

# 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-5. 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

Full Synthetic formulation helps increase engine life by maintaining oil flow at both high and low temperatures.

LSPI (Low Speed Pre-Ignition) prevention technology.

Formulated with exclusive additive chemistry which provides outstanding viscosity stability, superior engine cleaning power, deposit control and wear protection.

Combination of synthetic base stocks and unique additives ensures excellent thermal and oxidation stability and outstanding performance during maximum recommended oil drain intervals.

Excellent low temperature characteristics permit quick engine starting in cold weather and promptly deliver oil to vital metal parts maximizing engine life.

Anti-foam agents permit higher oil pressure for greater protection.



## Typical Applications

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

## Specifications

### PG Full Syn 0W-20

*API Approvals*  
API SN Plus  
API SN  
ILSAC GF-5, Resource Conserving

*Meets the Performance Requirements of:*  
Ford WSS-M2C947-A  
Ford WSS-M2C947-B1

### PG Full Syn 5W-20

*API Approvals*  
API SN Plus  
API SN  
ILSAC GF-5, Resource Conserving

*Meets the Performance Requirements of:*  
Ford WSS-M2C945-A  
Ford WSS-M2C945-B1

### PG Full Syn 5W-30

*API Approvals*  
API SN Plus  
API SN  
ILSAC GF-5, Resource Conserving

*Meets the Performance Requirements of:*  
Ford WSS-M2C946-A  
Ford WSS-M2C946-B1

### PG Full Syn 10W-30

*API Approvals*  
API SN Plus  
API SN  
ILSAC GF-5, Resource Conserving

## Typical Properties

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

SAE Viscosity Grade	J300	0W-20	5W-20	5W-30	10W-30
Viscosity @ 100°C, cSt	ASTM D445	8.1	8.6	10.5	11.7
@ 40°C, cSt	ASTM D445	42.7	46.7	59.1	76
Viscosity Index	ASTM D2270	165	163	170	147
Pour Point, °F (°C)	ASTM D97	-54 (-48)	-51 (-46)	-51 (-46)	-47 (-44)
Flash Point, °F (°C)	ASTM D92	446 (230)	432 (222)	464 (240)	410 (210)
Sulfated Ash, Weight %	ASTM D874	0.9	0.8	0.8	0.8
Specific Gravity @ 60°F	ASTM D4052	N/A	0.8456	0.8461	N/A
CCS @ -35°C, cP	ASTM D5293	N/A	-----	-----	-----
CCS @ -30°C, cP	ASTM D5293	-----	3500	3840	-----
CCS @ -25°C, cP	ASTM D5293	-----	-----	-----	N/A

### D-A Part Number:

Bulk	62811	62821	62831	62841
Tote – 330 Gal	62813	62823	62833	62843
Drum – 55 Gal	62812	62822	62832	62842
Bag-in-a-box – 6 Gal	62815	62825	62835	62845
Case – 4/1 Gal	N/A	N/A	62834	62844
Case – 12/1 Qt	62816	62826	62836	62846

