

# Flushing Fluid Recommendations Automatic Particle Counters

Due to the nature of MP Filtri’s portable products, it is likely that they may come into contact with different test fluids between each use. We therefore recommend that products be flushed with a suitably compatible fluid between uses. This flushing process can be performed using a bottle-sampling unit from MP Filtri’s range of products. For more information, contact [sales@mpfiltri.co.uk](mailto:sales@mpfiltri.co.uk)

While the permanently mounted products are less likely to be used with more than one fluid, some applications may require the unit to be removed from the system for re-calibration etc.

The flushing of units when testing between different types of fluid is of great importance as it limits the possibility of system cross-contamination. It also ensures that when a test is conducted that results are representative, and contain no trace of previous system conditions.

**NB:** It is also recommended, that at least 100ml of fluid be discharged to a waste container (approx. 1/5<sup>th</sup> of the container supplied in the accessories of every portable product) prior to test commencement. This purges the unit of either the flushing agent and/or any fluid from previous testing. This action should be performed every time a different fluid is being analysed.

There are four main product types to consider when conducting a flushing sequence:

1. M : Mineral oil & Petroleum based fluids
2. N : Offshore fluids & Water Based fluids
3. S : Phosphate Esters & Aggressive fluids
4. V : Where some products are specially fitted with Viton seals.

**IMPORTANT: ALWAYS REFER TO PRODUCT LITERATURE FOR DETAILS ON MATERIALS OF CONSTRUCTION. ALTERNATIVELY, CONTACT MP FILTRI UK LTD [sales@mpfiltri.co.uk](mailto:sales@mpfiltri.co.uk) FOR ADVICE ON FLUID COMPATABILITY**

**MP FILTRI UK LTD RECOMMEND USING PETROLEUM ETHER OR ISO-PROPYL ALCOHOL WHEN CONDUCTING A FLUSHING SEQUENCE. BELOW IS A CHART DETAILING PRODUCT COMPATABILITY WITH THESE FLUIDS.**

	LPA2	PML2	CML2	110ml Bottle Sampler	250ml Bottle Sampler	ICM
M						
N				N/A		
S				N/A		
V						N/A

Petroleum Ether  
Iso-Propyl Alcohol  
Both Fluids  
N/A



Product not available with this option

**Warning: Do NOT use Acetone to flush MP Filtri Products**

## Petroleum Ether



**100-120°C**

Wt. per ml at 20°C .....

Approx. 0.72g

Weight per ml at 20°C ..... Approx. 0.73g

Acidity ..... 0.1 ml N%

Alkalinity ..... 0.1 ml N%

Non-volatile matter ..... 0.002%

Description: Clear liquid.

-7°C

## Propan-2-ol (iso Propyl Alcohol)



(CH<sub>3</sub>)<sub>2</sub>CHOH

M.W. 60.10

Assay ..... 99.5%

Weight per ml at 20 °C ..... 0.783-0.786g

Water ..... 0.5%

Acidity ..... 0.05 ml N%

Non-volatile matter ..... 0.1%

Aldehydes and Ketones (as C<sub>3</sub>H<sub>6</sub>O) ..... 0.1%

Description: Clear, colourless liquid.

12°C

*For definitive guidance on safe handling, personal protective equipment and other safety measures, always reference the relevant MSDS sheet for the fluid in question*

**IMPORTANT: 'N' version LPA2/PML2/CML2 units that are being used for water applications MUST be periodically operated with a mineral oil based fluid to maintain lubrication and life of internal mechanisms. Failure to do so will cause internal damage to components and/or possible malfunction of the unit over time.**

Where products are being used on water applications, we recommend using Iso-Propyl alcohol for flushing as Petroleum Ether can adversely affect contamination results when mixed with water.

Where your 'N' version product is used for both mineral oils and offshore fluids, we recommend flushing between tests due to possible emulsification.

**IMPORTANT: The standard S version of the PML2 is not a dual purpose unit, this contains a combination of Perfluoroelastomer and EPDM seal material so must not be flushed with Petroleum Ether or Mineral oil fluids**

*MP Filtri UK Ltd accepts no responsibility for products being used outside of their intended applications or specification and as such these products will not be covered by the statutory warranty. Where possible, MP Filtri UK would recommend that the fluids stated in this document be used to reduce the risk of inadvertent damage to a unit. When using or handling any type of liquid, the customer should always refer to the relevant MSDS sheet and take the necessary precautions including but not exclusive to personal protective equipment. MP Filtri UK Ltd would always recommend that where there is uncertainty, the customer contact us directly so that we can assist in the selection of suitable fluids, where either Petroleum Ether or Iso-Propyl alcohol are not available. MP Filtri UK Ltd is not responsible for the safe working practices of customers when handling fluids.*