



This document contains brochures of Wellington Reporters from the year **2016**. We have created a combined file that includes them all for the specified year:

- June 2016 - Catalogue Announcement
- August 2016 - Sodium perfluoro-1-propanesulfonate: L-PFPrS
- August 2016 - Reference Standards for ADONA and F-53B
- August 2016 - Native Organophosphate Reference Standards
- November 2016 - U.S. EPA Method 537 Support Solutions
- November 2016 - Native and Mass-Labelled PFAS Solution/Mixtures

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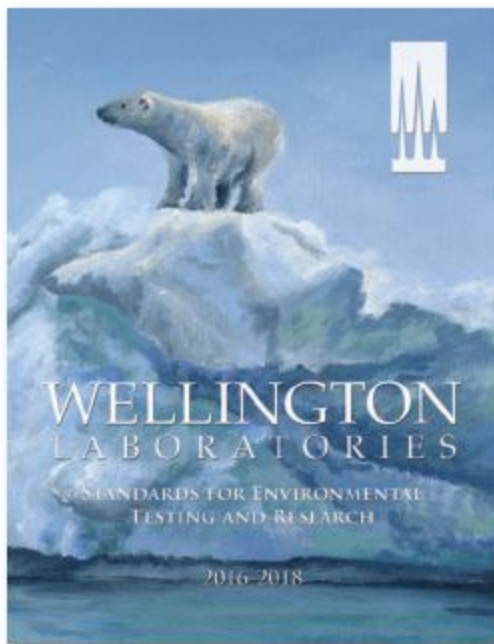
June 10, 2016

**2016-2018 CATALOGUE**

Wellington is pleased to announce the release of our latest catalogue which contains many new certified reference standard solutions, solution/mixtures, and calibration sets as well as numerous products listed in previous catalogues which are still relevant and useful. All of our standards are designed and developed based on customer requests and/or reports originating from the scientific literature that demonstrate escalating environmental concern. If you have an idea for a new product, please do not hesitate to contact us at [info@well-labs.com](mailto:info@well-labs.com). We value input from our customers and appreciate all suggestions.

Between catalogue printings, new products are released via the Wellington Reporter. If you don't want to miss any new developments, please register to be added to our e-mail distribution list at <http://www.well-labs.com/wrconsent.htm>. All new product announcements are posted on our website for your convenience as well.

ISO 9001:2008 ~ ISO/IEC 17025:2005 ~ ISO GUIDE 34:2009

**HIGHLIGHTED  
PRODUCTS**<sup>13</sup>C-PFBSPFC CALIBRATION SET  
& SUPPORT  
SOLUTIONSBRANCHED PFC  
STANDARDSORGANOPHOSPHORUS  
COMPOUNDSNEW HALOGENATED  
FLAME RETARDANTS**HIGHLIGHTED  
PRODUCTS**NEW MASS-LABELLED  
PCDDsHALOGENATED  
CARBAZOLESBISPHENOL A &  
BPA ANALOGUESTETRACHLORO-  
DIBENZOTHIOPHENE  
STANDARDSNEW EU AND EPA  
PAH MIXTURES

ISO 9001

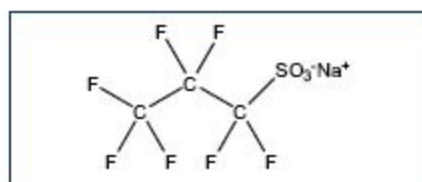
Please contact your local distributor or [info@well-labs.com](mailto:info@well-labs.com) for product pricing and delivery.

Track our Progress at [www.well-labs.com](http://www.well-labs.com)



**NEW PRODUCT****Sodium perfluoro-1-propanesulfonate**  
**L-PFPrS**

Aqueous Film Forming Foams (AFFF) are a group of fire-fighting foams containing perfluoroalkyl substances (PFAS) that have been utilized for fire extinguishment and vapour suppression by facilities handling large quantities of flammable hydrocarbon liquids (e.g. airports, storage terminals, refineries, etc.) since the 1970s. It has been documented that perfluoro-1-propanesulfonate can be present in some AFFF formulations at levels as high as 3.5% of the total perfluoroalkanesulfonic acid (PFSA) concentration. In fact, recent detection of ultra-short PFASs in ground water has elevated scientific interest in current environmental levels, steady-state human exposure, and the environmental fate of these compounds. For this reason, **Wellington** has prepared an analytical reference standard for sodium perfluoro-1-propanesulfonate (L-PFPrS) to aid researchers in both method development and quantification.



