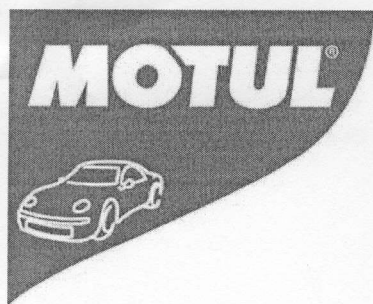




HYBRID 0W-8



Fuel Economy Gasoline engine lubricant

100% Synthetic

TYPE OF USE

100% Synthetic "Fuel economy" engine oil specially designed for Hybrid Electric Vehicles (H.E.V) and Plug-in Hybrid Electric Vehicles (P.H.E.V) fitted with recent gasoline engines, turbocharged or naturally aspirated, direct or indirect injection, designed to use SAE 0W-8 oil with very low friction and very low HTHS (High Temperature High Shear) viscosity (≥ 1.7 mPa.s).

Suitable also for battery electric vehicles (B.E.V) fitted with thermal gasoline engine used as Range Extender.

Suitable for modern gasoline engines requiring a viscosity grade SAE 0W-8 lubricant or a "Fuel Economy" lubricant in viscosity grade 8.

Compatible with catalytic converters.

This type of oil may be unsuitable for use in some engines. Refer to the owner manual if in doubt.

PERFORMANCE

RECOMMENDATIONS HONDA Hybrid gasoline engines
 TOYOTA Hybrid gasoline engines
 ...

At its latest review, SAE J300 specification related to motor oil viscosity grades, has introduced a new extremely fluid viscosity grade specifically designed for hybrid gasoline engines where fuel consumption savings in crucial.

Viscosity grade SAE 0W-8 extremely minimizes lubricant hydrodynamic friction to allow significant fuel economy benefits especially when the oil is cold but also in all temperature conditions.

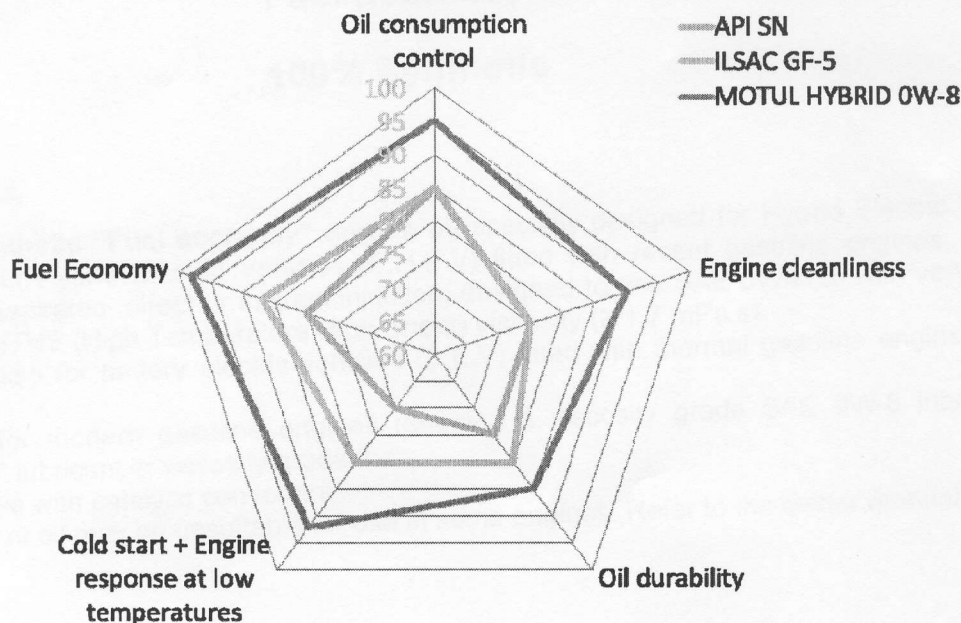
This very low viscosity grade also improves oil flow at start up, delivers faster oil pressure build up, faster rev raisings and allows reaching operating temperature faster.

