

DESCRIPTION

MAXIBURN CI (PCN 0093401) is an ashless marine fuel additive formulated to improve ignition quality and combustion performance in low sulfur marine fuels, including fuels meeting ISO 8217 specifications, VLSFO, ULSFO, and bio-derived fuel blends.

The nitrate-based cetane improver chemistry is designed to increase cetane number and reduce ignition delay in fuels with marginal ignition characteristics or low calculated cetane index (CCI). Improved ignition quality supports more stable combustion during low-load operation, maneuvering, slow steaming and other transient engine operating conditions.

MAXIBURN CI contains detergent technology designed to clean existing fuel system deposits and maintain injector cleanliness during continued operation. MAXIBURN CI is fully soluble in all marine fuel oils and provides an ashless alternative to metal-based combustion catalyst technologies.

APPLICATION AND USE

MAXIBURN CI is designed for routine treatment of marine distillate and residual fuel oils where improved ignition quality and combustion performance are desired. The product may be dosed directly into fuel storage or service tanks and is fully soluble in marine fuel oils.

MAXIBURN CI is particularly suitable for fuels exhibiting marginal ignition characteristics, low calculated cetane index (CCI), or combustion-related operational concerns commonly

encountered during slow steaming, maneuvering, prolonged low-load operation, and transient engine conditions.

For systems experiencing injector fouling, nozzle coking, excessive smoke formation, or combustion-related deposit concerns, increased dosage may be applied during an initial clean-up period before transitioning to routine maintenance treatment.

Dosage Rate	Application
1 to 1,000	Initial clean-up treatment for fouled fuel injectors, filters, and cylinder liner deposits
1 to 2,000	Maintenance treatment for combustion support and ignition quality improvement
1 to 5,000	Routine treatment for ongoing fuel system cleanliness

PERFORMANCE INFORMATION

Standardized diesel engine testing and field trials have demonstrated:

- Reduced injector nozzle coking
- Improved injector keep-clean performance
- Reduced power loss associated with injector fouling
- Improved combustion stability under deposit-forming conditions

FEATURES

- Nitrate-based cetane improver chemistry designed to increase cetane number and reduce ignition delay
- Ashless formulation without metal-based combustion catalyst species
- Fully soluble in marine fuel oils and compatible with onboard fuel management systems
- Suitable for all grades of LSFO, including VLSFO, ULSFO, distillate, and bio-derived fuel blends
- Deposit control performance validated through standardized dynamic diesel engine testing
- Liquid formulation
- Detergency performance supporting fuel system clean-up and injector cleanliness

BENEFITS

- Up to 86% reduction in injector nozzle fouling demonstrated in standardized engine testing
- Reduced power loss associated with injector deposit formation under dynamic engine testing conditions
- Supports improved ignition quality in fuels with marginal combustion characteristics
- More stable combustion during slow steaming, maneuvering, and low-load engine operation
- Cleaner injectors to maintain fuel spray quality over time
- Reduced carbonaceous deposits and visible smoke associated with incomplete combustion
- Ashless chemistry avoids introduction of metal-containing catalyst residues into the fuel system
- Optimized concentration and packaging for simplified onboard handling and dosing

Cetane response and ignition improvement performance are dependent upon several fuel-specific variables, including:

- Base fuel composition
- Base cetane number / CCI
- Fuel density and aromatic content
- Additive treat rate

Typical cetane improvement may range from approximately 1.5 to 3.0 cetane number increase depending on fuel properties and dosage rate. This metric is based on the empirical relationship between treat rate, fuel density and cetane response as demonstrated in nomographical tools.

TYPICAL PHYSICAL PROPERTIES

Appearance:	Yellow to dark amber liquid
Flash point:	>62°C
Density @15.6°C:	~0.955 g/cm ³
Solubility:	Fully soluble in fuel oil

NOTE: Always wear the appropriate personal protective equipment (PPE) when using this product.

PACKAGING

MAXIBURN CI (PCN 0093401) is available in 25L pails.

