

PAOs, synthetic base fluids manufacture by carefully controlled chemical reaction of alphaolefin, have extreme stability and high performances in cold property and robustness, mainly used for the most premium lubricant products.

Ester

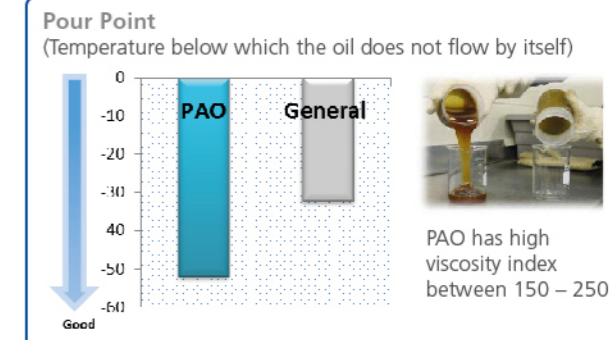
It use to balance the effect of seals, solubilize additives and improve energy efficiency through higher lubricity.

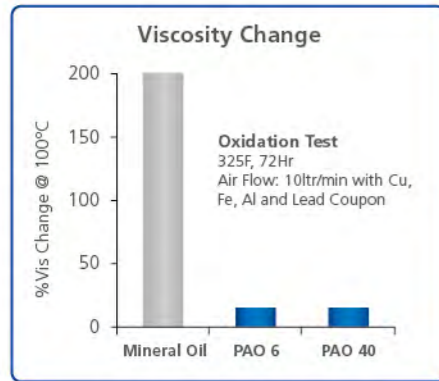
Cold Property

With their excellent cold property, PAOs can be used in extremely cold ambient temperature without oil change.

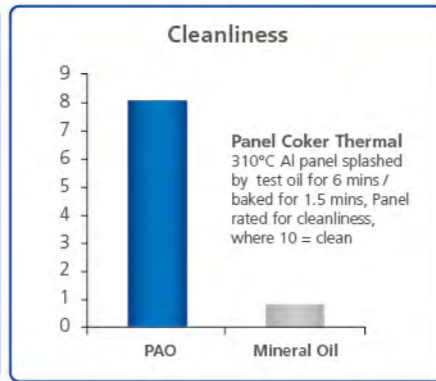
Robustness

PAOs have excellent anti-oxidation stability and low volatility, which allows the oil to maintain its original properties longer and significantly reduced sludge extending the oil drain interval.

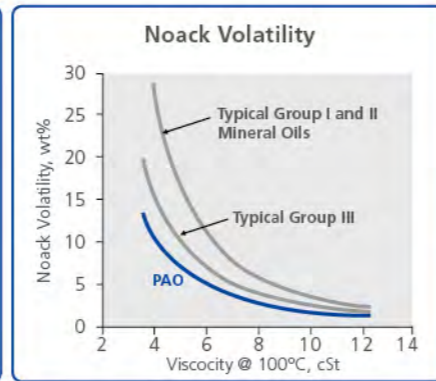




Viscosity increased at high temperature is significantly less.



Cleanliness in high temperature is much higher than others.



Low volatility makes oil to be used in longer time.



Mercedes C220: 96,540km



Mercedes C220: 96,540km

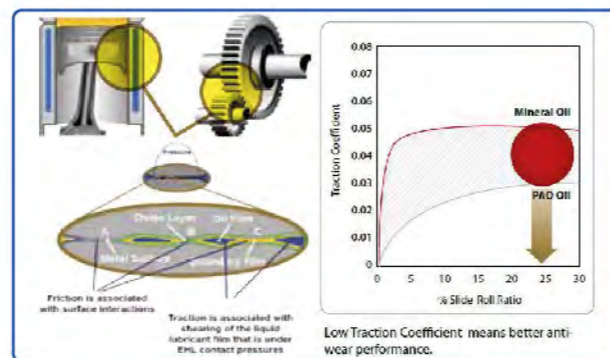


Mercedes C220: 193,080km

Anti-Wear
PAOs have excellent anti-wear performance in extreme pressurized friction thanks to their solid molecular structure.

