

PRODUCT INFORMATION



Powers-All Full Synthetic Motor Oil

DESCRIPTION: **Powers-All Full Synthetic Motor Oil** is uniquely formulated with an advanced additive system proven to provide protection against low-speed pre-ignition (LSPI)¹ often occurring in high performance turbocharged gasoline direct-inject engines (TGDI). They are full synthetic, multi-grade automotive lubricants formulated to meet or exceed the warranty requirements of most major manufacturers of gasoline engines. Extending oil change intervals and overall engine maintenance is greatly improved due to the full-synthetic formulations these fluids offer.

- BENEFITS:**
- Excellent anti-wear performance
 - Improved fuel economy and durability
 - Compatible with conventional motor oils
 - Excellent low-temperature starting and pumpability characteristics
 - Provides significant engine cleanliness, wear protection and resistance to oil thickening

APPLICATION: **Powers-All Full Synthetic Motor Oil** can help optimize fuel economy, oxidation control and lower emissions when compared to conventional motor oils. They are suitable for use in four-stroke gasoline engines used in passenger cars, light trucks, SUV's, motorcycles, generators and other equipment. All viscosity grades meet the performance requirements of the latest gasoline-fueled engine service **ILSAC GF-5/Resource Conserving** (excludes **SAE 0W-16** and **0W-40** viscosity grades) and **API SN Plus**.

Powers-All Synthetic 0W-30 and 0W-40 Motor Oils provide exceptional cleaning power, wear protection and overall performance. They are recommended for many types of modern, high performance engines where they provide optimum performance especially when operating under severe driving conditions.

Powers-All Full Synthetic 0W-16 is ultra-low viscosity engine oil designed to help provide long engine life and outstanding protection in vehicles such as **Toyota** and **Honda** where a **SAE 0W-16** is specified. **Powers-All Full Synthetic 0W-16** is classified by The American Petroleum Institute (API) to meet or exceed **API Service SN Plus / GF-5**.

Approvals / Recommended For Use by Powers-All:

	0W-16	0W-20	0W-30	0W-40	5W-20	5W-30	10W-30
API SN Plus, SN	X	X	X	X	X	X	X
ILSAC GF-5 / Resource Conserving	X	X			X	X	X
Ford WSS-M2C945-A					X		
Ford WSS-M2C946-A			X			X	
Ford WSS-M2C947-A		X					
FCA US LLC - Chrysler MS-6395		X	X		X	X	X
GM 6094M (obsolete)			X	X		X	X
GM 4718M (obsolete)			X	X	X	X	X
Toyota/Honda	X	X	X		X	X	X



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Typical Properties:		Powers-All Full Synthetic Motor Oil		
SAE Grade	Test Method	5W-20	5W-30	10W-30
Material Code		PA330210	PA330211	PA330213
Viscosity, cSt @ 40°C	ASTM D-445	45.8	61.5	66.5
Viscosity, cSt @ 100°C	ASTM D-445	8.5	11.0	10.5
Viscosity Index	ASTM D-2270	165	175	147
CCS @ -25°C, cP	ASTM D-5293	----	----	5200
CCS @ -30°C, cP	ASTM D-5293	5000	4800	----
Total Base Number, mg KOH/g	ASTM D-2896	8	8	8
Pour Point, °C	ASTM D-5949	-42	-40	-37
Flash Point, COC, °F/ (°C)	ASTM D-92	440 (226)	445 (229)	450 (232)

Typical Properties:		Powers-All Full Synthetic Motor Oil			
SAE Grade	Test Method	0W-16	0W-20	0W-30	0W-40
Material Code		PA330208	PA330212	PA330215	PA330218
Viscosity, cSt @ 40°C	ASTM D-445	36.5	46.0	60.5	73.6
Viscosity, cSt @ 100°C	ASTM D-445	7.2	8.6	10.8	13.2
Viscosity Index	ASTM D-2270	162	168	175	181
CCS @ -35°C, cP	ASTM D-5293	5000	5200	5800	5900
Total Base Number, mg KOH/g	ASTM D-2896	8	8	8	8
Pour Point, °C	ASTM D-5949	-48	-48	-45	-45
Flash Point, COC, °F/ (°C)	ASTM D-92	430 (221)	435 (220)	450 (220)	470 (243)

**Note: Values shown are typical only and do not constitute a specification. Minor variations in product are to be expected in normal manufacturing. Always confirm with the original manufacturer's recommendation for proper equipment operating requirements.*

Always consult your owner's manual for proper lubricant selection.

¹ *LSPI is a premature ignition of the air-fuel mixture in the combustion chamber. This low-speed pre-ignition is very violent and causes over pressurization of the combustion chamber that can lead to damage and failure of the piston, rings, valves, and other internal components.*



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