

MICROFILTRATION - Technical Data

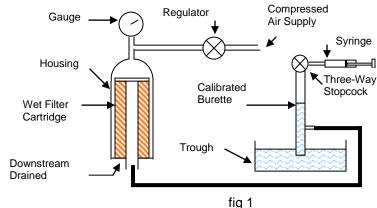
MPL 43 - DIFFUSIVE FLOW TEST - FLUOROFIL

Pre-Wetting:

It is imperative that the Fluorofil cartridge is thoroughly wetted with a solution of 60% iso propyl alcohol (IPA) and 40% water before carrying out the diffusion test. To achieve thorough wetting follow pre-wetting procedure described in MLP16.

Procedure:

- 1. Wet 'O' rings with water and install **Fluorofil** Cartridge in the housing.
- 2. With the wetted Cartridge positioned in the housing, connect housing inlet to a regulated source of clean compressed air (or other test gas such as nitrogen), and connect housing outlet to a suitable piece of flexible tube, extending into a inverted calibrated burette over a water trough partially filled with water (see fig 1).
- 3. Open gas valve slowly so as to pressurise filter assembly to 300mbar, hold pressure for 30 seconds to allow excess test solution to drain.
- 4. Continue to increase the gas pressure slowly until the required test value is. reached.



- 5. Measure flow rate (ml/min) of diffusing gas after flow has stabilised for 5 Minutes.
- 7. Maximum acceptable diffusive flow rates for Fluorofil cartridges are:



PRODUCT CODE	PORE SIZE RATING	TEST PRESSURE		MAXIMUM DIFFUSION
	μm	mbar	psi	ml/min
F10	0.1	1300	19	10
F20	0.2	800	12	10
F45	0.45	400	6	10

8. Maximum Permissible Diffusion Values:

110mm (4")	Cartridge	-	4.4ml/min
125mm (5")	Cartridge	-	5.0ml/min
250mm (10")	Cartridge	-	10.0ml/min
500mm (20")	Cartridge	-	20.0ml/min
750mm (30")	Cartridge	-	30.0ml/min
1000mm (40")	Cartridge	-	40.0ml/min

Note:

Most integrity test failures are due to incomplete wetting of the filter cartridge rather than a defect in the filter membrane itself. Therefore, if a failure occurs, rewet the cartridge and repeat test.