

# GALP FORMULA LS FE FUSION 0W20

Fully synthetic high performance lubricant, formulated with cutting edge technology, for petrol, diesel and hybrid, light duty vehicle engines.

Its enhanced performance provides low complexity and reduces the likelihood of error when used, as well as allowing the rationalization of stock.

It meets the latest specifications from some of the leading equipment manufacturers (OEMs), specifically **BMW, Opel, Mercedes, Ford, Jaguar Land Rover**.

In addition to passing all the physical-chemical and bench tests associated with **ACEA C6** level, this product is designed to exceed the demanding internal requirements of the new **BMW LL-17 FE+** specification, specifically the **FE (Fuel Economy)**, turbocharger and long oil change interval capacity tests.

The BMW LL-17 FE+ standard (whose requirements cover and exceed the BMW LL-14 FE+ standard) is required for the new generation of **BMW's Turbo Twin Power** engines (with or without particulate filters), particularly petrol engines (N20, N26, Bx6 and Bx8) from 2014 onwards.

Small modern turbocharged gasoline direct injection (TGDI) engines, with or without exhaust gas treatment systems, have very high operating temperatures and require high-performance lubricants.

**Galp Formula LS FE Fusion 0W20** boasts level **API SQ** as evidence of its additional capacity to protect the engine against the low-speed pre-ignition (LSPI) phenomenon, which can occur in vehicles with these types of engines and cause serious damage to the equipment.

This lubricant meets the requirements of the new **OPEL OV0401547** specification released after the separation of Opel from the GM group. It is required for **1.0, 1.4 and 1.5 turbocharged petrol engines and the 1.6 CDTI diesel** engine from OPEL, fitted to the Opel Astra and Opel Insignia models. It is also suitable for hybrid vehicles.

It also meets the requirements of the latest Mercedes light vehicle standards - **MB 229.72** and **MB 229.71** - required for the new Mercedes 4 cylinder engines, specifically the OM654 diesel engines and M256 and M264 petrol engines with integrated 48V electrical systems. These are fitted to the new **Mercedes E Class** models and to several **Mercedes C Class** and **S Class** models.

It is also designed for use in **FORD** engines that require a lubricant to meet the **FORD WSS M2C 947-B1** or **FORD WSS M2C 962-A1** standard, and in **JAGUAR** and **LAND ROVER** engines requiring a lubricant that meets the **STJLR 03.5006** standard.

Its **ACEA C6, C5** performance combined with a viscosity grade of **0W-20** also make it suitable for **Kia, Hyundai, Suzuki** and **Toyota** engines requiring a lubricant with these characteristics.

Thanks to the use of state-of-the-art friction modifiers, this product makes it possible to achieve fuel savings of at least 3.6% when compared to a benchmark 15W-40 lubricant.

## PROPERTIES

- Excellent fluidity to protect engines right from a cold start and to ensure a smooth start.
- It offers an exceptional reduction in fuel consumption, promotes a reduction in CO<sub>2</sub> emissions and therefore makes a very positive contribution to the environment.
- Excellent protection against wear and corrosion, increasing engine life.
- Its excellent detergent power guarantees a high level of cleanliness and maintains engine performance.
- Its high thermal stability and excellent rust resistance guarantee engine protection even at high speeds, allowing extended oil change intervals.
- Its formulation, with reduced Sulfated Ash, Phosphorus and Sulfur (*mid-SAPS*) content provides protection and increases the lifespan of modern exhaust gas post treatment systems, specifically the Diesel and Gasoline Particulate Filters (DPF and GPF).

## SPECIFICATIONS/APPROVALS

- **ACEA** C6, C5
- **API** *SQ Resource Conserving*
- **ILSAC** GF-7A, GF-6A, GF-5
- **BMW** LL-17 FE+ ; LL-14 FE+
- **OPEL** OV0401547-A20
- **MB** 229.72 / 229.71
- **FORD** WSS M2C 947-B1, WSS M2C 962-A1
- **FORD** WSS M2C 954-A1
- **STJLR** 03.5006
- **FIAT** 9.55535-GSX
- **CHRYSLER** MS 12145
- **ILSAC** GF-7A, GF-6A, GF-5

## MAIN CHARACTERISTICS

| TESTS                                            | METHODS           | RESULTS      |
|--------------------------------------------------|-------------------|--------------|
| SAE Grade                                        | ---               | <b>0W-20</b> |
| Density at 15°C, kg / l                          | ASTM D1298/ D4052 | 0,84         |
| Viscosity index                                  | ASTM D2270        | 179          |
| Kinematic viscosity at 40°C, mm <sup>2</sup> /s  | ASTM D445/ D7042  | 41           |
| Kinematic viscosity at 100°C, mm <sup>2</sup> /s | ASTM D445/ D7042  | 8,1          |
| Pour point, °C                                   | ASTM D97/ D6892   | - 48         |
| Flash point, °C                                  | ASTM D92          | 224          |
| Total Base Number, mg KOH/g                      | ASTM D2896        | 7,9          |

## PACKAGING



**IBC 1000L**



**DRUM 205L**



**5L  
(4x5L Box)**



**1L  
(18x1L Box)**

The values shown are for guidance and do not constitute a specification. This information may include minor variations that do not affect the product's performance. The information in this file is of a general nature and no guarantee is given if the products are used incorrectly or the information is out of date. To get a copy of the Safety Data Sheet for this product, please contact GALP's Customer Services Centre: [export@galp.com](mailto:export@galp.com).