Field Test
Field test results shows that AISIN PAO+Ester products, formulated with premium additives approved from API, ACEA and OEM recent specification, have excellent performance in low sludge and anti-wear characteristics.

- Customer Benefits**
- Maximizes engine life
 - Maximizes power and performance
 - Low oil consumption
 - Longer equipment life
 - Lower impact emissions



AISIN High Performance Gasoline Engine Oil

• PERFORMANCE STANDARD: SN/CF



DESCRIPTION

High Performance additives systems and leading edge viscosity index improver by meeting the requirement of current advances top-tier engine oil grade of API SN and ISLAC GF-5. It is optimized to provide complete engine oil performance especially for fuel efficiency, reducing friction loss and durability.

WIDE RANGE & MULTI-PURPOSE APPLICATIONS

All passenger car and light truck four-cycle gasoline engines and cards equipped with DOHC, EFI and VVT, both naturally aspirated and turbocharged.

SUPERIOR PROPERTIES

	Fully Synthetic	Fully Synthetic	Fully Synthetic	Semi Synthetic	Semi Synthetic
SAE Grade	5W-30	5W-40	5W-50	10W-30	10W-40
Density, kg/L @15°C	0.8526	0.8527	0.8521	0.8623	0.8646
Kinematic Viscosity, mm ² /s @ 40°C	59.6	83.91	113.8	64.89	105.1
Kinematic Viscosity, mm ² /s @ 100°C	10.24	14.5	18.81	10.13	15.29
Viscosity Index	162	183	184	144	160
Pour Point °C	-39	-42	-42	-42	-39
Flash Point °C	220	216	218	216	210
Package (Liters)	1L, 3L, 4L, 5L, 200L	1L, 4L, 5L, 200L	1L, 4L, 200L	1L, 3L, 4L, 5L, 200L	1L, 3L, 4L, 200L

Customer Benefits

- Fuel economy
- Engine power and maintainability
- Oil drainage interval
- All-temperature wear resistance

Performance Standards

- 5W-30 : SN/GF-5/RC/CF
- 5W-40 : SN/CF
- 5W-50 : SN/CF
- 10W-30 : SN/GF-5/RC/CF
- 10W-40 : SN/CF



AISIN GREENPower High Performance Diesel Engine Oil for Hybrid and Eco-Car

• PERFORMANCE STANDARD: SN / GF-5 / RC/CF

DESCRIPTION

High Performance additives systems and leading edge viscosity index improver by meeting the requirement of current advances top-tier engine oil grade of API SN and ISLAC GF-5. Formulated from synthetic technology base oil and it is optimized to provide complete engine oil performance especially for fuel efficiency, reducing friction loss and durability.

WIDE RANGE & MULTI-PURPOSE APPLICATIONS

All passenger cars and light truck four-cycle gasoline engines both naturally aspirated and turbocharged. It is suitable for both Hybrid and Eco-Car application. Gas-fuel (natural gas and LPG) spark ignition engines where conventional passenger car motor oils are commended.

UNIQUE ADVANTAGES

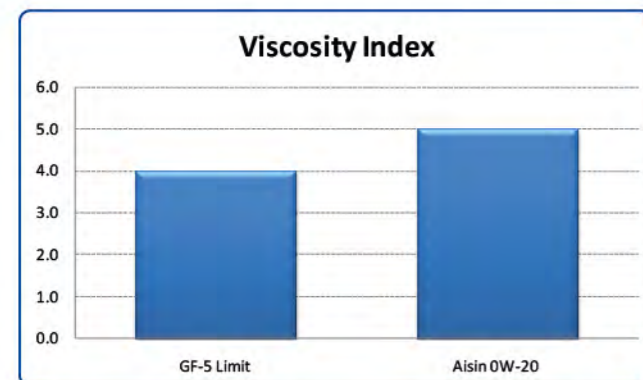
100% synthetic VHVI (Very High Viscosity Index) base oil formulated with premium additives which meets the requirements of API SN grade specification. They have excellent cold temperature performance and fuel efficiency thanks to their enhanced and anti-oxidation, cleanliness and catalyst protection properties.

