

PREMIUM LUBRICANTS & AUTOMOTIVE SOLUTIONS

GC ULTRA SYNTHETIC SAE 0W-20 API SP

Advanced Fully Synthetic Fuel-Economy Engine Oil | Maximum LSPI & Turbocharger Protection

PRODUCT DESCRIPTION & APPLICATION

GC ULTRA SYNTHETIC SAE 0W-20 API SP is a premium fully synthetic motor oil specifically engineered to protect modern turbocharged gasoline direct injection (TGDI) engines operating under extreme desert heat in Saudi Arabia. Delivers advanced protection against Low-Speed Pre-Ignition (LSPI) and timing chain wear while maximizing fuel efficiency.

PERFORMANCE & SERVICE DRAIN INTERVALS (SAUDI ARABIA SPECIFICATION)

Application Category	Recommended Service Life / Drain Interval
Modern TGDI Passenger Cars, Hybrids & SUVs	10,000 km – 12,000 km (Optimized for severe KSA driving conditions)
High-Efficiency Urban & Highway Fleets	300 – 350 Operating Hours (Under thermal heat stress)

***Note:** Actual drain intervals may vary depending on vehicle condition, fuel sulfur levels, severe dust exposure, and OEM engine recommendations.

KEY FEATURES & DESERT ADVANTAGES

- ✓ **LSPI Prevention:** Formulated to eliminate Low-Speed Pre-Ignition events in downsized turbocharged engines.
- ✓ **Fuel Economy Excellence:** Meets ILSAC GF-6A requirements for maximum fuel economy and low CO2 emissions.
- ✓ **Timing Chain Defense:** Controls chain stretch and wear to maintain optimum engine timing and performance.
- ✓ **Turbo Thermal Shield:** Resists severe thermal oxidation and coking inside high-temperature turbochargers.

TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Property Parameter	Method	Unit	Typical Value
SAE Viscosity Grade	SAE J300	-	0W-20
Kinematic Viscosity @ 100°C	ASTM D445	cSt	8.50
Kinematic Viscosity @ 40°C	ASTM D445	cSt	43.20
Viscosity Index (VI)	ASTM D2270	-	178
Density @ 15°C	ASTM D4052	g/cm ³	0.845
Flash Point (COC)	ASTM D92	°C	226
Pour Point	ASTM D97	°C	-45
Total Base Number (TBN)	ASTM D2896	mg KOH/g	8.2
Apparent Viscosity (CCS) @ -35°C	ASTM D5293	mPa.s (cP)	4,900
Sulfated Ash Content	ASTM D874	% wt	0.76
Evaporation Loss (NOACK)	ASTM D5800	% wt	9.5

PERFORMANCE SPECIFICATIONS & STANDARDS

- API Service Category: SP / ILSAC GF-6A
- SASO / GSO Standards Compliant (Saudi Standards, Metrology and Quality Organization)