

## FILTER MEMBRANE TESTING CONSUMABLES



### Introduction.

The ASTM specification for Aviation Turbine Fuels, D1655, calls for the fuel to be 'visually free of undissolved water, sediment, and suspended matter', and the standard tests for determining the level of dirt/particulate contamination are ASTM D2276/IP216 and D3830. A known quantity of fuel (normally 5 litres) is passed through standard 37 mm diameter discs of 0.8 micron filter paper under field conditions. The discs are contained in Tenite plastic capsules, or monitors, along with a 34 mm diameter support pad.

The Colormetric test is used as a qualitative assessment of particulate contamination. In this test a single membrane is assembled into the monitor on site, but in a clean area, and after testing it's colour is rated against a standard scale to identify changes in fuel cleanliness. This test is instant and can be fully completed under site conditions. It is particularly useful in establishing trends in fuel cleanliness, so tested membranes are dried and stored for later comparison.

The Gravimetric test, is used to give a quantitative assessment of particulate contamination, and in this test two factory matched weight membranes are assembled into the monitor under clean laboratory conditions. After testing the laboratory re-weighs the two membranes and establishes the increase in weight by deducting the weight of the downstream membrane from that of the upstream membrane. This test is used infrequently to provide a quantitative indication of a suspected fuel cleanliness problem.

### Our Stock Consumables.

Aljac has in stock the following items.

#### **Colormetric Monitors**

Box of 48 uncastellated plastic monitors each loaded with a single membrane and a support pad. Equivalent to Millipore MAWP-037-PO. Part no. 6002198500

#### **Single Membranes and Support Pads**

Replacement membranes (colormetric), GTP1983, Box of 100 membranes with a diameter of 37 mm and support pads with a diameter of 34 mm, with blue paper separators, equivalent to Millipore AAWP-037-PO and Sartorius/Howden Wade P/SKP/10387. Part no. 6002198300

#### **Gravimetric Monitors**

Box with 48 plastic monitors, each loaded with a pair of matched weight membranes and a support pad. Equivalent to Millipore MAWP-037-PM. Part no. 6002198600

#### **Gravimetric Membranes (refills)**

Box with 50 pairs of matched weight membranes without plastic monitors (the monitor must be loaded under laboratory conditions). Equivalent to Millipore AAWP-037-PM. Part no. 6002198400

#### **Empty Plastic Monitors**

Box with 48 empty plastic monitors (must be fitted with membranes and pads). Part no. 6002198700

### **ASTM Color Standards Book**

Wire bound book of standard colours to rate membranes after Colormetric testing. Each page is fuel resistant and has cut outs to view and rate the membrane accurately.  
Part no. 6002107401



### **Membrane Tweezers**

With rounded corners and locking device to hold the membrane securely.  
Part no. 6002209900



### **Membrane Storage Folder**

Black 3-Ring folder.  
Part no. 6002140000

### **Thick Manila Filing Pages**

Set of 10 for the 3-Ring folder.  
Each side can hold 21 storage envelopes.  
Part no. 6002133100



### **Membrane Storage Envelopes**

Pack of 500 clear plastic zip seal envelopes with write on strips for data recording to protect and store dried membranes.  
Part no. 6002126700