MOTUL HYBRID 0W-8 is the achievement of MOTUL innovation in developing new advanced lubricants and is specially formulated to meet the specific needs of hybrid electric vehicles, such as HEV, PHEV and BEV with Range Extender, where multiples unexpected stops and starts of the Gasoline engine are involved during the different operating phases of the hybrid vehicle. This particular mode of operation of the internal combustion engine on a hybrid vehicle generates very specific constraints for the lubricant, and in this, MOTUL HYBRID 0W-8 fully meets all these requirements.

On hybrid vehicles applications, the properties of "Fuel Economy" from the lubricant are paramount but the volatility of the lubricant and therefore its ability to control the oil consumption of the internal combustion engine is also very important when using such low viscosity oil. The exclusive formulation MOTUL HYBRID 0W-8 makes it particularly resistant to high temperatures for improved control of the oil consumption.

Environment friendly, this type of oil allows fuel consumption reduction and therefore minimizes greenhouse gases (CO₂) emissions.

Compared to known criteria and requirements of the API SN and ILSAC GF-5 standards, but not yet applicable to the innovative viscosity grade SAE 0W-8, all these qualities, MOTUL HYBRID 0W-8 demonstrates them:



RECOMMENDATION

Drain interval: according to manufacturers' recommendations and tune to your own use.

MOTUL HYBRID 0W-8 can be mixed with synthetic or mineral oils.

Before use always refer to the owner manual of the vehicle.

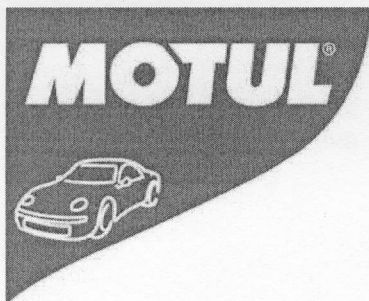
PROPERTIES

Viscosity grade	SAE J 300	0W-8
Density at 20°C (68°F)	ASTM D1298	0.842
Viscosity at 40°C (104°F)	ASTM D445	26.1 mm ² /s
Viscosity at 100°C (212°F)	ASTM D445	5.3 mm ² /s
HTHS viscosity at 150°C (302°F)	ASTM D4741	1.8 mPa.s
Viscosity index	ASTM D2270	139
Pour point	ASTM D97	-42°C / -44°F
Flash point	ASTM D92	238°C / 461°F
Sulfated ash	ASTM D874	0.89% weight
TBN	ASTM D2896	8.5 mg KOH/g

We retain the right to modify the general characteristics of our products in order to offer to our customers the latest technical development.

Product specifications are not definitive from the order which is subject to our general conditions of sale and warranty. Made in France.

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HYBRID 0W-12



Fuel Economy Gasoline engine lubricant

100% Synthetic

TYPE OF USE

100% Synthetic "Fuel economy" engine oil specially designed for Hybrid Electric Vehicles (H.E.V) and Plug-in Hybrid Electric Vehicles (P.H.E.V) fitted with recent gasoline engines, turbocharged or naturally aspirated, direct or indirect injection, designed to use SAE 0W-12 oil with very low friction and very low HTHS (High Temperature High Shear) viscosity (≥ 2.0 mPa.s).

Suitable also for battery electric vehicles (B.E.V) fitted with thermal gasoline engine used as Range Extender.

Suitable for modern gasoline engines requiring a viscosity grade SAE 0W-12 lubricant or a "Fuel Economy" lubricant in viscosity grade 12.

Compatible with catalytic converters.

This type of oil may be unsuitable for use in some engines. Refer to the owner manual if in doubt.

PERFORMANCE

RECOMMENDATIONS HONDA Hybrid gasoline engines
 TOYOTA Hybrid gasoline engines
 ...

At its latest review, SAE J300 specification related to motor oil viscosity grades, has introduced a new extremely fluid viscosity grade specifically designed for hybrid gasoline engines where fuel consumption savings in crucial.

