



Shield Classic

Phillips 66® Shield Classic Motor Oil, SAE 20W-50 is a high-quality, conventional automotive engine oil recommended for use in gasoline-fueled passenger cars and light trucks operating under high-temperature conditions, such as towing heavy loads, where the vehicle manufacturer specifies an SAE 20W-50 engine oil. It also may be used in gasoline-fueled competition engines and high-performance street engines where SAE 20W-50 engine oil is preferred. It provides engine protection for both turbocharged gasoline direct-injection and conventional gasoline-fueled and flex-fueled passenger cars and light trucks under all operating conditions. It is not recommended for use in new cars under warranty.

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

Applications

- Turbocharged gasoline direct-injection and conventional gasoline-fueled light trucks and sport utility vehicles where a SAE 20W-50 engine oil is specified
- Gasoline-fueled competition engines and high-performance street engines

Shield Classic Motor Oil is licensed for:

- API service SN
- Backward serviceable for use where API SN or earlier “S” category engine oils are recommended.

Features/Benefits

- Helps protect against low speed pre-ignition (LSPI) in turbocharged gasoline direct-injection engines (TGDI)
- Resists viscosity and thermal breakdown at high temperatures
- Protects against sludge and varnish formation
- Protects against wear
- Protects against rust and bearing corrosion
- Good foam resistance

Conventional Passenger Car Engine Oil





Shield™ Classic

Typical Properties			
SAE Grade	30	40	20W-50
Specific Gravity @ 60°F	0.882	0.884	0.876
Density, lbs/gal @ 60°F	7.35	7.36	7.29
Color, ASTM D1500	3.5	3.5	3.5
Flash Point (COC), °C (°F)	250 (482)	254 (489)	230 (446)
Pour Point, °C (°F)	-33 (-27)	-28 (-18)	-30 (-22)
Viscosity, Kinematic			
cSt @ 40°C	95.0	128	155
cSt @ 100°C	11.5	13.6	19.6
Viscosity Index	109	102	145
Cold Cranking Viscosity, cP	--	--	6,600
@ (°C)	--	--	(-15)
High-Temp/High-Shear Viscosity, cP @ 150°C	3.4	3.9	5.0
Sulfated Ash, ASTM D874, wt %	1.1	1.1	1.05
Total Base Number (TBN), ASTM D2896	9.3	9.3	8.8
Phosphorus, wt %	0.077	0.077	0.077
Zinc, wt %	0.085	0.085	0.085

Health Safety Information

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