

Shield[®] Choice

Phillips 66[°] Shield Choice Synthetic Blend Motor Oil is a premium quality, partsynthetic automotive engine oil designed to provide excellent engine protection for gasoline-fueled and flex-fuel passenger cars and light trucks under all operating conditions.

Shield Choice Synthetic Blend Motor Oil is formulated to provide excellent wear protection, to minimize sludge and varnish formation, and to resist viscosity and thermal breakdown, even in severe service. It also protects against rust and bearing corrosion, and is resistant to foaming.

Shield Choice Synthetic Blend Motor Oil (except SAE 10W-40) exceeds new car warranty requirements as defined by ILSAC GF-5. It meets "Resource Conserving" requirements for fuel economy improvement, emission system and turbocharger protection, and protection of engines operating on ethanol-containing fuels up to E85. It is backward serviceable for use where API SM or earlier "S" category engine oils are recommended.

Applications

- Gasoline-fueled and flex-fuel passenger cars, light trucks and sport utility vehicles, including gasoline-electric hybrids
- Four-stroke cycle gasoline engines in other mobile or stationary equipment

Shield Choice Synthetic Blend Motor Oil is licensed for:

- ILSAC GF-5 (except SAE 10W-40)
- API Service SN with Resource Conserving (except SAE 10W-40 which is API SN only)

Shield Choice Synthetic Blend Motor Oil meets or exceeds the requirements of:

- Chrysler MS-6395
- Ford WSS-M2C945-A (SAE 5W-20)
- Ford WSS-M2C946-A (SAE 5W-30)
- Ford WSS-M2C947-A (SAE 0W-20)
- GM6094M (obsolete specification)

Premium Synthetic Blend Passenger Car Engine Oil



U.S. Customer Service: 1-800-368-7128 Technical Hotline: 1-877-445-9198 International Customer Service: 1-832-765-2500 E-mail address: phillips66lubricants@p66.com



Features/Benefits

- Exceeds ILSAC GF-5 requirements for new cars under warranty
- Friction-modified for improved fuel economy
- Excellent resistance to viscosity and thermal breakdown at high temperatures
- Protects against sludge and varnish formation
- Protects against wear and bearing corrosion
- Low volatility for reduced oil consumption
- Highly resistant to foaming
- · Formulated to protect turbochargers and emission control system catalysts
- Formulated for use in vehicles operating on ethanol-containing fuels up to E8

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Typical Properties					
SAE Grade	0W-20	5W-20	5W-30	10W-30	10W-40
Specific Gravity @ 60°F	0.848	0.862	0.862	0.866	0.869
Density, lbs/gal @ 60°F	7.06	7.18	7.17	7.21	7.24
Color, ASTM D1500	3.0	3.0	3.0	3.0	3.0
Flash Point (COC), °C (°F)	218 (424)	218 (424)	216 (421)	229 (444)	227 (440)
Pour Point, °C (°F)	-34 (-29)	-30 (-22)	-30 (-22)	-30 (-22)	-30 (-22)
Viscosity, Kinematic					
cSt @ 40°C	46.0	49.8	65.4	65.1	106
cSt @ 100°C	8.8	8.5	10.9	10.4	15.8
Viscosity Index	174	147	158	148	150
Cold Cranking Viscosity, cP	5,400	6,150	6,150	4,550	6200
@ (°C)	(-35)	(-30)	(-30)	(-25)	(-25)
High-Temp/High-Shear Viscosity, cP @ 150°C	2.6	2.6	3.1	3.0	3.8
Sulfated Ash, ASTM D874, wt %	0.96	0.96	0.96	0.96	0.96
Total Base Number (TBN), ASTM D2896	8.0	8.0	8.0	8.0	8.0
Phosphorus, wt %	0.077	0.077	0.077	0.077	0.077
Zinc, wt %	0.085	0.085	0.085	0.085	0.085

Health & Safety Information

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

Typical properties are average values only and do not constitute a specification. Minor variations that do not affect product performance are to be expected during normal manufacture, and at different blending locations. Product formulations are subject to change without notification.