SUPERIOR PROPERTIES

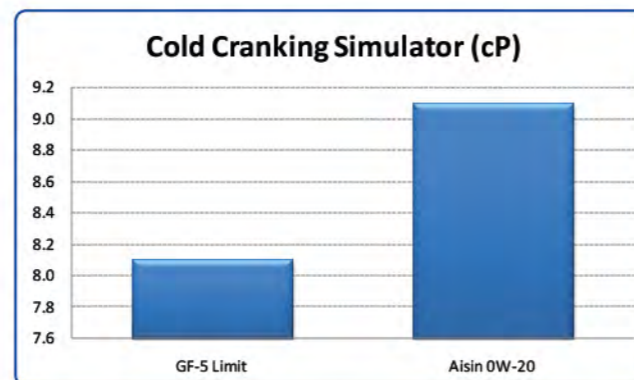
SAE Grade	0W-20
Density, kg/L @15°C	0.8493
Viscosity, mm ² /s @ 40°C	42.17
Viscosity, mm ² /s @ 100°C	8.195
Viscosity Index	169
Pour Point °C	-45
Flash Point °C	238
Package (Liters)	1L, 4L, 200L

Customer Benefits

- Extra Fuel Economy Saver
- Ultra Cleaning and Long Life Power
- Superior Cold Performance
- Saves on maintenance costs



Improved piston cleanliness protects blow-by gas to increase engine power.



High performance in engine sludge increase engine durability and anti-wear, which provides benefits in car maintenance.

AISIN GREENPower Advanced Technology CNG Engine Oil for Passenger Car

• PERFORMANCE STANDARD: API SL



DESCRIPTION

Premium performance, highly shear-stable, multi-grade CNG engine oil for use in passenger car, RV (SUV) car and CNG Taxi engines operating under the most severe conditions. Formulated from High Quality base oil and the latest technology additives, it is optimized to provide complete engine protection against: Starting friction / Heat stress / Engine deposits

WIDE RANGE & MULTI-PURPOSE APPLICATIONS

- CNG engine of passengers cars
- RV Car and SUV car
- Taxi using compressed natural gas (CNG), Dual Fuel-Engine

SUPERIOR PROPERTIES

SAE Grade	Semi Synthetic	Semi Synthetic
	5W-30	15W-40
Density, kg/L @15°C	0.8542	0.865
Kinematic Viscosity, mm ² /s @ 40°C	61.3	102.9
Kinematic Viscosity, mm ² /s @ 100°C	10.17	14.99
Viscosity Index	161	148
Pour Point °C	-45	-45
Flash Point °C	250	236
Package (Liters)	1L, 4L, 200L	1L, 4L, 200L

Customer Benefits

- Maximizes engine life through superior wear and deposit control under all operating conditions
- Provides significant fuel savings by reducing frictional losses.
- Protects against start-up wear in cold conditions through excellent low-temperature fluidity.
- Maintains power and economy by minimizing wear in even the most sophisticated valve train mechanisms, including those with variable valve timing.
- Helps to preserve emissions and fuel economy performance by protecting converters and oxygen sensors evaporation.



AISIN GREENergy Eco-Friendly Gasoline Engine Oil for vehicle fitted with Diesel Particulate Filter (DPF)

- PERFORMANCE STANDARD:
SM/CF, ACEA 3; CJ-4/SM, ACEA 9

DESCRIPTION

High Performance additives systems and leading edge viscosity index improver by meeting the requirement of current advances top-tier engine oil grade of API SN and ISLAC GF-5. It is optimized to provide complete engine oil performance especially for fuel efficiency, reducing friction loss and durability.

