



MICROBMONITOR[®] 2



What is the test?

The **MicrobMonitor2** is an easy to use test kit for microbial contamination with simple to read, reliable results. A small sample of fuel or oil is measured into a glass bottle containing a specially formulated gel. The number of microbial colony forming units (CFU) that develop indicates the severity of the contamination. Five **MicrobMonitor2** tests with sterile devices for measuring and dispensing samples are included in a single box.

What is the test used for?

To identify and quantify the presence of all types of microbial contamination in petroleum products in storage, distribution and use including:

- Aviation fuel
- Marine diesels, gas oils and heavy fuels
- Automotive diesel and gasoline, including biofuels
- Fuels for power generation
- Lubricants and hydraulic oils

It can also detect microbes in water and other fluids.

MicrobMonitor2 enables assessment of microbial contamination in fuels in accordance with standard methods ASTM D7978 and IP613.

Who can use the test?

ANYONE - no special skills or equipment are needed, full instructions are provided, and tests can be used on-site.

Why test for microbes in fuel and oils?

Microbial contamination in fuel has caused aircraft to abort take off and ships to lose power and propulsion. If left unchecked contamination can:

- Restrict the flow of fuel and oils by blocking filters and pipes.
- Corrode tanks and bearings
- Degrade fuel and oil quality

Regular testing for microbes together with a good treatment and maintenance regime can:

- Improve asset performance
- Reduce operational risks



Why use the test?

- Works with any petroleum product and associated water
- Quick and easy to use on-site or in the laboratory; more economic than standard laboratory tests
- Detects low level contamination for an early warning of potential problems
- Indicates the severity of any infection not just the presence of microbes as with "go, no-go" tests
- Can be used to monitor trends of contamination
- Determines when IATA contamination limits for aircraft fuel are exceeded and remedial measures are needed
- Contamination limits and detection levels can be user defined for specific facilities and operations
- Unaffected by biocides, DIEGME or other fuel additives; quickly assesses the effectiveness of biocide treatments
- Detects yeasts, bacteria and both spores and active growth of moulds (including *Hormoconis resinae*)



Is the test reliable?

MicrobMonitor2 is listed in EI and JIG standards for monitoring microbial contamination in aviation fuel at airports and supply and distribution facilities. IATA and leading airframe OEMs also recommend routine microbiological testing of aircraft fuel tanks and **MicrobMonitor2** is a widely recommended (including by Boeing and Airbus) for this purpose.

MicrobMonitor2 has been independently validated in an inter-laboratory study conducted for the Energy Institute and enables testing in accordance with IP standard method IP613 and ASTM D7978 - *Determination of the viable aerobic microbial content of fuels and associated water - Thixotropic Gel Culture Method*. The test gives results comparable with laboratory standard test methods IP 385 and ASTM 6974-03

Since its introduction, **MicrobMonitor2** has become established as a globally recognised standard for on-site monitoring of microbes in a broad range of fuels and oils.

- Listed by Boeing, Airbus, BAE Systems and other OEMs in their Aircraft Maintenance Manuals
- Listed by the Joint Inspection Group (JIG) in its Operational Bulletin October 2015 "Technical Information Document; Part 1 Microbial Monitoring Strategies".
- Used regularly by major users and suppliers of fuels such as Lufthansa, KLM, BP and ExxonMobil.
- NATO codified and used by air forces, navies and ground forces of many countries.
- Used in marine, offshore, power, transportation and other industrial sectors

What about Support?

ECHA provides full technical support to all of its customers, and will never leave you with an unresolved issue. Whether its support with interpretation of results or advice on testing regimes, ECHA will always be on hand with the technical knowledge and operation know-how you need. If you require our assistance, please call the number listed below.

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For more information on how to order this product, please contact a member of our Sales Team using any of the details below. You can also find more information on our website.

Tel: +44 (0)29 2036 5930

E-mail: sales@echamicrobiology.com

Web: www.echamicrobiology.com

