



LUBRICANTS

## Shield<sup>™</sup> Euro-Tech

Phillips 66<sup>®</sup> Shield Euro-Tech is a premium quality, full-synthetic, full-SAPS engine oil designed to provide maximum protection for European passenger cars under all operating conditions. It also is recommended for other vehicles operating at extreme temperatures or under severe driving conditions, such as towing heavy loads. It is recommended for use in many gasoline and light-duty diesel engines.

Shield Euro-Tech Motor Oil provides enhanced performance benefits compared with conventional engine oils. These benefits include better oxidation resistance and thermal stability at high temperatures for improved protection against viscosity breakdown and deposit formation; lower volatility for reduced oil consumption; and better low-temperature pumpability for easier starting and faster oil circulation at low temperatures.

Shield Euro-Tech Motor Oil meets or exceeds the performance requirements of API Service Category SN for the SAE 5W-40 viscosity and API Service Category SL for the SAE 5W-30 viscosity, and is approved for service fill under leading European OEM specifications

### Applications

- Audi: gasoline engines (except the R8 GT & R8 V10) and diesel engines without DPF, standard drain only
- BMW: most gasoline engines, except M-series & Z8 that require an SAE 10W-60 viscosity grade oil
- Mercedes-Benz: most gasoline engines
- Volkswagen: gasoline engines and diesel engines without DPF
- Passenger cars, light trucks and sport utility vehicles that do not require an ILSAC GF-5 oil for warranty coverage, especially when operating under severe driving conditions

Shield Euro-Tech Motor Oil is licensed for:

- API Service SL - SAE 5W-30
- API Service SN - SAE 5W-40

Shield Euro-Tech Motor Oil meets or exceeds the requirements of:

- ACEA A3/B4-12
- API Service CF
- Renalut RN 0700 RN0710 - SAE 5W-40
- PSA B71 2296 - SAE 5W-40

Shield Euro-Tech Motor Oil is fully approved for service fill under the following OEM specifications

- BMW Long Life LL-01
- Mercedes Benz Sheet 229.50
- Volkswagen Standard 502.00 & 505.00
- Porsche A40 - SAE 5W-40

**Premium Full-Synthetic Passenger Car Engine Oil for European & North American Vehicles**

KEEPING THE  
WORLD  
RUNNING  
SMOOTHLY. 



## Features/Benefits

- Outstanding resistance to viscosity and thermal breakdown at high temperatures
- Protects against sludge and varnish formation
- Excellent wear protection
- Protects against rust and bearing corrosion
- Low volatility for reduced oil consumption
- Excellent low-temperature pumpability for protection during cold starts
- Good foam resistance

## Shield™ Euro-Tech

| Typical Properties                         |           |           |
|--|-----------|-----------|
| SAE Grade                                  | 5W-30     | 5W-40     |
| Specific Gravity @ 60°F                    | 0.853     | 0.854     |
| Density, lbs/gal @ 60°F                    | 7.10      | 7.13      |
| Color, ASTM D1500                          | 3.0       | 3.0       |
| Flash Point (COC), °C (°F)                 | 216 (421) | 229 (444) |
| Pour Point, °C (°F)                        | -39 (-38) | -39 (-38) |
| Viscosity, Kinematic                       |           |           |
| cSt @ 40°C                                 | 80        | 80        |
| cSt @ 100°C                                | 12.2      | 13.3      |
| Viscosity Index                            | 164       | 168       |
| Cold Cranking Viscosity, cP                | 5700      | 5700      |
| @ (°C)                                     | (-30)     | (-30)     |
| High-Temp/High-Shear Viscosity, cP @ 150°C | 3.6       | 3.7       |
| Sulfated Ash, ASTM D874, wt %              | 1.1       | 1.1       |
| Total Base Number (TBN), ASTM D2896        | 10.0      | 10.0      |
| Phosphorus, wt %                           | 0.958     | 0.958     |
| Zinc, wt %                                 | 0.1051    | 0.1051    |

## Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.