March 29, 2014

### NEW PRODUCT

#### 6:2/8:2diPAP

The application of polyfluorinated phosphate esters (PAPs) to food-contact paper products, as well as their subsequent detection in the environment, is well-known. In fact, Wellington offers multiple certified reference standards based on the most commonly reported homologues of mono- and di-PAPs currently found in environmental samples based on published articles. All of the disubstituted PAP standards that we currently offer are symmetrical, that is both polyfluorinated substituents have the same chain length. However, unsymmetrical diPAPs are also being reported.

In order to provide a more comprehensive line of diPAP products, Wellington has produced an unsymmetrical diPAP reference standard, specifically native sodium (1H,1H,2H,2H-perfluorooctyl-1H,1H,2H,2H-perfluorodecyl)phosphate (6:2/8:2diPAP).

$$\begin{array}{c|c} & O \\ & \parallel \\ & F_3C(F_2C)_5H_2CH_2C \\ & O \end{array}$$
 
$$\begin{array}{c|c} O \\ & \parallel \\ & CH_2CH_2(CF_2)_7CF_3 \\ & ONa \end{array}$$

6:2/8:2diPAP

Since PAPs can leach out of packaging materials and into food that is consumed, it is important that they are accurately quantified in multiple matrices. PAPs have also been identified as possible precursors to perfluoroalkylcarboxylic acids during biotransformation processes, therefore interest in these compounds is likely going to continue to be high.

A full list of the native and mass-labelled mono- and di-PAP certified reference standards that Wellington currently offers is available on the next page.



#### NATIVE MONO-SUBSTITUTED POLYFLUORINATED PHOSPHATE ESTERS

<b>Catalogue Number</b>	Product (methanol)	Qty	Conc
6:2PAP	Sodium 1H,1H,2H,2H-perfluorooctylphosphate	1.2 ml	50 μg/ml
8:2PAP	Sodium 1H,1H,2H,2H-perfluorodecylphosphate	1.2 ml	50 μg/ml

## MASS-LABELLED MONO-SUBSTITUTED POLYFLUORINATED PHOSPHATE ESTERS

<b>Catalogue Numbe</b>	r Product (methanol)	Qty	Conc
M2-6:2PAP	Sodium 1H,1H,2H,2H-[1,2- <sup>13</sup> C <sub>2</sub> ]perfluorooctylphosphate	1.2 ml	50 μg/ml
M2-8:2PAP	Sodium 1H,1H,2H,2H-[1,2- <sup>13</sup> C <sub>2</sub> ]perfluorodecylphosphate	1.2 ml	50 μg/ml

## NATIVE DI-SUBSTITUTED POLYFLUORINATED PHOSPHATE ESTERS

NEW

<b>Catalogue Number</b>	Product (methanol)	Qty	Conc
6:2diPAP	Sodium bis(1H,1H,2H,2H-perfluorooctyl)phosphate	1.2 ml	50 μg/ml
6:2/8:2diPAP	Sodium (1H,1H,2H,2H-perfluorooctyl-1H,1H,2H,2H-		
	perfluorodecyl)phosphate	1.2 ml	50 μg/ml
8:2diPAP	Sodium bis(1H,1H,2H,2H-perfluorodecyl)phosphate	1.2 ml	50 μg/ml

# MASS-LABELLED DI-SUBSTITUTED POLYFLUORINATED PHOSPHATE ESTERS

Catalogue Number	Product (methanol)	Qty	Conc
M4-6:2diPAP	Sodium bis(1H,1H,2H,2H-[1,2-13C <sub>2</sub> ]perfluorooctyl)phosphate	1.2 ml	50 μg/ml
M4-8:2diPAP	Sodium bis(1H,1H,2H,2H-[1,2- <sup>13</sup> C <sub>2</sub> ]perfluorodecyl)phosphate	1.2 ml	50 μg/ml

Please contact your local distributor or info@well-labs.com for pricing and delivery.

Visit our website (www.well-labs.com) for a complete listing of our new products.