WIDE RANGE & MULTI-PURPOSE APPLICATIONS

All passenger car and light truck four-cycle gasoline engines and cards equipped with DOHC, EFI and VVT, both naturally aspirated and turbocharged. It is highly recommended for vehicle fitted with Diesel Particulate Filter (DPF) features.

SUPERIOR PROPERTIES

SAE Viscosity	Fully Synthetic (PAO+Ester) 15W-40 (CJ-4/SM)	Semi Synthetic 10W-30	Semi Synthetic 15W-40 (CJ-4/SM)
Density, kg/L @15°C	0.8689	TBC	0.8681
Kinematic Viscosity, mm ² /s @ 40°C	120.8	TBC	117.2
Kinematic Viscosity, mm ² /s @ 100°C	16.11	TBC	16.07
Viscosity Index	142	TBC	147
Pour Point °C	-39	TBC	-39
Flash Point °C	248	TBC	242
Base Number, mg KOH/g	10.08	TBC	9.6
Package (Liters)	5L, 20L, 200L	5L, 200L	4L, 5L, 18L, 200L

Customer Benefits

- Fuel economy
- Engine power and maintainability
- Oil drainage interval
- All-temperature wear resistance



AISIN High Performance Diesel Engine Oil

- PERFORMANCE STANDARD:
SF/CF, CF-4/SG

DESCRIPTION

High performance, multi-grade diesel engine oil specifically designed to lubricate a wide range of diesel and gasoline engines requiring API CF-4 performance lubricants. Formulated in synthetic technology base oil ad high performance additives, optimize to provide outstanding protection and lubricity in all passenger car and light truck gasoline engines.

WIDE RANGE & MULTI-PURPOSE APPLICATIONS

All passenger car and light truck four-cycle gasoline engines both naturally aspirated and turbocharged. Mixed fleets of diesel engines (high-speed, four-stroke, naturally aspirated and turbocharged), commercial road transport and small diesel engines in marine service (e.g. fishing, river transport etc.)

SUPERIOR PROPERTIES

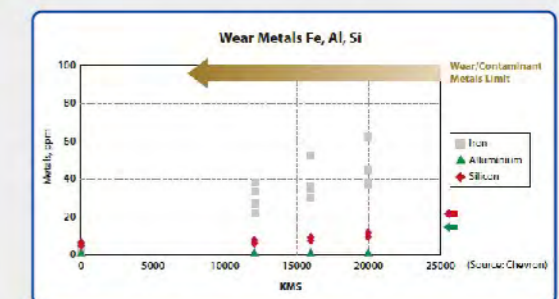
SAE Viscosity	20W-50 (CF-4/SG)	20W-50 (SF/CF)
Density, kg/L @15°C	0.867	0.871
Kinematic Viscosity, mm ² /s @ 40°C	173.5	150.6
Kinematic Viscosity, mm ² /s @ 100°C	20.29	18.96
Viscosity Index	136	126
Pour Point °C	-33	-33
Flash Point °C	262	236
Base Number, mg KOH/g	9	-
Package (Liters)	1L, 4L, 6L, 20L, 200L	1L, 3L, 4L, 5L, 6L, 20L, 200L

UNIQUE ADVANTAGES

AISIN High Performance Diesel engine oil maintains power output by providing outstanding deposit control. With the anti-wear additive system, AISIN Diesel engine oil reduces wear in severe service by forming a protective layer on all metal contact surfaces.

Customer Benefits

- Maximum power output
- Reduced maintenance costs





AISIN High Performance Diesel Engine Oil

• PERFORMANCE STANDARD: CI-4/SL

DESCRIPTION

High performance, multi-grade, heavy-duty diesel engine oil specifically designed to lubricate a wide range of diesel and gasoline engines requiring API CI-4, SL, ACEA E7 performance lubricants operating under the most severe conditions.

