

# LAUNCHER MOTOR OIL

ULTRA PREMIUM FULLY SYNTHETIC

**APISP** 

LAUNCHER Ultra Premium Fully Synthetic Motor Oil is formulated to outperform conventional oils and exceed API baseline performance testing standards on wear protection, engine sludge protection, piston cleanliness, low temperature performance, and oil loss prevention in gasoline/diesel engines and hybrid vehicles. LAUNCHER Ultra Premium Fully Synthetic Motor Oil has been recommended and tested on new engines and high mileage vehicles.



## APPLICATIONS

- Turbocharged gasoline direct injection, conventional gasoline-fueled and flex-fuel passenger cars, light trucks and sport utility vehicles, including gasoline-electric hybrids, especially when operating under severe conditions.
- Four-stroke cycle gasoline engines in other mobile or stationary equipment.

# PERFORMANCE FEATURES AND BENEFITS

- Exceeds ILSAC GF-6 requirements for new cars under warranty.
- Helps protect against low speed pre-ignition (LSPI) in turbocharged gasoline direct injection engines (TGDI).
- Outstanding resistance to viscosity and thermal breakdown at high temperatures.
- Enhanced performance benefits at extreme temperatures compared with conventional engine oils.

## PROPERTIES

LAUNCHER Ultra Premium Fully Synthetic Motor Oil is formulated with synthetic base stocks. The full synthetic formulation provides improved protection against viscosity breakdown and deposit formation at high temperatures; lower volatility for reduced oil consumption; and faster oil circulation at low temperatures for easier starting and better protection during cold starts when compared with conventional engine oils.

- Protects against sludge and varnish formation.
- Protects against rust and bearing corrosion.
- Low volatility for reduced oil consumption.
- Excellent low temperature pumpability for protection during cold starts.
- Highly resistant to foaming.
- Formulated to protect turbochargers and emission control system catalysts.

#### RECOMMENDATIONS / SPECIFICATIONS

#### **MEETS OR EXCEEDS:**

API SP, SN and all API previous categories, ILSAC GF-6A, ACEA C3, Chrysler: MS-6395; Ford: WSS-M2C947-B1, BMW LL04, MB 229.51, VW 504.00507, PORSCHE C30. GM DEXOS1 (Gen 3), LANDROVER STJLR.03.5003

## **TYPICAL TECHNICAL PROPERTIES**

Viscosity Grade	OW-16	OW-20	5W-20	5W-30	5W-40
PRODUCT CODE	LMO0W16FP	LMO0W20FP	LMO5W20FP	LMO5W30FP	LMO5W40FP
Density at 15.60C, g/ml, ASTM D4052	0.846	0.846	0.848	0.852	0.847
Color, ASTM 6045	3.0	0.848	0.852	0.853	3.0
Cold Cranking Viscosity (CCS), mPa s, ASTM D5293	5000 @-35°C	5900 @-35°C	3650@-30°C	4900@-30℃	5200@-30℃
Kinematic Viscosity at 40°C, mm²/s, ASTM D445	37.3	45.2	45.4	63	86.22
Kinematic Viscosity at 100°C, mm <sup>2</sup> /s, ASTM D445	7.3	8.5	8.7	11.1	14.60
Viscosity Index, ASTM D2270	163	168	165	167	177
Flash Point (COC), °C, ASTM D92	228	230	228	234	235
Pour Point, °C, ASTM D97	-42	-454	-42	-42	-45
Total Base Number, mg KOH/g, ASTM D2896	7.0	7.9	7.0	8.6	7.0
Sulfated Ash, wt%, ASTM D 874	0.9	0.9	0.9	0.9	0.8
High-Temperature/High-Shear Viscosity @ 150°C,	2.3	2.6	2.6	3.0	3.9
cP, ASTM D4683					
Phosphorus, wt %, ASTM D5185	0.077	0.077	0.077	0.077	0.077
Zinc. wt %, ASTM D5185	0.085	0.085	0.085	0.085	0.085

 $Note: These \ characteristics \ are \ typical \ of \ current \ production. While \ future \ production \ will \ conform \ to \ LAUNCHER'S \ specification, \ variations \ in \ these \ characteristics \ may \ occur.$ 







Packing: 1L | 4L | 5L | 208L/Drum

Version: LL/TDS/GOGE/UPSF/V1/02-01-2023

Health and Safety: This lubricant, when used in accordance with our recommendations and for the application for which it is intended, does not constitute any special hazard. A safety data file conforming to the requirements of current EC legislation is available from your local trade consultant