



Product One Voice

Q&A

Product: AMSOIL Synthetic 5W-40 Premium API CJ-4 Diesel Oil (DEO)

Product Area: Motor Oil

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1. Question:

What is API CJ-4 and what is different about it?

Answer:

The EPA has mandated changes for 2007 diesel engines and API CJ-4 is the corresponding diesel oil specification. CJ-4 is an improvement over the previous CI-4 Plus API specification, although chemical limitations have been put in place for CJ-4. The reason for these chemical limitations has to do with the fact that 2007 diesel engines have a new device on the exhaust system. This new device is called a diesel particulate filter (DPF) which is designed to greatly reduce particulate emissions of diesel engines. Sulfated ash, phosphorus, and sulfur additives have been limited because these additives will clog the DPF.

2. Question:

Where can I use DEO Premium API CJ-4 Diesel Oil?

Answer:

AMSOIL DEO is recommended for use wherever API CJ-4 engine oil is called for in 2007 diesel engines and wherever API CI-4 Plus, CH-4, CF, etc. is called for in older diesel engines. AMSOIL DEO engine oil is backwards compatible with all previous API diesel specifications. API CJ-4 is absolutely essential for new engines equipped with exhaust treatment devices, and with AMSOIL, we offer premium synthetic technology.

3. Question:

Is AMSOIL DEO recommended for extended drain intervals?

Answer:

Yes, but only when monitored by oil analysis. Due to chemical limitations mandated by the EPA, AMSOIL DEO has a lower TBN value of eight (8). This is lower than other AMSOIL diesel oils, which have TBN values of twelve (12). This means that the ability of AMSOIL DEO to neutralize acids is limited over extended drain intervals. It is very important to realize that the lower TBN value of DEO does not mean it is lower quality. In fact, DEO contains additional dispersants and anti-oxidants needed to fulfill the CJ-4 category, which the other CI-4 Plus oils do not contain. Tests have demonstrated that DEO is more than capable of neutralizing acids generated during diesel or gasoline engine operation with standard OEM recommended drain intervals.

With the new EPA requirements, engine oils will be subject to more severe environments than ever before. EGR will increase (from 15% to near 30%) in 2007, which will increase soot and acids. Closed crankcase ventilation (CCV) will also increase the overall stress on engine oil. The result will be lower oil drain intervals and this is why oil analysis is recommended.

4. Question:

Why is DEO a 5W-40-viscosity grade instead of 15W-40?

Answer:

In a word, flexibility. 5W-40 is a well-recognized viscosity for diesel engines. It offers a wider operating temperature range than 15W-40 and enhances cold weather starting and protection. AMSOIL DEO replaces 5W-40, 10W-40, and 15W-40 viscosity oils making it excellent for use in many applications and facilitating the consolidation of inventory as well. Additionally, the 5W-40 viscosity differentiates DEO from other AMSOIL diesel oils, thereby minimizing confusion.

5. Question:

Can I use DEO in gasoline engines?

Answer:

Yes. AMSOIL DEO is API SM quality, which is the highest API rating for gasoline engine oils today. AMSOIL DEO makes a great fleet oil for mixed gasoline and diesel engine fleets. You can save your fleet customer time and money by recommending AMSOIL DEO.

6. Question:

Why is DEO more expensive than other AMSOIL diesel oils?

Answer:

It is more expensive because the new additives used to replace zinc and phosphorus cost more. Additionally, supplemental dispersants and anti-oxidants are included to meet the API CJ-4 criteria.

7. Question:

How long will this transition to the new CJ-4 oil take?

Answer:

It will be a relatively slow transition process to CJ-4. Due to the fact that CJ-4 costs more, and due to pre-buying of '06 equipment, it is expected that CJ-4 oils will begin selling slowly but will increase over time. CI-4 Plus will remain in the market until at least 2010. Significant pre-buying of '06 hardware means an estimated 3% of the heavy duty fleet will require CJ-4 by the end of 2007.