Viscosity grade SAE 0W-12 extremely minimizes lubricant hydrodynamic friction to allow significant fuel economy benefits especially when the oil is cold but also in all temperature conditions.

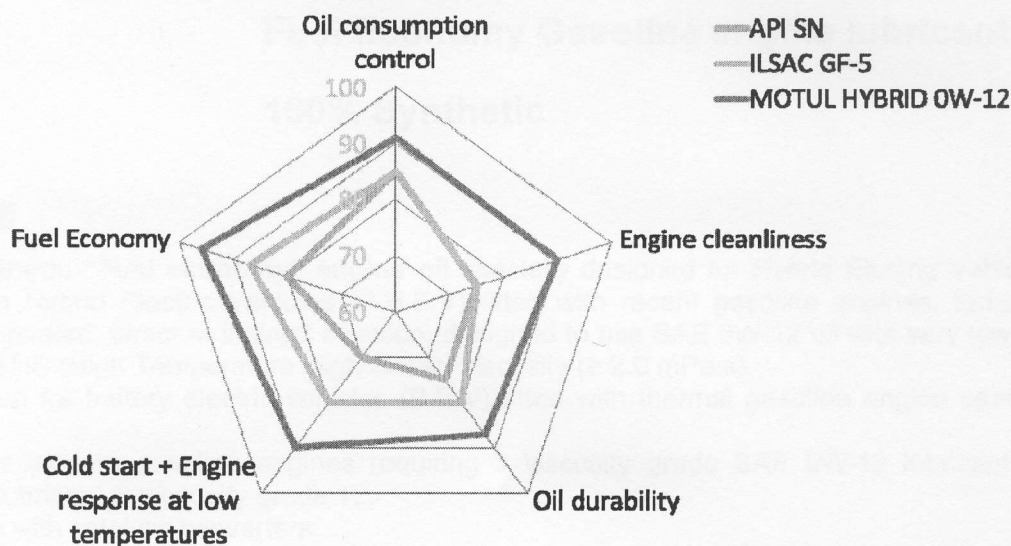
This very low viscosity grade improves oil flow at start up, delivers faster oil pressure build up, faster rev raisings and allows reaching operating temperature faster.

MOTUL HYBRID 0W-12 is the achievement of MOTUL innovation in developing new advanced lubricants and is specially formulated to meet the specific needs of hybrid electric vehicles, such as HEV, PHEV and BEV with Range Extender, where multiples unexpected stops and starts of the Gasoline engine are involved during the different operating phases of the hybrid vehicle. This particular mode of operation of the internal combustion engine on hybrid vehicle generates very specific constraints for the lubricant, and in this, MOTUL HYBRID 0W-12 fully meets all these requirements.

On hybrid vehicles applications, the properties of "Fuel Economy" from the lubricant are paramount but the volatility of the lubricant and therefore its ability to control the oil consumption of the internal combustion engine is also very important when using such low viscosity oil. The exclusive formulation of MOTUL HYBRID 0W-12 makes it particularly resistant to high temperatures for improved control of the oil consumption.

Environment friendly, this type of oil allows fuel consumption reduction and therefore minimizes greenhouse gases (CO₂) emissions.

Compared to known criteria and requirements of the API SN and ILSAC GF-5 standards, but not yet applicable to the innovative viscosity grade SAE 0W-12, all these qualities, MOTUL HYBRID 0W-12 demonstrates them:

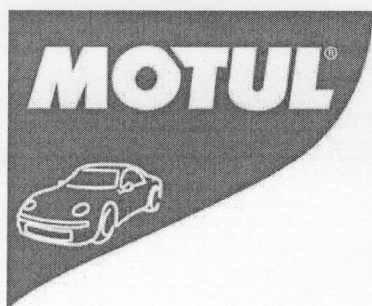


RECOMMENDATION

Drain interval: according to manufacturers' recommendations and tune to your own use.
 MOTUL HYBRID 0W-12 can be mixed with synthetic or mineral oils.
Before use always refer to the owner manual of the vehicle.

