

# Determining Water Separation Characteristics of Aviation Turbine Fuels

## test method

Covers a rapid portable means for field and laboratory use to rate the ability of Aviation Turbine Fuels to release entrained or emulsified water when passed through fiberglass coalescing material. Provides a measure of the presence of surfactants in aviation turbine fuels which degrade the performance of filter separators used to remove water from the fuel. The presence of water can impair engine performance and initiate microbiological growth, which can cause corrosion in tanks and filter plugging in fuel lines.

## micro-separometer

The Micro-Separometer is an electro-mechanical instrument used to rate water separation characteristics. The Micro-separometer employs the use of a turbidimeter, a mechanical mixer, and a disposable filter. A portion of the sample, in a clear glass vial, is used to set the meter to read 100. The sample in the vial is discarded and the vial is retained.

Another portion of the sample in a plastic syringe is used to create a water/fuel emulsion using the mixer. The emulsion is passed through the filter at a programmed rate and a portion is collected in the retained vial. The vial is replaced in the turbidimeter and the water separation characteristic of the fuel is rated.

## test expendables

A box containing 6 test kits, commonly known as a "Six Pack" is available as an additional accessory. Expendables for a single test are vacuum packed in each Test Kit. A container of distilled water is also included in each six pack.



K11440 Micro-Separometer

## specifications

Conforms to the Specifications of:  
ASTM D3948, D4860, D7224, D7261

## ordering information

| catalog no. | description       |
|-------------|-------------------|
| K11440      | Micro-Separometer |

### accessories

|          |   |
|----------|---|
| K11440-1 | Six Pack for Jet Fuel, D3948            |
| K11440-2 | Six Pack for Diesel Fuel, D7261         |
| K11440-3 | Six Pack for Clear & Bright Test, D4860 |
| K11440-4 | Six Pack for Jet Fuel, D7224            |