

PREMIUM LUBRICANTS & AUTOMOTIVE SOLUTIONS

GC SYNTHETIC SHIELD SAE 5W-40 API SN

Advanced Synthetic Engine Oil | Extended Thermal Stability & European OEM Capability

PRODUCT DESCRIPTION & APPLICATION

GC SYNTHETIC SHIELD SAE 5W-40 API SN is an advanced synthetic engine oil engineered to meet the high thermal and mechanical stress of European and Asian vehicles operating in the Middle East. Provides excellent piston cleanliness, oxidation control, and wear resistance under extreme highway driving conditions.

PERFORMANCE & SERVICE DRAIN INTERVALS (SAUDI ARABIA SPECIFICATION)

Application Category	Recommended Service Life / Drain Interval
Passenger Cars, Luxury Sedans & SUVs	8,000 km – 10,000 km (Optimized for long-distance KSA highway travel)
High-Performance Gasoline Engines	280 – 320 Operating Hours (Sustained thermal resistance)

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

KEY FEATURES & DESERT ADVANTAGES

- ✓ **Thermal Viscosity Resistance:** Prevents oil thickening and thermal degradation during high-speed summer travel.
- ✓ **Piston Deposit Control:** High-efficiency detergents control carbon formation under continuous heavy loads.
- ✓ **Cold-Start Protection:** Ensures immediate oil pressure delivery during cool morning ignition.
- ✓ **Seal & Elastomer Compatibility:** Protects oil seals and gaskets to prevent leaks over long service intervals.

TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Property Parameter	Method	Unit	Typical Value
SAE Viscosity Grade	SAE J300	-	5W-40
Kinematic Viscosity @ 100°C	ASTM D445	cSt	14.50
Kinematic Viscosity @ 40°C	ASTM D445	cSt	87.00
Viscosity Index (VI)	ASTM D2270	-	172
Density @ 15°C	ASTM D4052	g/cm ³	0.854
Flash Point (COC)	ASTM D92	°C	228
Pour Point	ASTM D97	°C	-39
Total Base Number (TBN)	ASTM D2896	mg KOH/g	8.1
Apparent Viscosity (CCS) @ -30°C	ASTM D5293	mPa.s (cP)	5,800
Sulfated Ash Content	ASTM D874	% wt	0.80
Evaporation Loss (NOACK)	ASTM D5800	% wt	10.0

PERFORMANCE SPECIFICATIONS & STANDARDS

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