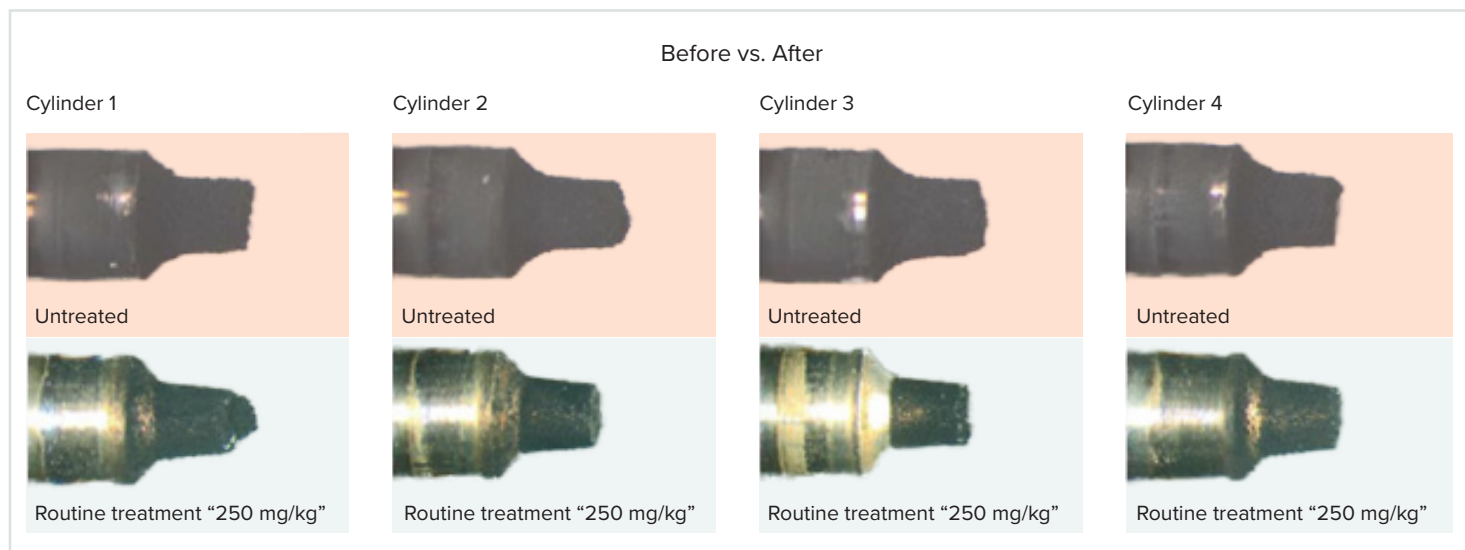


Figure 1. Injector nozzle coking test (CEC-F-23-01), a 1.9L, 4-cylinder, indirect injection, naturally-aspirated, diesel engine is used in this test. An air-flow rig is used to measure air flow loss through the injector nozzles. The engine is operated at light load/speed, cyclic conditions for a period of 10 hours.

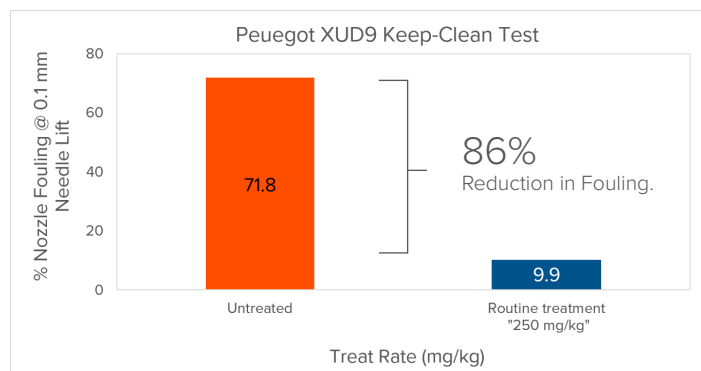


Figure 2. Injector nozzle coking test (CEC-F-23-01), the result is expressed as the average percentage of air flow reduction at 0.1 mm needle lift for all four nozzles. Testing demonstrated an approximate 86% reduction in injector nozzle fouling at 250 mg/kg treatment rate versus untreated base fuel.