PROPERTIES

Viscosity grade	SAE J 300	0W-12
Density at 20°C (68°F)	ASTM D1298	0.842
Viscosity at 40°C (104°F)	ASTM D445	31.4 mm²/s
Viscosity at 100°C (212°F)	ASTM D445	6.2 mm²/s
HTHS viscosity at 150°C (302°F)	ASTM D4741	2.1 mPa.s
Viscosity index	ASTM D2270	149
Pour point	ASTM D97	-42°C / -44°F
Flash point	ASTM D92	228°C / 453°F
Sulfated ash	ASTM D874	0.89% weight
TBN	ASTM D2896	8.5 mg KOH/g



HYBRID 0W-16



Fuel Economy Gasoline engine lubricant

100% Synthetic

TYPE OF USE

100% Synthetic "Fuel economy" engine oil specially designed for Hybrid Electric Vehicles (H.E.V) and Plug-in Hybrid Electric Vehicles (P.H.E.V) fitted with recent gasoline engines, turbocharged or naturally aspirated, direct or indirect injection, designed to use SAE 0W-16 oil with low friction and very low HTHS (High Temperature High Shear) viscosity (≥ 2.3 mPa.s).

Suitable also for battery electric vehicles (B.E.V) fitted with thermal gasoline engine used as Range Extender.

Suitable for modern gasoline engines requiring a viscosity grade SAE 0W-16 lubricant or a "Fuel Economy" lubricant in viscosity grade 16: Standards API SN.

Compatible with catalytic converters.

This type of oil may be unsuitable for use in some engines. Refer to the owner manual if in doubt.

PERFORMANCE

STANDARDS

API SERVICES **SN**

RECOMMENDATIONS

HONDA Hybrid gasoline engines
TOYOTA Hybrid gasoline engines
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The API SN standard is fully backward compatible over API SM requirements and all former API standards.

API SN lubricants provide outstanding oxidation resistance, better protection against deposits, better engine cleanliness, better anti-wear protection and enhanced performance at cold temperature during the whole oil life duration.

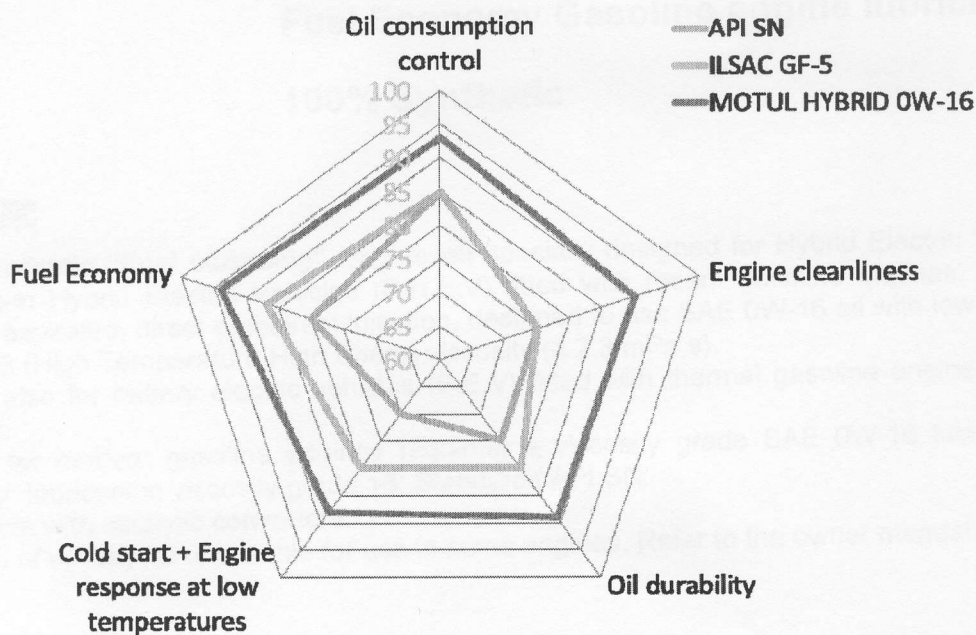
Viscosity grade SAE 0W-16 minimizes seriously lubricant hydrodynamic friction, allows significant fuel economy benefits especially when the oil is cold.

