

## BEYOND SYNTHETIC™

Royal Purple HPS Series motor oil is specifically formulated to maximize performance and meet the demands of high performance and modified engines. HPS is recommended for vehicles no longer under manufacturer warranty and for those seeking a higher level of performance and protection.

This unique blend enables HPS to outperform leading synthetics and conventional lubricants for both gasoline and diesel engines. Royal Purple's HPS is fortified with a high level of zinc / phosphorus anti-wear additive and Royal Purple's proprietary Synerlec additive technology.

### SYNERLEC® ADDITIVE TECHNOLOGY MAKES THE DIFFERENCE!

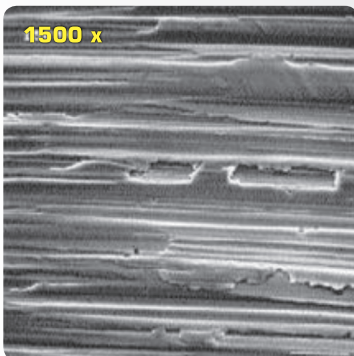
Synthetic oils enable Royal Purple to make superior lubricants, but it is Royal Purple's advanced Synerlec additive technology that gives its lubricants their amazing performance advantages. Synerlec additive technology truly is beyond synthetic.

Synerlec additive technology forms a tough, slippery, synthetic film on all metal surfaces. This proprietary film significantly improves lubrication: first, by increasing the oil film's thickness, and second, by increasing the oil film's toughness, both of which help to prevent metal-to-metal contact. It displaces moisture from metal surfaces and protects all metals against rust and corrosion. It also fortifies the oil against the detrimental effects of heat, which causes oil to oxidize.

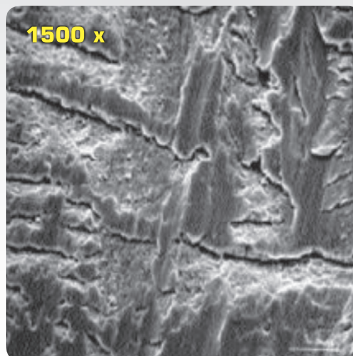
## PERFORMANCE ADVANTAGES

- **Outstanding Film Strength**  
HPS provides exceptionally high film strength for dramatic reductions in engine wear and reduced engine heat to extend the life of your engine.
- **Synthetic Solvency**  
HPS's advanced synthetic solvency reduces engine deposits and keeps engines clean.
- **Extends Oil Drain Intervals**  
HPS provides exceptional oxidation stability to extend oil life and allow for more miles driven between oil changes saving you time, money and reducing the impact on the environment.
- **Saves Fuel and Maximizes Horsepower**  
HPS provides improved sealing between the piston ring and cylinder wall which maximizes horsepower and torque and optimizes fuel economy.
- **Reduces Maintenance Costs**  
HPS protects valve trains using roller or flat tappet lifters that require added protection due to high lift / high ramp rate camshafts.
- **Superior Corrosion Protection**  
HPS contains synthetic inhibitors and has a moderately high base number to protect against rust and corrosion.

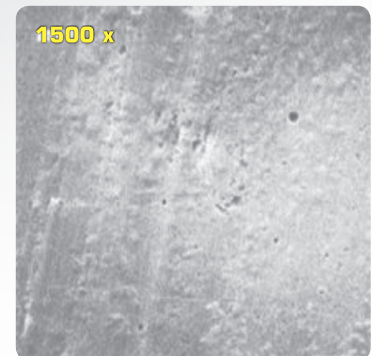
## BEARING COMPARISON



A new bearing surface appears smooth until magnified 1500X.



The bearing is scuffed after using a leading synthetic motor oil.



The bearing is visibly smoother after using Royal Purple HPS.

TYPICAL PROPERTIES*	ASTM METHOD	SAE GRADE				
		5W20	5W30	10W30	10W40	20W50
Viscosity	D-445					
cSt @ 40°C		50.8	65.6	71.4	92.1	176.1
cSt @ 100°C		8.9	11.3	11.3	13.7	20.1
Viscosity Index	D-2270	157	167	151	151	134
Cold Crank Viscosity	D-5293					
cP @ -35°C		4680	4880	---	---	---
cP @ -30°C		---	---	4900	6600	---
cP @ -20°C						6450
Flash Point, °F	D-92	385	385	365	385	390
Density, lbs/g	D-4052					
Total Base Number, mgKOH/g	D-2896	10	10	10	10	10

\*Properties are typical and may vary