

Keeping the power online

Turbo oils for aeroderivative turbine engines



EASTMAN

Can your choice of lubricant improve the availability and reliability of your turbine engines?

Yes.

Offering higher thermal, hydrolytic, and oxidative stability, Eastman Turbo Oil 2197 is an industry-leading high performance lubricant with approximately 400 million hours of proven performance.

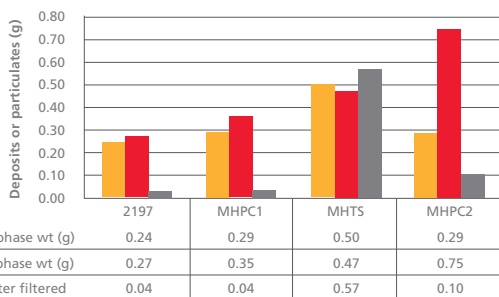
- Higher thermal stability reduces the amount of coking in the engine—resulting in reduced maintenance costs, shorter downtime, and increased return on engine operation.
- Hydrolytic stability decreases the risk of corrosion and improves the reliability of a unit required to start on a moment's notice; it is especially useful for units where there is potential water in the oil system.
- Improved oxidative stability leads to longer oil life and improved operations for an engine.

Whether used in turbine engines as peaking units or primary power generators, Eastman turbo oils help protect an institution's ability to keep operating and serving its constituents. Our lubricants are designed to exceed the demands of current and future aeroderivative turbine engines.

Power plant operators can be confident in their choice, knowing that **Eastman Turbo Oil 2197 is used in 86%** of equivalent GE engines used in aviation (CF6) by the 10 leading North American airlines.

Eastman Turbo Oil 2197 exhibits superior thermal and oxidative stability.

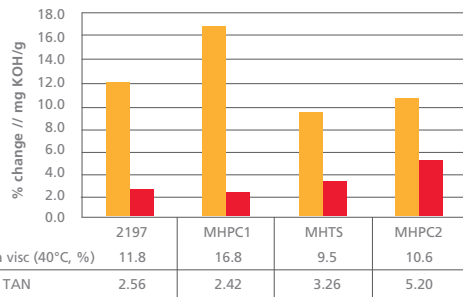
Thermal & oxidative stability—deposition



Test results from the Cyclic Coker Mister simulating the cyclic heat that oil is exposed to in a turbine engine (in both liquid and vapor phases) and measuring suspended coke particulates.

Eastman Turbo Oil 2197 exhibits superior bulk oil stability when thermally and oxidatively stressed.

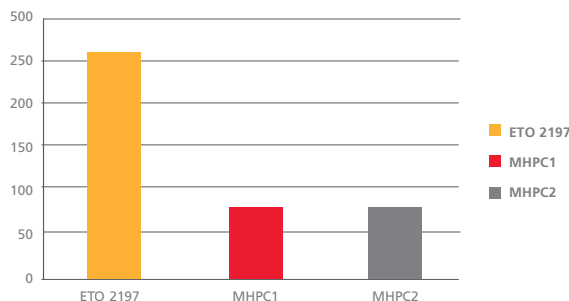
Thermal & oxidative stability—viscosity & TAN



Improved oxidative stability leads to longer oil life and improved operations for an engine.

Eastman Turbo Oil 2197's hydrolytic stability is unmatched by any other oil on the market.

TAN change, hrs to 1.5 mg KOH/g @ 90°C



TAN change is an excellent measure of an oil starting to rapidly degrade. Test results from the Cyclic Coker Mister—consistent with industry tests such as GE Alcor.

Confidence is a powerful thing.

With so many people relying on the efficient and continual operation of aeroderivative turbine engines, the choice in turbo oil becomes a matter of ultimate trust. In this business, there should be no room for doubt.

That's why many turbine engine manufacturers and operators alike trust Eastman turbo oils.

Based on generations of experience in the marketplace, Eastman turbo oils can help reduce damaging coking and—in the process—provide maximum protection for power-generating turbines.

With reliable manufacturing, technical support, and a global distribution network, Eastman has a long history of innovation and customer service. Turbo Oil 2197 is manufactured in our own facilities, ensuring dependable worldwide quality, consistency, and delivery.

Today, as always, we remain committed to helping power plants increase their turbines' reliability, operating life, and efficiency.

For more information, contact your Eastman representative or visit www.Eastman.com/power.

Eastman Turbo Oil 2197

With approximately 400 million hours of proven performance, Eastman Turbo Oil 2197 is by far the most widely used high performance capable (HPC) oil in the world. It is AS5780 HPC/MIL-PRF-23699 HTS class, 5-cSt turbine oil for the most thermally demanding engine and accessory applications.



Eastman Turbo Oil 2380

Widely used in turbine engines around the world, Eastman Turbo Oil 2380 was one of the first turbine oils to be qualified and approved for MIL-PRF-23699 STD (Standard) class and subsequently SAE AS5780 SPC (Standard Performance Capability) class.



OEM approvals

- General Electric
- Pratt & Whitney
- Rolls-Royce
- Solar
- Siemens
- PW Power Systems
(subsidiary of Mitsubishi Heavy Industries, Ltd.)



EASTMAN

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