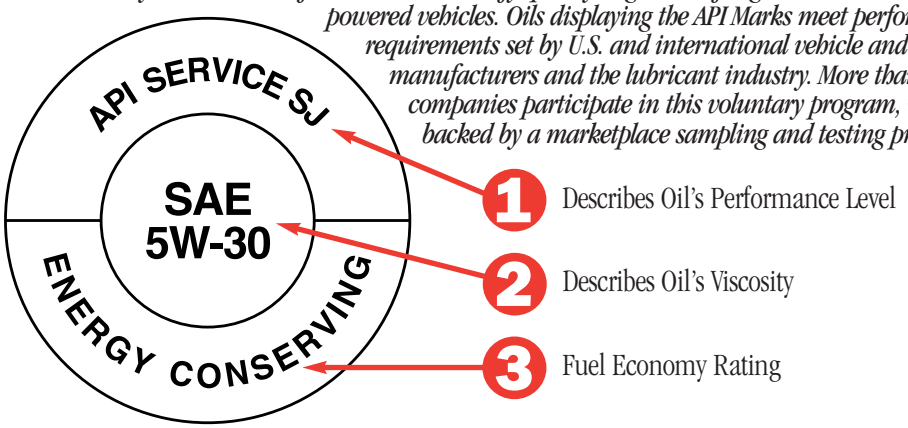
American Petroleum Institute

Motor Oil Guide

API's Service Symbol and Certification Mark identify quality engine oils for gasoline and diesel-powered vehicles. Oils displaying the API Marks meet performance requirements set by U.S. and international vehicle and engine manufacturers and the lubricant industry. More than 500 companies participate in this voluntary program, which is backed by a marketplace sampling and testing program.



1. Performance Level

Gasoline engine oil categories (for cars, vans, and light trucks with gasoline engines): Oils designed for gasoline-engine service fall under API's "S" (**S**ervice) categories. Look for current service category SJ. API SH may appear in the Service Symbol when preceded by a "C" category. See reverse for descriptions of current and obsolete API service categories.

Diesel engine oil categories (for heavy-duty trucks and vehicles with diesel engines): Oils designed for diesel-engine service fall under API's "C" (**C**ommercial) categories. Look for current categories CH-4, CG-4, CF-4, CF-2, and CF.

2. Viscosity

The measure of an oil's thickness and ability to flow at certain temperatures.

3. Fuel Economy Rating

The "Energy Conserving" rating applies only to oils intended for gasoline-engine cars, vans, and light trucks. Widespread use of "Energy Conserving" oils may result in an overall savings of fuel in the nation as a whole. (Applies primarily to SAE 5W-30 and 10W-30 grades.)

Guide to SAE Grades of Motor Oil for Passenger Cars

Multigrade oils such as SAE 5W-30 and 10W-30 are widely used because, under all but extremely hot or cold conditions, they are thin enough for easy cranking at low temperatures and thick enough to perform satisfactorily at high temperatures. **Note that your vehicle's requirements may vary. Follow your vehicle manufacturer's recommendations on SAE oil viscosity.**

If lowest expected outdoor temperature is	Typical SAE Viscosity Grades for Passenger Cars
0°C (32°F)	5W-30, 10W-30, 10W-40, 20W-50
–18°C (0°F)	5W-30, 10W-30, 10W-40
Below –18°C (0°F)	5W-30

For more information about API's Engine Oil Program, call the American Petroleum Institute at 202-682-8516 or visit our website at www.api.org/eolcs. This guide is provided as a service to the motoring public courtesy of the American Petroleum Institute. Concept courtesy of Pinnacle Oil, Inc.

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Look for the API Quality Marks every time you buy motor oil.

API Service Symbol
Indicates an oil's performance level, viscosity, and fuel economy rating.

API Certification Mark
Indicates that an oil meets current standards of the International Lubricant Standardization and Approval Committee (ILSAC), a joint effort of U.S. and Japanese automobile manufacturers.

Guidelines to help you get more from your motor oil.

- Refer to your owner's manual for type of oil to use.
- Follow manufacturer's oil change recommendations.
- Use only the recommended API category: "**S**" for gasoline engines; "**C**" for diesel engines.
- Select the proper SAE oil viscosity.
- If you find it necessary to mix brands of oil, use the same viscosity grade and API service category to maintain performance.
- Properly dispose of used oil. Contact your local service station or recycling center for assistance.

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Which oil is right for you?

The current and previous API Service Categories are listed below. Vehicle owners should refer to their owner's manuals before consulting these charts. Engine oils are categorized based on their performance characteristics and the type of service for which they are intended: **S** category oils are suitable for gasoline engines and **C** category oils for diesel engines. Oils may have more than one performance level.

For automotive gasoline engines, the latest engine oil service category includes the performance properties of each earlier category. If an automotive owner's manual calls for an API SG or SH oil, an API SJ oil will provide full protection. For diesel engines, the latest category usually - but not always - includes the performance properties of an earlier category.

Gasoline Engines

Category	Status	Service
SJ	**Current**	For all automotive engines presently in use. Introduced in the API Service Symbol in 1996.
SH	Obsolete	For model year 1996 and older engines. Valid when preceded by certain C categories.
SG	Obsolete	For model year 1993 and older engines.
SF	Obsolete	For 1988 and older engines.
SE	Obsolete	For 1979 and older engines.
SD	Obsolete	For 1971 and older engines.
SC	Obsolete	For 1967 and older engines.
SB	Obsolete	For older engines. Use only when specifically recommended by the manufacturer.
SA	Obsolete	For older engines; no performance requirement. Use only when specifically recommended by the manufacturer.

Diesel Engines

Category	Status	Service
CH-4	**Current**	Introduced December 1, 1998. For high-speed, four-stroke engines designed to meet 1998 exhaust emission standards.CH-4 oils are specifically compounded for use with diesel fuels ranging in sulfur content up to 0.5% weight. Can be used in place of CD, CE, CF-4, and CG-4 oils.
CG-4	**Current**	Introduced in 1995. For severe duty, high-speed, four-stroke engines using fuel with less than 0.5% weight sulfur. CG-4 oils are required for engines meeting 1994 emission standards. Can be used in place of CD, CE, and CF-4 oils.
CF-4	**Current**	Introduced in 1990. For high-speed, four-stroke, naturally aspirated and turbocharged engines. Can be used in place of CD and CE oils.
CF-2	**Current**	Introduced in 1994. For severe duty, two-stroke-cycle engines. Can be used in place of CD-II oils.
CF	**Current**	Introduced in 1994. For off-road, indirect-injected and other diesel engines including those using fuel with over 0.5% weight sulfur. Can be used in place of CD oils.
CE	Obsolete	Introduced in 1987. For high-speed, four-stroke, naturally aspirated and turbocharged engines. Can be used in place of CC and CD oils.
CD-II	Obsolete	Introduced in 1987. For two-stroke-cycle engines.
CD	Obsolete	Introduced in 1955. For certain naturally aspirated and turbocharged engines.
CC	Obsolete	For engines introduced in 1961.
CB	Obsolete	For moderate duty engines from 1949 to 1960.
CA	Obsolete	For light duty engines (1940's and 1950's).

Note: API intentionally omitted "SI" from the sequence of categories because the letters are commonly used to refer to international units of measurement.

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