



# LUBRICANTS

## Shield<sup>™</sup> Valor

Phillips 66® Shield Valor Full Synthetic Motor Oil is a premium quality automotive engine oil specially designed to meet the performance requirements of the GM dexos1® specification for gasoline-fueled GM vehicles. It also exceeds ILSAC GF-5 warranty requirements for use in other vehicles.

Shield Valor Full Synthetic 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 bearing corrosion and is highly resistant to aeration and foaming. It meets stricter performance requirements than ILSAC GF-5 quality oils, resulting in improved engine life and performance. The full-synthetic formulation provides enhanced performance benefits at extreme temperatures compared with conventional engine oils.

Shield Valor Full Synthetic is fully licensed to dexos1® for service fill in all GM vehicles where an SAE 0W-20 engine oil is specified. It also exceeds new car warranty requirements for other vehicles as defined by ILSAC GF-5. It meets or exceeds "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

- GM vehicles where a dexos1® oil is specified
- Gasoline-fueled and flex-fuel passenger cars, light trucks and sport utility vehicles, including gasoline-electric hybrids, where the OEM specifies SAE 0W-20 engine oil
- Four-stroke cycle gasoline engines in other mobile or stationary equipment

Shield Valor Full Synthetic is licensed or OEM-certified for:

- ILSAC GF-5
- API Service SN with Resource Conserving
- GM dexos1®

Shield Valor Full Synthetic meets or exceeds the requirements of:

- Chrysler MS-6395
- Ford WSS-M2C947-A

**Premium Full-Synthetic Passenger Car Engine Oil; Approved for GM dexos1®**

**KEEPING THE  
WORLD  
RUNNING  
SMOOTHLY.**





## Features/Benefits

- Exceeds ILSAC GF-5 requirements for new cars under warranty
- Outstanding resistance to viscosity and thermal breakdown at high temperatures
- Excellent low-temperature pumpability for protection during cold starts
- Protects against sludge and varnish formation
- Protects against rust and bearing corrosion
- Low volatility for reduced oil consumption
- Highly resistant to aeration and foaming
- Formulated to protect turbochargers and emission control system catalysts
- Formulated for use in vehicles operating on ethanol-containing fuels up to E85

## Shield<sup>™</sup> Valor

Typical Properties		
SAE Grade	0W-20	5W-30
Specific Gravity @ 60oF	0.846	0.852
Density, lbs/gal @ 60oF	7.05	7.09
Color, ASTM D1500	3.0	3.0
Flash Point (COC), °C (°F)	230 (446)	235 (455)
Pour Point, °C (°F)	-45 (-49)	-40 (-40)
Viscosity, Kinematic		
cSt @ 40°C	45.2	63
cSt @ 100°C	8.5	11.1
Viscosity Index	168	167
Cold Cranking Viscosity, cP	5,900	4,900
@ (°C)	(-35)	(-30)
High Temp/High Shear Viscosity, cP @ 150°C	2.6	3.0
Sulfated Ash, ASTM D874, wt %	0.92	0.92
Total Base Number (TBN), ASTM D2896	7.9	8.6
Phosphorus, wt %	0.077	0.077
Zinc, wt %	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://3apps.phillips66.com/NetMSDS>.