

## BRAD PENN® FSGF FULL SYNTHETIC SAE 5W-30 MOTOR OIL

BRAD PENN® FSGF Full Synthetic SAE 5W-30 Motor Oil employs a combination of select premium quality synthetic stocks and superior additive technology to provide the ultimate in performance and quality. It meets or exceeds the latest automotive manufacturers' requirements including API Service SN (Resource Conserving) as well as ILSAC GF-5 and is fit for use in gasoline engines that require GM dexos 1™ global engine oil specification.\*

## PERFORMANCE ADVANTAGES:

Engine oils meeting the new ILSAC GF-5 specification provide improvements in fuel economy, emission system durability, turbocharger protection, and engine oil robustness. Additionally, ILSAC GF-5 qualified oils offer improved emulsion retention and stability when used in engines utilizing alcohol-containing fuels such as E85 (85% ethyl alcohol/15% gasoline) or 'oxygenated' gasoline that contains 10% alcohol. BRAD PENN® FSGF Full Synthetic SAE 5W-30 Motor Oil provides the extended engine lubrication protection required to meet the longer oil drain intervals recommended by many new car manufacturers. The low volatility ZDP utilized in the SN/GF-5 product provides improved catalyst protection and prolonged catalyst life in emission systems as well as extended anti-wear and oil oxidation protection. BRAD PENN® FSGF Full Synthetic SAE 5W-30 Motor Oil is recommended for new and older vehicles equipped with catalytic converters.

- Fit for use in gasoline engines requiring GM dexos 1<sup>™</sup> global engine oil specification\*
- Excellent anti-wear properties/Extended wear and oxidation protection
- Compatible with conventional motor oils
- Improved emissions/catalytic converter efficiency
- Outstanding low-temperature fluidity and protection at start up
- Improved protection against viscosity and thermal breakdown at high temperatures

## APPLICATIONS:

**BRAD PENN® FSGF Synthetic SAE 5W-30 Motor Oil** is designed for today's higher revving, hotter running engines. It is also back-serviceable in applications where oils of API SM, SL or SJ quality are specified. Fit for use in the following applications:

- When ILSAC GF-5 oils are required
- Where API SN (Resource Conserving) oils are desired
- In most turbo-charged gasoline passenger car engines
- Ford WSS-M2C946-A

\*NOTE: The "dexos" trademark is owned by General Motors LLC. BRAD PENN® Full Synthetic Motor Oil is not manufactured by or sponsored or licensed by or affiliated with General Motors LLC.

## BRAD PENN® FSGF Full Synthetic SAE 5W-30 Motor Oil Typical Properties

SAE Grade		5W-30
API Service	Test Method	SN / GF-5
Gravity, API	ASTM D-4052	34.2
Density, lbs/gal (g/L)	Calculated	7.128 (854)
Viscosity, cSt @ 40°C	ASTM D-445	61.8
Viscosity, cSt @ 100°C	ASTM D-445	10.3
Viscosity Index	ASTM D-2270	150
Color	ASTM D-1500	1.5
Pour Point, °C (°F)	ASTM D-5949	-39 (-38.2)
Flash Point, °F (°C)	ASTM D-92	425 (218)
CCS @ -30 °C, cP	ASTM D-5293	5900
MRV @ -35 °C, cP	ASTM D-4684	35,000
TBN	ASTM D-2896	8.7
Sulfated Ash, Mass %	ASTM D-874	0.99
Product Code		7110