Sodium perfluoro-1-propanesulfonate

	Catalogue Number	Product (methanol)	Qty/Conc
<b>NEW</b>	L-PFPrS	Sodium perfluoro-1-propanesulfonate	1.2 ml 50 µg/ml
	L-PFBs	Potassium perfluoro-1-butanesulfonate	1.2 ml 50 µg/ml
	L-PFPeS	Sodium perfluoro-1-pentanesulfonate	1.2 ml 50 µg/ml
	L-PFHxS	Sodium perfluoro-1-hexanesulfonate	1.2 ml 50 µg/ml
	L-PFHpS	Sodium perfluoro-1-heptanesulfonate	1.2 ml 50 µg/ml
	L-PFOs	Sodium perfluoro-1-octanesulfonate	1.2 ml 50 µg/ml
	L-PFOsK	Potassium perfluoro-1-octanesulfonate	1.2 ml 50 µg/ml
	L-PFNS	Sodium perfluoro-1-nonanesulfonate	1.2 ml 50 µg/ml
	L-PFDS	Sodium perfluoro-1-decanesulfonate	1.2 ml 50 µg/ml
	L-PFDoS	Sodium perfluoro-1-dodecanesulfonate	1.2 ml 50 µg/ml



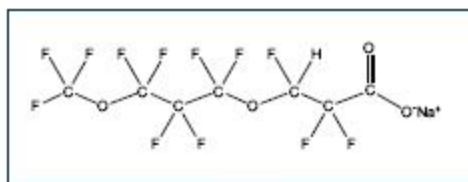
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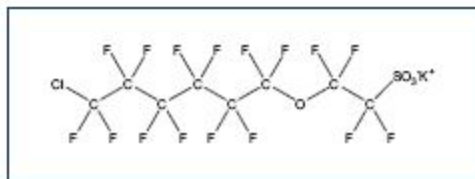


**NEW PRODUCTS****Reference Standards for Replacement PFCs:  
Components of ADONA & F-53B**

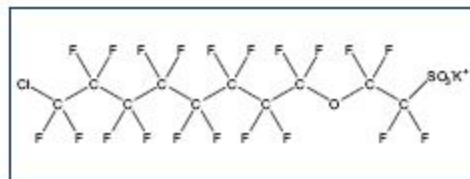
Over the past few years, industry stewardship programs have prompted the removal of PFOS and PFOA from industrial production processes. However, commercial demand has simply resulted in the use of other fluorinated materials in their place such as GenX (CAS 62037-80-3; also known as HFPO-DA), F-53B (CAS 73606-19-6), and ADONA (CAS 958445-44-8). In order to aid researchers in the detection of these compounds in environmental samples, **Wellington** has prepared certified reference standards for the main components of these commercial products. We are presently offering the sodium salt of ADONA (**NaDONA**) and the two major components of F-53B (**9Cl-PF3ONS** and **11Cl-PF3OUdS**).



NaDONA



9Cl-PF3ONS (main component of F-53B)



11Cl-PF3OUdS (minor component of F-53B)

Catalogue Number	Product (methanol)	Qty/Conc
<b>NEW</b> NaDONA	Sodium dodecafluoro-3H-4,8-dioxanonanoate	1.2 ml 50 µg/ml
<b>NEW</b> 9Cl-PF3ONS	Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	1.2 ml 50 µg/ml
<b>NEW</b> 11Cl-PF3OUdS	Potassium 11-chloroeicosadecafluoro-3-oxaundecane-1-sulfonate	1.2 ml 50 µg/ml
HFPO-DA	Tetrafluoro-2-(heptafluoropropoxy)propanoic acid	1.2 ml 50 µg/ml
M3HFPO-DA	Tetrafluoro-2-(heptafluoropropoxy)- <sup>13</sup> C <sub>3</sub> -propanoic acid	1.2 ml 50 µg/ml



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August 22, 2016

**NEW PRODUCTS****NATIVE ORGANOPHOSPHATE REFERENCE STANDARDS**

In order to aid researchers in the accurate quantitation of organophosphorus compounds in environmental samples, Wellington has produced certified reference standards for 14 new organophosphate compounds that are believed to be present at significant levels in commercial flame retardant mixtures such as FM-550 and FM-600. These new products complement our existing inventory of native and mass-labelled organophosphate reference standards.