This very low viscosity grade also improves oil flow at start up, delivers faster oil pressure build up, faster rev raisings and allows reaching operating temperature faster.

MOTUL HYBRID 0W-16 is specially formulated to meet the specific needs of hybrid electric vehicles, such as HEV, PHEV and BEV with Range Extender, where multiples unexpected stops and starts of the Gasoline engine are involved during the different operating phases of the hybrid vehicle. This particular mode of operation of the internal combustion engine on a hybrid vehicle generates very specific constraints for the lubricant, and in this, MOTUL HYBRID 0W-16 fully meets all these requirements.

Environment friendly, this type of oil allows fuel consumption reduction and therefore minimizes greenhouse gases (CO₂) emissions.

MOTUL HYBRID 0W16 demonstrates all these qualities on all key criteria and requirements when compared to API SN and ILSAC GF-5:

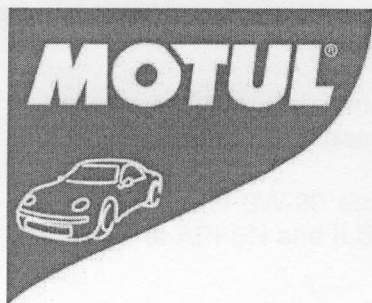


RECOMMENDATION

Drain interval: according to manufacturers' recommendations and tune to your own use.
 MOTUL HYBRID 0W-16 can be mixed with synthetic or mineral oils.
Before use always refer to the owner manual of the vehicle.

PROPERTIES

Viscosity grade	SAE J 300	0W-16
Density at 20°C (68°F)	ASTM D1298	0.843
Viscosity at 40°C (104°F)	ASTM D445	36.3 mm²/s
Viscosity at 100°C (212°F)	ASTM D445	7.1 mm²/s
HTHS viscosity at 150°C (302°F)	ASTM D4741	2.3 mPa.s
Viscosity index	ASTM D2270	160
Pour point	ASTM D97	-42°C / -44°F
Flash point	ASTM D92	234°C / 453°F
Sulfated ash	ASTM D874	0.89% weight
TBN	ASTM D2896	8.5 mg KOH/g



HYBRID 0W-20



Fuel Economy Gasoline engine lubricant

100% Synthetic

TYPE OF USE

100% Synthetic "Fuel economy" engine oil specially designed for Hybrid Electric Vehicles (H.E.V) and Plug-in Hybrid Electric Vehicles (P.H.E.V) fitted with recent gasoline engines, turbocharged or naturally aspirated, direct or indirect injection, designed to use SAE 0W-20 oil with low friction and very low HTHS (High Temperature High Shear) viscosity (≥ 2.6 mPa.s).

Suitable also for battery electric vehicles (B.E.V) fitted with thermal gasoline engine used as Range Extender.

Suitable for modern gasoline engines requiring a viscosity grade SAE 0W-20 lubricant or a "Fuel Economy" lubricant in viscosity grade 20: Standards API SN, API SN-RC and/or ILSAC GF-5.

Compatible with catalytic converters.

This type of oil may be unsuitable for use in some engines. Refer to the owner manual if in doubt.

PERFORMANCE

STANDARDS

API SERVICES **SN-RC**

ILSAC **GF-5**

RECOMMENDATIONS

HONDA Hybrid gasoline engines

NISSAN Hybrid gasoline engines

TOYOTA Hybrid gasoline engines

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The API SN standard is fully backward compatible over API SM requirements and all former API standards.

API SN lubricants provide outstanding oxidation resistance, better protection against deposits, better engine cleanliness, better anti-wear protection and enhanced performance at cold temperature during the whole oil life duration.

The "RC - Resource Conserving" designation in addition to the API level "Sx" applies especially to "Energy Saver" lubricant types for gasoline engines. It is the guarantee of fuel savings when used on vehicle fleets.

