

# PennGrade® Full Synthetic



## Product Description

**PennGrade® Full Synthetic Motor Oil** has been formulated with the latest high-tech additive technology and premium quality synthetic base oils. It is designed to meet the toughest demands of today's automotive engine technology. **PennGrade® Full Synthetic Motor Oil** has been designed to offer the highest levels of performance, engine cleanliness and protection while supporting the performance requirements of ILSAC GF-6. The product has been designed to insure quick cold weather engine start up while protecting vital engine parts and to provide exceptional protection against wear in high temperature / high stress applications. **PennGrade® Full Synthetic Motor Oil** provides excellent resistance to viscosity breakdown and foaming in modern engines.

## Product Features and Benefits

SAE 0W-20, 5W-20 and 5W-30 Are Formulated to Meet and Exceed all requirements of ILSAC GF-6A. SAE 0W-16 is Formulated to Meet and Exceed all Requirements of GF-6B Utilizes synthetic base oil to improve temperature control in engines.

Outstanding thermal and oxidation stability delivers excellent performance during the maximum oil change interval recommended by the engine manufacturer.

Enhanced cleanliness protects against harmful sludge build-up and piston deposits.

Excellent low temperatures capabilities help aide in ultra-fast cold weather start-up protection.

**PENNGRADE®**  
FOR PASSENGER CARS

## Typical Applications

**PennGrade® Full Synthetic** is fully licensed in all of the following viscosity grades and specifications:

## Specifications

### PG Full Syn 0W-16

*API Approvals*  
API SP  
API SN Plus  
ILSAC GF-6B, Resource Conserving

### PG Full Syn 0W-20

*API Approvals*  
API SP  
API SN Plus  
API SN  
ILSAC GF-6A, Resource Conserving

### PG Full Syn 5W-20

*API Approvals*  
API SP  
API SN Plus  
API SN  
ILSAC GF-6A, Resource Conserving

### PG Full Syn 5W-30

*API Approvals*  
API SP  
API SN Plus  
API SN  
ILSAC GF-6A, Resource Conserving

*Meets the Performance Requirements of:*

Ford WSS-M2C962-A1  
Ford WSS-M2C947-B1

*Meets the Performance Requirements of:*

Ford WSS-M2C960-A1  
Ford WSS-M2C945-B1

*Meets the Performance Requirements of:*

Ford WSS-M2C961-A1  
Ford WSS-M2C946-B1

### PG Full Syn 10W30

*API Approvals*  
API SP  
API SN Plus  
API SN  
ILSAC GF-6A, Resource Conserving

## Typical Properties

**PennGrade® Full Synthetic** is formulated to meet typical properties listed below:

SAE Viscosity Grade	J300	0W-16	0W-20	5W-20	5W-30	10W-30
Viscosity @ 100°C, cSt	ASTM D445	7.29	8.85	8.82	11.32	11.7
Viscosity @ 40°C, cSt	ASTM D445	37.38	46.52	48.86	65.03	76
Viscosity Index	ASTM D2270	164	174	162	169	147
Pour Point, °F (°C)	ASTM D97	-60 (-51)	-54 (-48)	-44 (-42)	-44 (-42)	-47 (-44)
Flash Point, °F (°C)	ASTM D92	401 (205)	401 (205)	401 (205)	401 (205)	410 (210)
Sulfated Ash, Weight %	ASTM D874	0.8	0.8	0.8	0.8	0.8
Specific Gravity @ 60°F	ASTM D4052	0.8434	0.8445	0.8470	0.8479	-----
CCS @ -35°C, cP	ASTM D5293	4593	5509	-----	-----	-----
CCS @ -30°C, cP	ASTM D5293	-----	-----	4045	4532	-----

### D-A Part Number:

Bulk	62801	62811	62821	62831	62841
Tote – 330 Gal	62803	62813	62823	62833	62843
Drum – 55 Gal	62802	62812	62822	62832	N/A
Bag-in-a-box – 6 Gal	62805	62815	62825	62835	N/A
Case – 4/1 Gal	N/A	N/A	N/A	62834	62844
Case – 12/1 Qt	N/A	62816	62826	62836	N/A

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