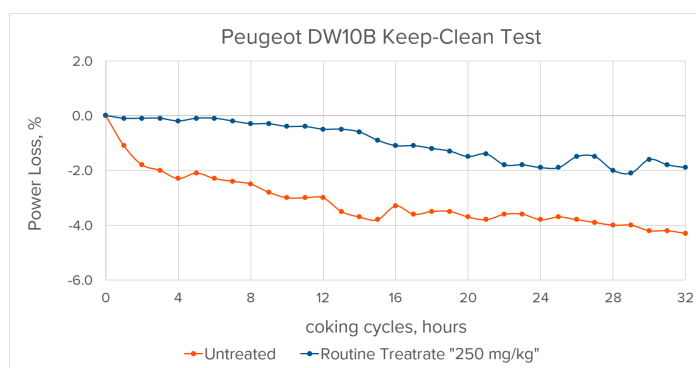


Figure 3. Keep-Clean Performance Test, where the base run and the additized run both start with clean injectors. At the end of the tests, power loss is measured as an indication of injector nozzle coking or deposit formation. The results indicate improved injector keep-clean performance and reduced power loss associated with injector fouling.



Contact your Drew Marine representative for more information

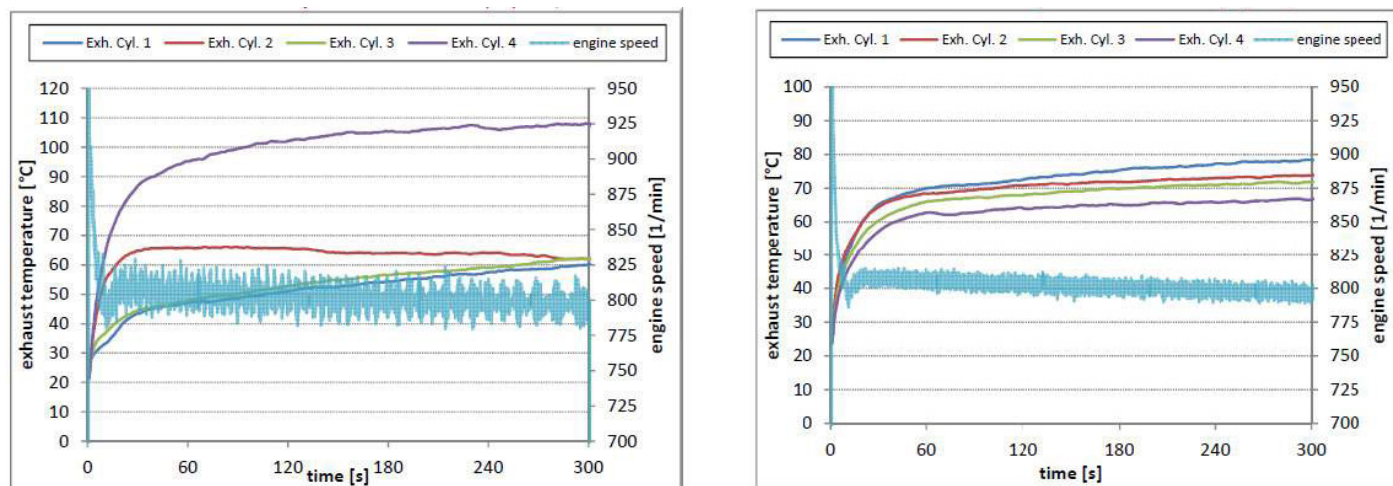


Figure 4. IDID Nozzle Coking Test (CEC-F-110-16), evaluates a fuel or additive's ability to prevent and clean internal diesel injector deposits that can lead to injector sticking and poor cold-start performance. It uses a controlled engine test with added contaminants and assesses performance based on temperature stability and deviation between cylinders during cold starts. Improvements can be seen as more stable—and in some cases lower—exhaust temperatures, indicating better combustion and cleaner injectors.

IMPORTANT INFORMATION

Drew Marine maintains Safety Data Sheets on all of its products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees.

Our Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Drew Marine products.



300 Interpace Pkwy, Suite C350
Parsippany, NJ 07054 USA
1-973-526-5700
www.Drew-Marine.com

Copyright © Drew Marine. All Rights Reserved. All statements, information and data presented herein are believed to be accurate and reliable but are not to be taken as a guarantee, express warranty or implied warranty of merchantability or fitness for a particular purpose, or representation, express or implied, for which seller assumes legal responsibility, and they are offered solely for your consideration, investigation and verification. Statements or suggestions concerning possible use of this product are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe on any patent.