Based on the API SN specification, the ILSAC GF-5 standard is even more severe especially on the energy saving criteria. The requirements on the low viscosity "Fuel Economy" side of the lubricant, but also extended drain intervals, clean pistons/rings, seals compatibility and reduced content of phosphorus for after treatment systems compatibility are enhanced. The ILSAC GF-5 specification ensures perfect engine protection when gasoline containing up to 85% Ethanol is used (E85).

Viscosity grade SAE 0W-20 minimizes lubricant hydrodynamic friction, allows fuel economy benefits especially when the oil is cold.

This low viscosity grade also improves oil flow at start up, delivers faster oil pressure build up, faster rev raisings and allows to reach operating temperature faster.

MOTUL HYBRID 0W-20 is specially formulated to meet the specific needs of hybrid electric vehicles, such as HEV, PHEV and BEV with Range Extender, where multiples unexpected stops and starts of the Gasoline engine are involved during the different operating phases of the hybrid vehicle. This particular mode of operation of the internal combustion engine on a hybrid vehicle generates very specific constraints for the lubricant, and in this, MOTUL HYBRID 0W-20 fully meets all these requirements.

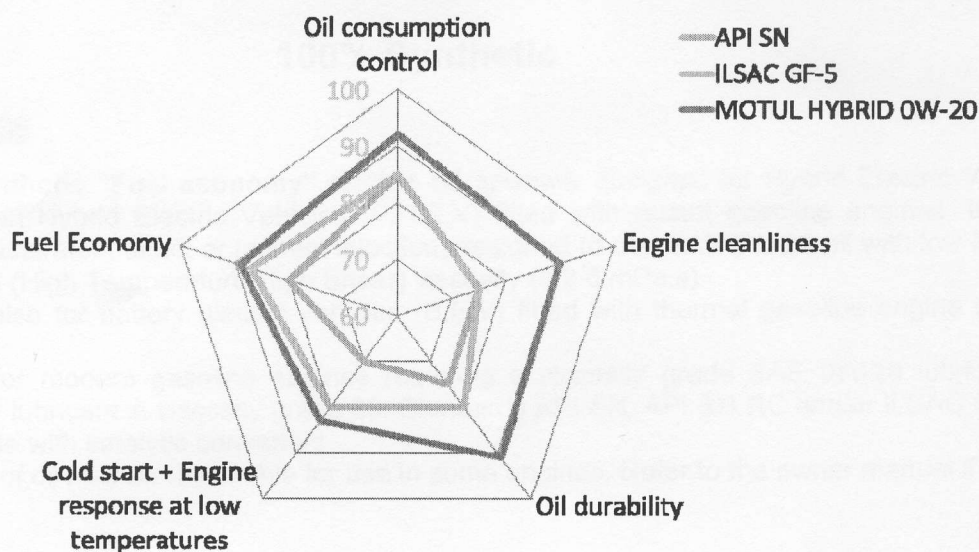
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Environment friendly, this type of oil allows fuel consumption reduction and therefore minimizes greenhouse gases (CO₂) emissions.

MOTUL HYBRID 0W-20 demonstrates all these qualities on all key criteria and requirements when compared to API SN and ILSAC GF-5:



RECOMMENDATION

Drain interval: according to manufacturers' recommendations and tune to your own use.

MOTUL HYBRID 0W-20 can be mixed with synthetic or mineral oils.

Before use always refer to the owner manual of the vehicle.

PROPERTIES

Viscosity grade	SAE J 300	0W-20
Density at 20°C (68°F)	ASTM D1298	0.846
Viscosity at 40°C (104°F)	ASTM D445	45.4 mm ² /s
Viscosity at 100°C (212°F)	ASTM D445	8.5 mm ² /s
HTHS viscosity at 150°C (302°F)	ASTM D4741	2.6 mPa.s
Viscosity index	ASTM D2270	168
Pour point	ASTM D97	-36°C / -33°F
Flash point	ASTM D92	230°C / 446°F
Sulfated ash	ASTM D874	0.89% weight
TBN	ASTM D2896	8.5 mg KOH/g