**NEW OPFR CERTIFIED REFERENCE STANDARDS...**

Catalogue Number	Product (toluene)	Qty	Conc
B2tBPPP	Bis(2- <i>tert</i> -butylphenyl) phenyl phosphate	1.2 ml	50 µg/ml
B4tBPPP	Bis(4- <i>tert</i> -butylphenyl) phenyl phosphate	1.2 ml	50 µg/ml
2tBPDP	2- <i>tert</i> -Butylphenyl diphenyl phosphate	1.2 ml	50 µg/ml
4tBPDP	4- <i>tert</i> -Butylphenyl diphenyl phosphate	1.2 ml	50 µg/ml
T4tBPP	Tris(4- <i>tert</i> -butylphenyl) phosphate	1.2 ml	50 µg/ml
T3iPPP	Tris(3-isopropylphenyl) phosphate	1.2 ml	50 µg/ml
T4iPPP	Tris(4-isopropylphenyl) phosphate	1.2 ml	50 µg/ml
T34DMPP	Tris(3,4-dimethylphenyl) phosphate	1.2 ml	50 µg/ml
B24DiPPPP	Bis(2,4-diisopropylphenyl) phenyl phosphate	1.2 ml	50 µg/ml
B2iPPPP	Bis(2-isopropylphenyl) phenyl phosphate	1.2 ml	50 µg/ml
B4iPPPP	Bis(4-isopropylphenyl) phenyl phosphate	1.2 ml	50 µg/ml
2iPPDP	2-Isopropylphenyl diphenyl phosphate	1.2 ml	50 µg/ml
4iPPDP	4-Isopropylphenyl diphenyl phosphate	1.2 ml	50 µg/ml
24DiPPDP	2,4-Diisopropylphenyl diphenyl phosphate	1.2 ml	50 µg/ml

Wellington also offers native and mass-labelled certified reference standards for the "non-OPFR" components of FM-550.

Catalogue Number	Product (toluene)	Qty	Conc
MEHTBB	2-Ethylhexyl-d <sub>17</sub> 2,3,4,5-tetrabromo[ <sup>13</sup> C <sub>6</sub> ]benzoate	1.2 ml	50 µg/ml
MBEHTBP	Bis(2-ethylhexyl-d <sub>17</sub> ) tetrabromo[ <sup>13</sup> C <sub>6</sub> ]phthalate	1.2 ml	50 µg/ml
EHTBB	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate	1.2 ml	50 µg/ml
BEHTBP	Bis(2-ethylhexyl) tetrabromophthalate	1.2 ml	50 µg/ml



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Previously released native OPFRs....

Catalogue Number	Product (toluene)	Qty	Conc
TPP	Triphenyl phosphate	1.2 ml	50 µg/ml
TOTP	Tri- <i>o</i> -tolyl phosphate	1.2 ml	50 µg/ml
TMTp	Tri- <i>m</i> -tolyl phosphate	1.2 ml	50 µg/ml
TPTP	Tri- <i>p</i> -tolyl phosphate	1.2 ml	50 µg/ml
T35DMPP	Tris(3,5-dimethylphenyl) phosphate	1.2 ml	50 µg/ml
T2IPPP	Tris(2-isopropylphenyl) phosphate	1.2 ml	50 µg/ml
TEP	Triethyl phosphate	1.2 ml	50 µg/ml
TPrP	Tri- <i>n</i> -propyl phosphate	1.2 ml	50 µg/ml
TBP	Tri- <i>n</i> -butyl phosphate	1.2 ml	50 µg/ml
TBEP	Tris(2-butoxyethyl) phosphate	1.2 ml	50 µg/ml
TDBPP	Tris(2,3-dibromopropyl) phosphate	1.2 ml	50 µg/ml
EHDP	2-Ethylhexyl diphenyl phosphate	1.2 ml	50 µg/ml
TEHP	Tris(2-ethylhexyl) phosphate	1.2 ml	50 µg/ml
TCEP	Tris(2-chloroethyl) phosphate	1.2 ml	50 µg/ml
TCPP	Tris[(2 <i>R</i> )-1-chloro-2-propyl] phosphate	1.2 ml	50 µg/ml
TDCPP	Tris(1,3-dichloro-2-propyl) phosphate	1.2 ml	50 µg/ml
BDCP	Bis(1,3-dichloro-2-propyl) phosphate (97% purity in acetonitrile)	1.2 ml	48.5 µg/ml

Previously released mass-labelled OPFRs....

