

PREMIUM LUBRICANTS & AUTOMOTIVE SOLUTIONS

GC ULTRA SYNTHETIC SAE 5W-40 API SP

Top-Tier Fully Synthetic Gasoline Motor Oil | Maximum LSPI & Turbo Protection

PRODUCT DESCRIPTION & APPLICATION

GC ULTRA SYNTHETIC SAE 5W-40 API SP is a top-tier fully synthetic motor oil formulated to deliver maximum protection for high-output, turbocharged direct-injection (TGDI) engines operating under peak ambient temperatures in Saudi Arabia. Engineered to mitigate LSPI risk and protect timing chains against wear.

PERFORMANCE & SERVICE DRAIN INTERVALS (SAUDI ARABIA SPECIFICATION)

Application Category	Recommended Service Life / Drain Interval
Turbocharged Passenger Cars & Performance SUVs	10,000 km – 12,000 km (Optimized for KSA severe service)
Downsized TGDI & Modern Fleets	300 – 350 Operating Hours (Continuous thermal loading defense)

***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 Standard:** Eliminates Low-Speed Pre-Ignition hazards in modern turbocharged direct-injection engines.
- ✓ **Timing Chain Defense:** Controls chain stretch and wear to maintain precise engine timing.
- ✓ **Turbocharger Thermal Shield:** Resists extreme turbo temperature oxidation and oil coking.
- ✓ **Shear Stability:** Stays in grade under high shear stress to retain oil film thickness.

TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Property Parameter	Method	Unit	Typical Value
SAE Viscosity Grade	SAE J300	-	5W-40
Kinematic Viscosity @ 100°C	ASTM D445	cSt	14.60
Kinematic Viscosity @ 40°C	ASTM D445	cSt	85.80
Viscosity Index (VI)	ASTM D2270	-	177
Density @ 15°C	ASTM D4052	g/cm ³	0.851
Flash Point (COC)	ASTM D92	°C	232
Pour Point	ASTM D97	°C	-42
Total Base Number (TBN)	ASTM D2896	mg KOH/g	8.4
Apparent Viscosity (CCS) @ -30°C	ASTM D5293	mPa.s (cP)	5,300
Sulfated Ash Content	ASTM D874	% wt	0.78
Evaporation Loss (NOACK)	ASTM D5800	% wt	9.1

PERFORMANCE SPECIFICATIONS & STANDARDS

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