WIDE RANGE & MULTI-PURPOSE APPLICATIONS

Wide range of mixed fleets of European, North American diesel engine (high speed, four stroke, turbocharged naturally aspirated) including both old and new equipment of commercial road transport (heavy trucks, buses, Stop-and-go vehicles, off-highway vehicles); Heavy construction equipment's including excavator, wheel loader, forklift and dozer; Small diesel engines in marine service; Generator sets and Powershift transmissions.

SUPERIOR PROPERTIES

	Fully Synthetic	Semi Synthetic	Semi Synthetic
SAE Viscosity	10W-40	15W-40	15W-40 (CF-4/SG)
Density, kg/L @15°C	0.8612	0.8748	0.8694
Kinematic Viscosity, mm ² /s @ 40°C	104.8	111.8	112.5
Kinematic Viscosity, mm ² /s @ 100°C	15.58	14.76	14.98
Viscosity Index	158	136	138
Pour Point °C	-42	-33	-39
Flash Point °C	226	240	252
Base Number, mg KOH/g	10.23	9.45	10.2
Package (Liters)	1L, 4L, 5L, 6L, 20L, 200L	1L, 4L, 5L, 6L, 20L, 200L	1L, 4L, 5L, 6L, 20L, 200L

UNIQUE ADVANTAGES

AISIN high performance diesel engine oil has excellent performance for sustaining durability with EGR system. It protects sludge formed by sulfur and fuel combustion without the need for overly shortened drain intervals.

Customer Benefits

- Minimize fleet maintenance costs
- Minimize fleet operating costs
- Extends engine life to overhaul



AISIN High Performance Gear Oil

• PERFORMANCE STANDARD: GL-5 / MIL-L-2105D

DESCRIPTION

High-performance, multipurpose, thermally stable, EP automotive gear lubricant. GL-5 designates the type of service characteristic of gears, particularly hypoids in automotive axles under high-speed and/or low-speed, high-torque conditions. Lubricants qualified under U.S. Military specification MIL-L-2105D (formerly MIL-L-2105C), MIL-PRF-2105E and SAE J2360 satisfy the requirements of the API GL-5 service designation.

WIDE RANGE & MULTI-PURPOSE APPLICATIONS

Recommended for automotive hypoid gear applications requiring lubricants meeting MIL-PRF-2105E, MIL-L-2105D, MIL-L-2105C, MIL-L-2105B, Service GL-5 or where EP, multi-purpose or hypoid type gear oils are specified. It is also recommended where loading is severe and maximum gear protection is required. 'Clean gear' technology makes it particularly suitable where gear oil temperatures are high. Not recommended for manual transmission and transaxles where the manufacturer specifies APL GL-4 (mid-EP) lubricants, or where the manufacturer advises against the use of API GL-5 (multipurpose, hypoid) lubricants.

SUPERIOR PROPERTIES

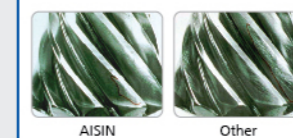
SAE Viscosity	80W-90 (Non-LSD)	80W-90 (LSD)	85W-140 (Non-LSD)
Density, kg/L @15°C	0.8612	0.8794	0.8968
Kinematic Viscosity, mm ² /s @ 40°C	132.1	144.1	313.5
Kinematic Viscosity, mm ² /s @ 100°C	14.51	14.6	24.85
Viscosity Index	110	110	101
Pour Point °C	-33	-36	-21
Flash Point °C	208	232	210
Package (Liters)	1L, 4L, 20L, 200L	4L, 20L, 200L	1L, 4L

UNIQUE ADVANTAGES

High performance, thermally stable, EP automotive gear lubricant (API GL-5, MIL-L-2105D, SAE 80W-90, 85W-140)

Very Good Anti-wear Performance

High quality base oil and additive provide good resisting gear wear and scuffing under severe conditions



Outstanding thermal & oxidation stability

GSC product is superior to other products in oxidation test under 150°C, 96 hours. (Oxidation Test Method : JIS K2514)

