

ESSO ULTRA

SUPER PREMIUM PASSENGER CAR ENGINE OIL

April 2009



ESSO ULTRA is Imperial Oil's best mineral oil based gasoline engine oil. ESSO ULTRA is a product formulated by Esso Research providing both the low temperature start-up and high temperature viscosity protection that your engine needs for tough Canadian driving conditions.

- ◆ Meets ILSAC GF-4 the latest gasoline lubricant standard of the International Lubricant Standards and Approval Committee
- ◆ Meets warranty requirements for all gasoline powered vehicles requiring ILSAC GF-4
- ◆ Meets warranty requirements for propane and natural gas fueled light duty vehicles
- ◆ Contains additional additives to ensure the product exceeds API SM, the highest API standard for gasoline engine protection
- ◆ Meets the light duty diesel requirement of API CF
- ◆ Longer catalyst life from improved volatility
- ◆ Meets requirements for turbo-equipped gasoline engines
- ◆ Improved oil consumption from low volatility formulation

Primary Applications

ESSO ULTRA is available in 5W-30 and 10W-30 grades. The 5W-30 and 10W-30 grades exceed the requirements for ILSAC GF-4 and are recommended for ILSAC GF-3, GF-2 and GF-1. They also meet the requirements of API SM and are recommended for applications requiring API SE, SF SG, SH, SJ or SL. ESSO ULTRA is recommended for engines using gasoline, propane and natural gas as fuel.

ESSO ULTRA meets the requirements for API CF and is recommended for light duty diesel applications requiring API CF quality oil.

Most late model North American built cars specify an SAE 5W-30 grade engine oil for use year-round. SAE 5W-30 offers optimal performance for wear protection, fuel economy, oil consumption control, cold starting and warm-up lubrication. Check your owners' manual for the correct grade recommendation

SAE 10W-30 grade oil is recommended for older, higher mileage cars that have been using 10W-30 for most of their operating lives.

Performance Features

Imperial's Best Mineral Based Engine Oil

ESSO ULTRA has additional additives included in the formulation to deliver performance beyond ESSO EXTRA to ensure that engines receive more protection.

Fuel Economy

Both grades of ESSO ULTRA contain a potent friction modifier for improved fuel economy. The 5W-30 and 10W-30 grades meet the highest level of fuel economy recognized by API, the American Petroleum Institute.

Excellent Engine Wear

ESSO ULTRA contains effective anti-wear additives that minimize wear and scuffing of heavily loaded parts such as the valve train. Improved low temperature performance and water tolerance also contribute to the excellent wear performance of ESSO ULTRA.

Deposit Control/Engine Cleanliness

The detergent-dispersant additive system in ESSO ULTRA is designed to minimize ring zone deposits, ring sticking and liner scuffing. Poor engine cleanliness can shorten engine life and, in severe cases can result in engine failure. The additive system in ESSO ULTRA is also designed to control sludge formation, which can lead to plugged oil filters and screens, stuck valve lifters and other related problems.

Turbo-Charger Protection

ESSO ULTRA meets the GF-4 requirement of the current TEOST (Thermal-oxidation Engine Oil Stability Test) ensuring that the oil meets the severe deposit formation requirements of hot running engines.

Maximize Oil Drain

ESSO ULTRA contains potent oxidation inhibitors to retard oil breakdown and reduce

varnish and lacquer deposits, which can be severe under high temperature conditions experienced in modern lean burn gasoline engines.

Improved Catalyst Compatibility

ESSO ULTRA is formulated with an additive package that is designed to protect the exhaust catalyst ensuring reliable operation.

Lower Volatility

ESSO ULTRA is formulated against the latest volatility requirements to meet current emission requirements and minimize oil consumption.

High Temperature Foam

ESSO ULTRA meets the foam requirement, ensuring your engine is protected from wear in high engine speed accelerations.

Precautions

ESSO ULTRA engine oils are manufactured from high quality petroleum base stocks, carefully blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. Special care is also recommended in handling used motor oils.

Note: This product is not controlled under Canadian WHMIS legislation.

Grade Specific Recommendation

SERVICE	5W-30	10W-30
ILSAC GF-4, GF-3, GF-2, GF-1	R	R
API SM, SL, SJ, SH	R	R
EC - API SM	R	R
API CF	R	R
FORD WSS-M2C929-A	R	
FORD WSS-M2C395-A		R
FORD ESE-M2C153-G	R	R
FORD WSS-M2C-205-A	R	R
CHRYSLER MS6395	R	R
GENERAL MOTORS GM6094M	R	R
MIL-CID-A-A-52039A	R	R

R = Grade is recommended for service specified

Typical Properties

	5W-30	10W-30
Density @ 15°C, kg/m ³	860	870
Flash Point, COC, °C	210	215
Viscosity Index	163	144
Kinematic Viscosity, cSt., @ 100°C @ 40°C	10.7 63.2	10.4 66.4
Viscosity, CCS, Centipoise @ -25°C @ -30°C	5,300	5,600
Viscosity, MRV, Centipoise @ -25°C @ -30°C @ -35°C @ -40°C	18,500 52,800	17,200 45,000
MRV BPT °C	-41	-36
Pour Point °C	-33	-33
Color, ASTM	2.5	2.5
Sulfated Ash, wt%	1.0	1.0
TAN, D664	3.1	3.1
TBN D2896*	8.3	8.3

The values shown above are representative of current production. Some are controlled by manufacturing and performance specifications while others are not. All may vary within modest ranges.

** Modified test method*