



## Independent Lab Tests Prove Orion 5000-EL Improves Cold Weather Starting

OKEMOS, Mich. – [Orion® 5000-EL](#) engine and fuel lubricant improves cold weather starting, increases fuel efficiency, and reduces harmful emissions, according to lab tests conducted by [Paragon Laboratories](#) using ASTM standard benchmarks and protocols for medium and heavy duty diesel engines, and diesel fuel testing.

Paragon's results validate what savvy organizations know from real world experience with the product. Orion 5000-EL improves cold weather starting.

Paragon Laboratories performed a series of [ASTM D613](#) tests to determine if ultra low sulfur diesel (ULSD) fuel treated with Orion 5000-EL would experience a cetane improvement.

The results of the ASTM D613 tests indicated a two point (4.65%) increase in the cetane level of ultra low diesel fuel treated with Orion 5000-EL (10 gallons of ultra low sulfur diesel fuel treated with two ounces of Orion 5000-EL) compared to untreated ultra low sulfur diesel fuel.

Cetane measures the starting, ignition, and combustion quality characteristics of diesel fuel. The cetane number itself relates to the ignition delay—the period that occurs between the start of fuel injection and the start of combustion.

Good quality combustion occurs with rapid ignition followed by a smooth and complete fuel burn. The higher the cetane number, the shorter the ignition delay and the better the quality of combustion.

The annual autumn switch to winter blend diesel fuel lowers cetane levels. During the winter months, diesel fuel operators can experience starting problems. In cold weather, low cetane fuels are slow to ignite and then burn too quickly leading to excessive smoke and noise.

Improving the cetane quality of your diesel fuel will lead to easier starting and fuel ignition, helping it burn more smoothly and efficiently delivering improved engine performance, better fuel economy, reduced exhaust emissions and a quieter running engine.

Paragon's ASTM D613 cetane test results confirm the real world results of Orion customers. [Orion 5000-EL](#) improves cold weather starting, improves fuel efficiency, and reduces harmful emissions.

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**About Orion Industrial, LLC**

[Orion Industrial](#), LLC is a new North American manufacturer of synthetic lubricants for industrial uses (e.g., gear boxes, ) and for use in internal combustion engines. Orion<sup>®</sup> 5000-EL is a synthetic fuel and engine lubricant formulated with ASET<sup>™</sup> technology for medium and heavy-duty diesel engines. To learn more about Orion Industrial, LLC visit [www.orion5000.com](http://www.orion5000.com) or email [info@orion5000.com](mailto:info@orion5000.com).

**About Paragon Laboratories, Inc**

[Paragon Laboratories](#) is an independent, privately held laboratory specializing in testing services on fuels, oil, and water samples. Paragon performs over 225 analytical procedures that include ASTM protocols. The company employs a management system to meet the specifications of the ISO/IEC 17025:2005 standard.

**About ASTM International**

[ASTM International](#), formerly known as American Society for testing and materials, is one of the largest voluntary standards development organizations in the world known for their high technical quality and market relevancy. They are a trusted source for technical standards in materials, products, systems, and services.

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