

COMMANDER

0W-20, 5W-20, 5W-16

**PREMIUM FULLY SYNTHETIC
LOW VISCOSITY & EXTRA FUEL EFFICIENT
PETROL ENGINE OIL**

BULWARK COMMANDER oils are premium fully synthetic, multi-grade Low Viscosity Extra Fuel Efficient (LVEFE) motor oils engineered to meet the requirements of ultra-modern downsized and hybrid engines seeking high performance and additional protection benefits. The product is intended for use in modern engines of passenger cars, pick-ups and light trucks including turbocharged & supercharged engines, which require LVEFE category oils.

BULWARK COMMANDER oils are manufactured using high-quality synthetic base stocks and technologically advanced premium additive packages. Recommended for use in all-season operations, especially gasoline engines of cars from European, American, Japanese and other Asian manufacturers, which require oils with performance levels API SP/RC (Resource Conserving) and SAE 0W-20, 5W-20 & 5W-16 viscosity.

PERFORMANCE LEVEL*

- API SP/RC; SP Plus
- ILSAC GF-6A

KEY BENEFITS

- Excellent fuel economy benefits.
- Protection after treatment systems and extends oil drain intervals.
- Ultra-low viscosity together with special additives, makes cold engine starts easier
- Unique formulation demonstrates robustness specific to low speed premature ignition prevention.

TYPICAL CHARACTERISTICS**

Properties	Test Methods	0W-20	5W-20	5W-16
Density @ 29.5°C, Kg/m ³	ASTM D4052	0.851	0.853	0.852
Kinematic Viscosity @ 100°C cSt	ASTM D7042	8.12	8.56	7.82
Viscosity Index	ASTM D2270	154	162	164
Cold Cranking Viscosity, mPa-s	ASTM D5293	3980 at -35°C	4100 at -30°C	4260 at -30°C
Borderline Pumping Viscosity, mPa-s	ASTM D4684	12,300 at -40°C	16,500 at -35°C	11,520 at -35°C
Sulphated Ash, %	ASTM D874	0.80	0.80	0.80
Flash Point, COC, °C	ASTM D92	232	228	234
Pour Point, °C	ASTM D97	-54	-48	-48
Total Base Number, mg KOH/g	ASTM D2896B	7.32	7.32	7.32

* Performance levels indicated may include licensed API specs or specs that our products meet or exceed

** Typical Characteristics are typical values. Minor variations within the permissible tolerance limits maybe expected on the final product.

STORAGE

All packages should be stored under cover. Where outside storage is unavoidable, drums should be laid horizontally to avoid the possible ingress of water and the obliteration of drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

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