

# Product Information



A PRODUCT OF THE VALVOLINE COMPANY A DIVISION OF ASHLAND INC.

## VALVOLINE SYNPOWER MOTOR OIL: ILSAC Grades

Valvoline's SYNPOWER ILSAC Grades are premium fully synthetic motor oils that are formulated with the highest quality synthetic base oils and enhanced with the most advanced additive technology for ultimate performance in meeting the latest requirements for modern engines in North America. The ILSAC Grade Synpower Motor Oils are specially designed to provide high levels of fuel efficiency and deposit protection under severe service conditions and meet the performance requirements of virtually all naturally aspirated, turbocharged and supercharged passenger cars operating in North America including European and Asian passenger cars.

### The Valvoline SYNPOWER Motor Oil Advantages

- **Breakdown Resistance:** Increased thermal and oxidation stability.
- **Deposit Control:** Reduces formation of sludge and varnish deposits.
- **Wear Protection:** Improves oil film strength and breakdown resistance.
- **Volatility:** Lowers oil vaporization and consumption at extreme conditions.
- **Cold Start Properties:** Flows easily at low temperature.

Approvals and Performance Levels				
API SN/SM	0W-20	5W-20	5W-30	10W-30
ACEA A1	0W-20	5W-20	5W-30	10W-30*
ACEA A5			5W-30	10W-30*
ILSAC GF-5	0W-20	5W-20	5W-30	10W-30
dexos 1		5W-20	5W-30	
Ford WSS-M2C945-A		5W-20		
Ford WSS-M2C946-A			5W-30	
Chrysler MS-6395	0W-20	5W-20	5W-30	10W-30
GM 6094M **		5W-20	5W-30	10W-30
GM 4718M			5W-30	10W-30

Test	0W-20	5W-20	5W-30	10W-30
Vis @ 100°C (cSt)	8.8	8.7	10.7	10.5
Vis @ 40°C (cSt)	47.0	48.1	59.5	64.0
Viscosity Index	169	161	172	153
Spec Gravity @ 60°F	0.844	0.847	0.847	0.856
Density(lbs/gal)	7.04	7.06	7.06	7.14
Total Base No.	8.7	8.7	8.7	8.7
Flash COC (°C)	220	221	223	223
Pour Point (°C)	-45	-42	-42	-39
CCS cP (°C)	4600@-35	5000@-30	4300 @ -30	4200@-25
MRV TP-1 cP (°C)	30,000@-40	13,500@ -35	18,000@-35	13,000@-30
NOACK, wt. % loss	12.0	10.0	10.0	9.6
Sulfated Ash	0.93	0.93	0.93	0.93
Zinc/Phosphorus, wt.%	0.083/0.076	0.083/0.076	0.083/0.076	0.083/0.076
Sodium, wt%	0.049	0.049	0.049	0.049
Calcium, wt%	0.211	0.211	0.211	0.211

\* Except European Fuel Economy

\*\* Obsolete

This information only applies to products manufactured in the following location(s): USA, Canada.

Effective Date:  
10-25-11

Replaces:  
3-1-11

Author's Initials:  
ZGZ

Code  
Rev 010

**ASHLAND**

# Product Information



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## VALVOLINE SYNPOWER MOTOR OIL: non-ILSAC Grades

Valvoline's SYNPOWER non-ILSAC Grades are premium fully synthetic motor oils that are formulated specially with the highest quality synthetic base oils and enhanced with the most advanced additive technology for ultimate performance in meeting the latest requirements for European applications including Mercedes Benz, BMW and VW diesel and gasoline engines and meet the performance requirements of virtually all naturally aspirated, turbocharged and supercharged passenger cars operating in North America including Asian passenger cars.

### The Valvoline SYNPOWER Motor Oil Advantages

- **Breakdown Resistance:** Increased thermal and oxidation stability.
- **Deposit Control:** Reduces formation of sludge and varnish deposits.
- **Wear Protection:** Improves oil film strength and breakdown resistance.
- **Volatility:** Lowers oil vaporization and consumption at extreme conditions.
- **Cold Start Properties:** Flows easily at low temperature.
- **Emissions System Protection:** Synpower MST 5W-30 and Synpower MST 5W-40, are designed for diesel passenger cars with diesel particulate filters and also meet the emission system protection requirements of ILSAC GF-5.

Approvals/Performance Level	Synpower MST	Synpower MST	Synpower HST	Synpower
API SN/SM	5W-30	5W-40	5W-40	20W-50
API CF **	5W-30	5W-40	5W-40	20W-50
ACEA A3/B3/B4	5W-30	5W-40	5W-40	20W-50
ACEA C3	5W-30	5W-40	-----	20W-50
MB 229.3, 229.5	5W-30	5W-40	5W-40*	20W-50
MB 229.31, 229.51	5W-30*	5W-40*	-----	20W-50
VW 505.01	5W-30*	5W-40*	-----	20W-50
VW 502.00, & 505.00	5W-30*	5W-40*	5W-40*	20W-50
Porsche A40		5W-40*	5W-40*	
BMW Long Life 04	5W-30*	5W-40*	-----	20W-50
BMW Long Life 01	5W-30	-----	5W-40*/5W-30*	-----
dexos 2	5W-30			

\* Denotes formal OEM approval

\*\* Obsolete

Test	5W-30 MST	5W-40 MST	5W-40 HST	20W-50
Vis @ 100°C (cSt)	12.0	13.1	13.5	19.0
Vis @ 40°C (cSt)	72.0	79.0	82.0	139.0
Viscosity Index	163	167	168	155
Spec Gravity @ 60°F	0.852	0.852	0.854	0.862
Density(lbs/gal)	7.1	7.1	7.2	7.2
Total Base No.	7	7	10	7
Flash COC (°C)	227	230	230	230
Pour Point (°C)	-42	-42	-42	-33
CCS cP (°C)	6020@-30	5900@-30	5900@-30	4700@-15
MRV TP-1 cP (°C)	20,000@-35	20,000@-35	20,000@-35	10,100@-20
NOACK, wt. % loss	9.3	10.1	10.2	8.2
Sulfated Ash	0.78	0.78	1.26	0.78
Zinc/Phosphorus, wt. %	0.084/0.077	0.084/0.077	0.099/0.090	0.084/0.077
Calcium	0.193	0.193	0.326	0.193

This information only applies to products manufactured in the following location(s): USA, Canada.

Effective Date: 10-25-11      Replaces: 12-15-10      Author's Initials: ZGZ      Code Rev 009

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