



CHAMPION BRANDS
1001 GOLDEN DRIVE
CLINTON, MO 64735
1-800-821-5693

www.championbrands.com
www.championsusechampion.com

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What You Need to Know About GF-6 Engine Oils

Licensing for the newest engine oil standards won't take effect until May 1, 2020, but oil manufacturers like Champion Brands have planned for this change for years. The standards represent a big change for the industry, taking into account rising MPG requirements and new engine technology. It's the beginning of the future for engine oils.

The newest standard is GF-6, which is designated by the International Lubricant Standardization Advisory Committee or ILSAC. The organization worked for eight years on its development. There are two categories: GF-6A and GF-6B.

The name of the game for GF-6 engine oils is reducing emissions through increased fuel efficiency. GF-6 really is in response to the OEMs being legislated to lower their emissions - and that's not just in North America—that's globally. One factor to know about the new specifications is that GF-6A will be the main product used. That will be the standard for the most common viscosity grades.

The 6A is backward compatible. That means that a GF-6 engine oil for a given SAE viscosity grade will also work for older engines that required previous standards like GF-5 and GF-4. In fact, it will offer added performance in the engine.

What's also new for these latest ILSAC standards is that GF-6B is not backward compatible. It's specific to 0W-16 viscosity grades and should only be used in vehicles that recommend that type of engine oil. Typically, Toyota and Honda models recommend that grade. Japanese OEMs have used 0W-16 oils for years, favoring it for its cold-start qualities and fuel efficiency, even over 0W-20 grades.

GF-6B oils meet all the requirements of GF-6A but is reserved for that lower viscosity, but they cannot be mixed. GF-6B oils will carry their own certification labels. The "shield" was developed as the 6B alternative to the already commonplace "starburst" label for gasoline engine oils.

Of note: 10W30s and higher, are now for vehicles that are 15 years or older. Currently, 5W-30 and 5W-20 cover more than 50 percent of vis grades that are OEM required. Add in the growing popularity of 0W-20, and that covers as much as 80 percent of vehicles out there. Lately there have been concerns about LSPI. The problem of low-speed pre-ignition, also called LSPI or super knock, arose around the development of turbocharged direct-injection engines. They're more fuel efficient, but the high-pressure combustion chambers sometimes caused spontaneous fuel combustion without spark. It could have devastating effects on engines.

API developed the SN Plus service category to address this issue during the development of GF-6. It aimed to certify oils that add protection against LSPI through their formulations. Technology has advanced a lot in a few short years, and SN Plus protection is a part of the new ILSAC standards. GF-6 now has that built in, so not only does it have LSPI protection, but it has better deposit control, better fuel economy. Drivers with direct-injection engines can expect both efficiency and performance. Many drivers that have put 10W-30 or 5W-30 in their cars for years might wonder about the thought of a lighter 0W engine oil. If the manufacturer recommends 0W-20 and your previous car had a 5W-30 in it, they're now doing it for a reason.