



LUBRICANTS

## Shield® Valor Gen2

Phillips 66® Shield Valor Gen2 Full Synthetic Motor Oils are an ultra-premium quality automotive engine oil specially designed to meet the performance requirements of the GM dexos1™ Gen2 specification for gasoline-fueled GM vehicles. They also exceed ILSAC GF-5 warranty requirements for use in other vehicles.

Shield Valor Full Synthetic Gen2 Motor Oils are formulated to reduce the occurrence of low speed preignition, provide wear protection, minimize sludge and varnish formation, protect against turbo charger deposits and resist viscosity and thermal breakdown, even in severe service. They also protect against bearing corrosion and are highly resistant to aeration and foaming. They meet 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 Gen2 Motor Oil are fully licensed to dexos1 Gen2 for service fill in all GM vehicles. They also exceed new car warranty requirements for other vehicles as defined by ILSAC GF-5. They meet 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. They are backward serviceable for use where API SN or earlier "S" category engine oils are recommended.

### Applications

- GM vehicles where a dexos1 Gen2 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 or 5W-30 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 Plus with Resource Conserving
- GM dexos1 Gen2

Shield Valor Full Synthetic meets or exceeds the requirements of:

- Chrysler MS-6395
- Ford WSS-M2C946-A (SAE 5W-30)
- Ford WSS-M2C946-B1 (SAE 5W-30)
- Ford WSS-M2C947-A (SAE 0W-20)
- Ford WSS-M2C947-B1 (SAE 0W-20)
- GM4718M, GM6094M (obsolete specifications)
- Honda HT-06

**Premium Full-Synthetic Passenger Car Engine Oil; Approved for GM dexos1™ Gen2**

KEEPING THE  
WORLD  
RUNNING  
SMOOTHLY. 



## Features/Benefits

- Helps protect against low speed pre-ignition (LSPI) in turbocharged gasoline direct-injection engines (TGDI)
- Exceeds ILSAC GF-5 requirements for new cars under warranty
- Reduces the occurrence of low speed preignition
- 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 turbocharger deposits
- 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® Valor Gen2

Typical Properties		
SAE Grade	0W-20	5W-30
Specific Gravity @ 60°F	0.846	0.851
Density, lbs/gal @ 60°F	7.04	7.08
Color, ASTM D1500	3.0	3.0
Flash Point (COC), °C (°F)	226 (438)	220 (428)
Pour Point, °C (°F)	-40 (-40)	-40 (-40)
Viscosity, Kinematic		
cSt @ 40°C	45	64
cSt @ 100°C	8.5	11.0
Viscosity Index	169	165
Cold Cranking Viscosity, cP	5700	5000
@ (°C)	(-35)	(-30)
High Temp/High Shear Viscosity, cP @ 150°C	2.7	3.2
Sulfated Ash, ASTM D874, wt %	0.9	0.9
Total Base Number (TBN), ASTM D2896	8.7	8.7
Phosphorus, wt %	0.77	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://www.phillips66.com/SDS>.