

## PRODUCT DATA SHEET

# FULL SYNTHETIC EUROPEAN MOTOR OILS



Lucas Oil Synthetic European Motor oils are specially formulated to provide maximum protection for all European import vehicles, or vehicles requiring European style motor oils. Our line of high-performance formulations meets the latest generation of industry and engine builder specifications to deliver premium performance to keep your vehicle on the road and out of the maintenance shop.

Lucas Oil Synthetic European Motor oils are fully synthetic and formulated with the latest European "Mid-SAPS" additive technology to deliver improved wear performance, engine cleanliness, and protection from abnormal combustion (LSPI) which can ruin an engine. These oils are intended for use as at extended drain intervals in modern gasoline or diesel engines fitted with emissions aftertreatment devices. Our proprietary, shear stable polymer technology helps prevent premature break-down to ensure viscosity is maintained and a strong lubricating film is always present in the engine.

Lucas Oil Synthetic European Motor Oils exceed industry minimum performance requirements in all dimensions including piston cleanliness, oxidation control, engine sludge prevention, timing chain wear protection, and fuel economy performance. Protect your investment and rely on Lucas Oil for your car's engine oil. IT WORKS!

#### **PART NUMBER AND SIZE:**

**SAE 0W-20** - 11302 (1 Liter), 11303 (5 Liter)

**SAE 0W-40** - 10210 (1 Liter), 10327 (5 Liter), 10213 (5 Gallon), 10215 (55 Gallon), 18022 (6 Gallon BiB)

**SAE 5W-30** - 10051 (1 Liter), 10206 (5 Liter), 11193 (55 Gallon), 18020 (6 Gallon BiB)

**SAE 5W-40** – 10186 (1 Liter), 10187 (5 Liter), 11163 (330 Gallon), 11194 (55 Gallon), 18016 (6 Gallon BiB).

**SAE 10W-40** – 10229 (1 Liter), 10230 (5 Liter), 10222 (5 Gallon), 10224 (55 Gallon)

**SAE 10W-60** – 10248 (1 Liter), 10231 (5 Liter), 10251 (55 Gallon), 10250 (330 Gallon), 10823 (6 Gallon BiB).

#### **FEATURES AND BENEFITS:**

- Fully synthetic European style formulations
- Outstanding low speed pre-ignition (LSPI) protection.
- Improved fuel economy and fuel economy retention over the oil drain interval.
- Turbocharger protection in turbocharged gasoline direct injection (TGDI) engines, as well as proven performance in Hybrid vehicles.
- Improved wear protection with low phosphorus and zinc for emissions system protection.
- Reduced sludge formation and varnish deposits for start-stop engines

### **MAIN APPLICATIONS:**

Lucas Oil offers a premium line of synthetic European motor oils in the most common viscosity grades. Follow your owner's manual recommendation for the correct viscosity grade for your engine. Lucas Oil recommends our synthetic European motor oils for all European make or import model cars and trucks with gasoline or diesel engines.

Lucas Oil Synthetic European Motor Oils will blend with all other conventional or synthetic motor oils.



## LUCAS OIL PRODUCTS, INC. PRODUCT DATA SHEET

## SPECIFICATIONS, APPROVALS AND RECOMMENDATIONS:

Meets / Exceeds:

Lucas Oil European Motor Oils meet or exceed the requirements of European Industry and Manufacturer specifications, and are suitable for use in Audi, BMW, Mercedes, Porsche, Renault, Volkswagen, and other vehicles from European Auto Builders.

The following viscosity grades meet or exceed the listed specifications:

0W-20: ACEA C5, API SP

5W-30: ACEA C2, C3, API SP, BMW LL-04, MB229.31, 229.51, 229.52, Opel OV0401547, Fiat 9.55535-S3

5W-40: ACEA C3, API SP, MB 229.31, Fiat 9.55535-S2, 9.55535-GH-2

#### TYPICAL PHYSICAL CHARACTERISTICS:

| PROPERTIES                    | ASTM  | 0W-20 | 0W-40   | 5W-30 | 5W-40 | 10W-40 | 10W-60 |
|-------------------------------|-------|-------|---------|-------|-------|--------|--------|
| API Gravity                   | D4052 | 36.2  | 35.6    | 34.9  | 34.8  | 34.9   | 33.23  |
| Specific Gravity @ 60°F       | D4052 | 0.844 | 0.847   | 0.851 | 0.851 | 0.850  | 0.858  |
| Density @ 60°F,<br>Lbs/US Gal | D4052 | 7.046 | 7.7.074 | 7.104 | 7.106 | 7.08   | 7.148  |
| Viscosity @ 40°C cSt          | D445  | 53.5  | 92.7    | 65.0  | 95.22 | 105.5  | 163.7  |
| Viscosity @ 100°C<br>cSt      | D445  | 8.79  | 15.44   | 12.1  | 14.92 | 15.87  | 23.01  |
| Viscosity Index               | D2270 | 143   | 161     | 185   | 165   | 148    | 170    |
| Color                         | D1500 | 2.5   | 2.5     | 2.5   | 2.5   | 2.5    | 2.5    |
| Flash Point (PMCC),<br>°F     | D93   | >400  | >400    | >400  | >400  | >400   | >400   |

### LINKS AND ADDITIONAL INFORMATION:

For additional product or health and safety information, including product Safety Data Sheets, visit LucasOil.com