



## PANAMA 15W-50 SM

**Semi Synthetic PCEO**

### PERFORMANCE LEVELS: Meets and Exceeds

ACEA A2/B2, A3/B3: MB 229.1, VW 500/501/505, CUMMINS CES 20071, PORSCH GL

Black Bulls PANAMA Semi synthetic motor oil; our most advanced formulation fortified with most effective additives and blended using latest technology for most demanding modern high-performance engines.

Suitable for all gasoline, diesel, gas or dual fuel engines of passenger cars, light duty commercial vehicles, and off-road SUV's requiring API SM viscosity grade or as recommended by the OEM. It helps lower the maintenance cost by keeping your engine clean providing reduced engine wear and improving performance.

### Typical properties:

PROPERTY	UNIT	TEST METHOD	TYPICAL VALUES
SAE VISCOSITY GRADE			<b>15W-50</b>
APPEARANCE	NA	VISUAL	B&C
COLOR	NA	ASTM D-1500	2.5
DENSITY @29.5°C	g/mL	ASTM D-4052	0.8750
KINEMATIC VISCOSITY @100°C	cSt	ASTM D-445	17.50
KINEMATIC VISCOSITY @40°C	cSt	ASTM D-445	Report
VISCOSITY INDEX	NA	ASTM D-2270	136
CORRECTED FLASH POINT	°C	ASTM D-92	248
HOMOGENEITY/MISCIBILITY	NA	ASTM D-6922	Pass
ACCEPTABLE ODOR	NA	VISUAL	Agreeable
POUR POINT	°C	ASTM D-97	-27
TOTAL BASE NO. (TBN)	mg KOH/g	ASTM D-2896	9.5

### Advantages:

- Fully & Semi Synthetic formulation.
- Improved Oxidation resistance.
- Protection from piston deposits
- Superior wear and corrosion protection.
- Excellent fuel economy and energy efficiency.
- Longer drain intervals and smooth running of engines.
- Helps quick cold weather starting.
- Enhanced emission system protection compared to ILSAC GF-4 and GF-5

### Applications:

- For modern gasoline, diesel, gas and dual fuel engines or as recommended by the OEM.
- Serves best for high-end German, Japanese, Korean cars and buses wherever a lubricant of this grade recommended by the OEM.
- Suitable for all engines requiring API SM Oils.

