



ELITE

GASOLINE ENGINE OIL

What is API SP/ ILSAC GF-6?

API SP/ ILSAC GF-6 is the new industry standard specifications for the American Petroleum Institute (API) and ILSAC (International Lubricants Standardization and Approval Committee) for all engine oil grades. These new performance specifications replace previous specifications API SN Plus/ILSAC GF-5.

API SP/ILSAC GF-6 is backwards compatible, meaning it will perform in the latest gasoline engine technology and will also work with previously designed gasoline engine standards.

What are the benefits to the new GF-6 specification?

- Improved fuel economy and lower emissions
- Improved deposit control and engine cleanliness
- Greater protection against timing chain wear and LSPI

What is Low Speed Pre-Ignition (LSPI)?

- LSPI, commonly referred to as "engine knock," is an abnormal combustion phenomenon typically observed at low engine speeds and high loads in which the fuel/air mixture in the combustion chambers ignites before spark timing. LSPI can cause engine knock and in severe cases, catastrophic engine failure.
- There are multiple theories about what causes LSPI in downsized Turbo Gasoline Direct Injection engines, although it is widely accepted that motor oils can play a role. Research has shown that during LSPI, a drop of oil in the cylinder may be combining with fuel droplets to create hot spots in the combustion chamber and prompting ignition before spark timing is intended to occur. Research has also shown that motor oils can be reformulated to significantly reduce their contribution to LSPI, which was the goal of the API SN PLUS supplemental service category introduced in 2018. GM chose to address LSPI with the introduction of its dexos1™ Gen 2 specification, which went into effect September 2011.
- The API SP/ILSAC GF-6 standard were designed to address the impact of LSPI in downsized TGD engines.

Does my car need an API SP/ILSAC GF-6 engine oil?

- Always make sure to check your vehicle owner's manual to the performance specification requirement and recommended oil grade viscosity (i.e. 5W-30) for your vehicle.

Why does oil type matter?

- Using substandard oil can affect engine performance, and in the worst-case scenario, may damage or harm the engine. Failure to use the recommended engine oil can also result in engine damage not covered by the vehicle warranty.

When to use dexos1™ Gen 2

- General Motors recommends that you use the dexos1™ Gen 2 specification if you own a General Motors vehicle with a model year of 2011 and newer. This includes the existing dexos1 generation and now the new dexos1™ Gen 2 specification.

For more information, please see your local Co-op Fuel Team expert today.

