



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
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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.

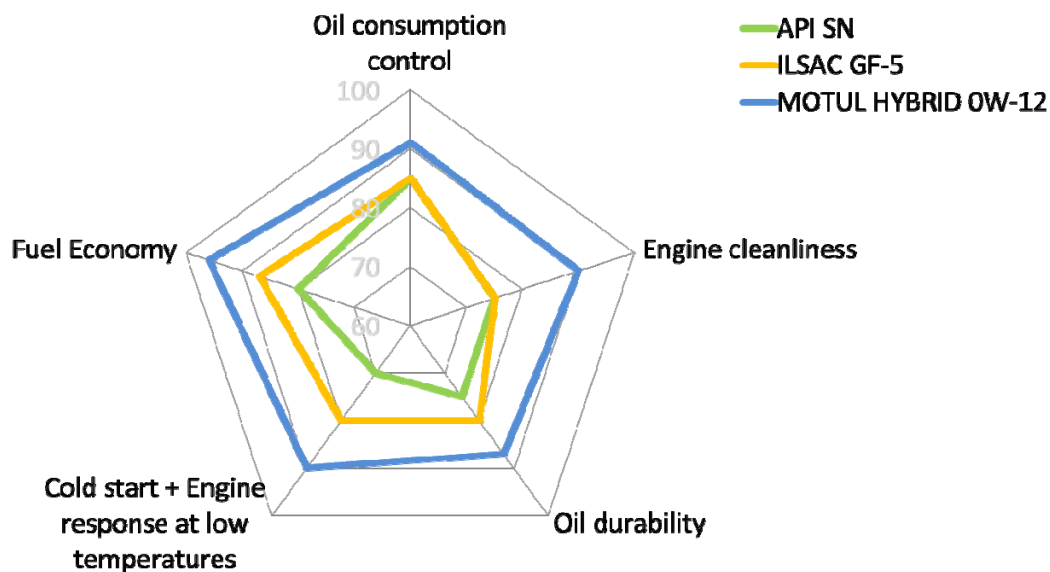
This very low viscosity grade improves oil flow at start up, delivers faster oil pressure build up, faster rev raisings and allows reaching operating temperature faster.

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 mm ² /s
Viscosity at 100°C (212°F)	ASTM D445	6.2 mm ² /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