

Technical Data Sheet

Eastman™ Turbo Oil 2197

Applications

- Aerospace
- Aviation turbine oil (ATO)

Key Attributes

- 5 cSt High Thermal Stability synthetic lubricant
- High temperature cleanliness
- Outstanding Oxidative, Thermal and Hydrolytic stability

Product Description

Eastman Turbo Oil 2197™ is designed to exceed the demand of current and future turbine engines. With over 400 million hours of in-flight experience, it is by far the most widely used HTS fleet oil in the world. Turbo Oil 2197 is manufactured in our own facility so you can rely on consistently high quality wherever you are in the world.

Turbo Oil 2197 is AS5780 HPC / MIL-PRF-23699 HTS class, 5 cSt turbine oil for the most thermally demanding engine and accessory applications.

Typical Properties

| Property | Test Method | Typical Value, Units |
|--|-------------------|---------------------------|
| General | | |
| Density @ 15°C | ASTM D 1298 | 0.9968 kg/L |
| Viscosity, Kinematic @ 100°C | ASTM D 445 | 5.28 mm ² /s |
| @ 40°C | ASTM D 445 | 26.98 mm ² /s |
| @ -40°C after 35 minutes | ASTM D 2532 | 12,539 mm ² /s |
| Pour Point | ASTM D 97 | -57 °C |
| Flash Point | ASTM D92 | 262 °C |
| Total Acid Number | SAE ARP5088 | 0.36 mg KOH/g |
| Evaporation Loss 6.5 hrs @ 204°C | ASTM D 972 | 2.30 % |
| Foaming Volume ^a | | |
| Sequence 1 @ 24°C | ASTM D 892 | 10/0 ml/vol |
| Sequence 2 @ 93 °C | ASTM D 892 | 10/0 ml/vol |
| Sequence 3 @ 24°C | ASTM D 892 | 10/0 ml/vol |
| Thermal Stability & Corrosivity ^b | | |
| Metal Weight | FED-STD-791, 3411 | -0.154 mg/cm ² |
| Total Acid Number | FED-STD-791, 3411 | 1.08 mg KOH/g |
| Viscosity | FED-STD-791, 3411 | 0.37 |
| Corrosion & Oxidative Stability ^c | | |
| Aluminium Weight Change | FED-STD-791, 5308 | 0.009 mg/cm ² |
| Copper Weight Change | FED-STD-791, 5308 | -0.076 mg/cm ² |
| Magnesium Weight Change | FED-STD-791, 5308 | -0.012 mg/cm ² |
| Silver Weight Change | FED-STD-791, 5308 | -0.017 mg/cm ² |
| Sludge | FED-STD-791, 5308 | 0.37 mg/100ml |
| Steel Weight Change | FED-STD-791, 5308 | 0.011 mg/cm ² |
| Total Acid Number | FED-STD-791, 5308 | 0.96 mg KOH/g |
| Viscosity @ 40°C | FED-STD-791, 5308 | 14.75 % |
| Sediment | | |

| | | |
|--------------------------|-------------------|-------------------------|
| Metal Weight | FED-STD-791, 3010 | 0.12 mg/cm ² |
| Sediment, 1.2 µm filter | FED-STD-791, 3010 | 0.85 mg/L |
| Visual Undissolved Water | FED-STD-791, 3010 | None |

^a@ 1 minute setting

^b@ 274°C

^c72 hrs @ 204°C

Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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