

TECHNICAL DATA SHEET

ECO MATIC 5W-30 SP/CF*Fully Synthetic Passenger Car & Light-Duty Engine Oil*

API SP • API CF • ILSAC GF-6A

PRODUCT DESCRIPTION

ECO MATIC 5W-30 SP/CF is a premium fully synthetic engine oil meeting API SP and ILSAC GF-6A — the latest and most advanced specification for passenger car and light-duty gasoline and diesel engines. API SP supersedes API SN Plus and SN, introducing improved protection against Low-Speed Pre-Ignition (LSPI) in turbocharged direct-injection engines, superior timing chain wear protection, and enhanced deposit control. Its dual API SP/CF rating also makes it suitable for light-duty diesel applications.

APPLICATIONS

- Modern gasoline passenger cars and light trucks requiring API SP / ILSAC GF-6A grade oil
- Turbocharged gasoline direct-injection (TGDI) engines — provides LSPI protection
- Hybrid vehicle engines and conventional gasoline engines
- Light-duty diesel engines requiring API CF specification
- Vehicles with extended drain interval recommendations from the manufacturer
- Available in 1L, 3.5L, 4L, 5L, and 20L pack sizes

PERFORMANCE STANDARDS

API SP • API CF • ILSAC GF-6A • ACEA A5/B5

FEATURES & BENEFITS

- Meets API SP / ILSAC GF-6A — latest generation protection for modern engines
- Low-Speed Pre-Ignition (LSPI) protection for turbocharged GDI engines
- Superior timing chain wear protection — exceeds API SN Plus requirements
- Excellent fuel economy contribution through reduced friction (GF-6A certified)
- Outstanding engine cleanliness and piston deposit control
- Backward compatible with API SN, SN Plus, SM, SL, and SJ specifications
- Excellent low-temperature pumpability for fast cold-start protection
- Dual SP/CF rating for both gasoline and light-duty diesel compatibility

TYPICAL PROPERTIES

TEST PARAMETER	TEST METHOD	TYPICAL VALUE
Appearance	Visual	Clear, Amber Liquid
SAE Viscosity Grade	—	5W-30
API Service Classification — Petrol	—	SP
API Service Classification — Diesel	—	CF
ILSAC Classification	—	GF-6A
Kinematic Viscosity @ 40°C (cSt)	ASTM D445	65.0
Kinematic Viscosity @ 100°C (cSt)	ASTM D445	11.0
Viscosity Index	ASTM D2270	165 min
Flash Point, COC (°C)	ASTM D92	220 min
Pour Point (°C)	ASTM D97	-40 max
Total Base Number (mg KOH/g)	ASTM D2896	9.0 min

TEST PARAMETER	TEST METHOD	TYPICAL VALUE
Sulfated Ash (% wt)	ASTM D874	0.9 max
Density @ 15°C (kg/L)	ASTM D4052	0.858
HTHS Viscosity @ 150°C (mPa·s)	ASTM D4683	2.9 min
Phosphorus Content (% wt)	ASTM D5185	0.08 max
Copper Corrosion @ 100°C, 3 hrs	ASTM D130	1B max

STORAGE & HANDLING

Store the product indoors and avoid direct sunlight or heat. Keep containers tightly closed when not in use. Avoid contact with skin and eyes. After skin contact, wash thoroughly with soap and water. Keep out of reach of children.

DISCLAIMER: The information provided in this Technical Data Sheet is based on standard laboratory tests and is indicative only. Synergy Lubricant and Chemical makes no warranty regarding the accuracy of this data. Typical values may vary within acceptable production tolerances.

Revision: 01 | Date: March 2026