Catalogue Number	Product (toluene)	Qty	Conc
MTTP	<sup>13</sup> C <sub>18</sub> -Triphenyl phosphate	1.2 ml	50 µg/ml
dTPP	Triphenyl phosphate-d <sub>15</sub>	1.2 ml	50 µg/ml
dTEP	Triethyl phosphate-d <sub>15</sub>	1.2 ml	50 µg/ml
dTPrP	Tri- <i>n</i> -propyl phosphate-d <sub>21</sub>	1.2 ml	50 µg/ml
dBTP	Tri- <i>n</i> -butyl phosphate-d <sub>27</sub>	1.2 ml	50 µg/ml
M6TBEP	Tris(2-butoxy-[ <sup>13</sup> C <sub>2</sub> ]-ethyl) phosphate	1.2 ml	50 µg/ml
dTCEP	Tris(2-chloroethyl) phosphate-d <sub>12</sub>	1.2 ml	50 µg/ml
dTDCPP	Tris(1,3-dichloro-2-propyl) phosphate-d <sub>15</sub>	1.2 ml	50 µg/ml
dBDCP	Bis(1,3-dichloro-2-propyl) phosphate-d <sub>10</sub> (In acetonitrile)	1.2 ml	50 µg/ml





November 16, 2016

**NEW PRODUCTS****U.S. EPA Method 537 Support Solutions**  
**EPA-537SS & EPA-537IS**

In 2009, the U.S. Environmental Protection Agency issued Method 537 (Version 1.1) for the determination of selected perfluorinated alkyl acids in drinking water by solid phase extraction and liquid chromatography/tandem mass spectrometry (LC/MS/MS). Subsequently, PFOA and PFOS, along with 4 other perfluorinated compounds, were added to the third Unregulated Contaminant Monitoring Rule (UCMR 3) which defines a list of contaminants to be monitored by public water systems and specifies EPA Method 537 as the reference analytical method. With ongoing risk assessments being completed on perfluoroalkyl substances (PFAS) under the IRIS program (Integrated Risk Information System) in the U.S., analytical testing of environmental samples for PFAS is likely to increase with U.S. EPA Method 537 being an established method for reference or modification.

In response to customer requests, **Wellington** has prepared support solutions for U.S. EPA Method 537 including the surrogate primary dilution standard (EPA-537SS) and the internal standard primary dilution standard (EPA-537IS).

Catalogue Number	Product (methanol)	Qty	Conc
<b>EPA-537SS</b>	<b>Surrogate Primary Dilution Standard (SUR PDS)</b>	1.2 ml	
MPFHxA	Perfluoro-n-[1,2- <sup>13</sup> C <sub>2</sub> ]hexanoic acid		1.0 µg/ml
MPFDA	Perfluoro-n-[1,2- <sup>13</sup> C <sub>2</sub> ]decanoic acid		1.0 µg/ml
d5-N-EtFOSAA	N-ethyl-d <sub>5</sub> -perfluoro-1-octanesulfonamidoacetic acid		4.0 µg/ml
<b>EPA-537IS</b>	<b>Internal Standard Primary Dilution Standard (IS PDS)</b>	1.2 ml	
M2PFOA	Perfluoro-n-[1,2- <sup>13</sup> C <sub>2</sub> ]octanoic acid		1.0 µg/ml
MPFOS	Sodium perfluoro-1-[1,2,3,4- <sup>13</sup> C <sub>4</sub> ]octanesulfonate		3.0 µg/ml
d3-N-MeFOSAA	N-methyl-d <sub>3</sub> -perfluoro-1-octanesulfonamidoacetic acid		4.0 µg/ml

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November 17, 2016

**NEW PRODUCTS****Native and Mass-Labelled PFAS Solution/Mixtures**  
**PFAC-24PAR & MPFAC-24ES**

In response to customer requests for comprehensive mixtures of perfluorinated compounds, Wellington has prepared native and mass-labelled solution/mixtures containing commonly analyzed per- and poly-fluoroalkyl substances (PFASs). The native solution/mixture (PFAC-24PAR) contains 24 components (C<sub>4</sub>-C<sub>14</sub> PFCAs, C<sub>4</sub>-C<sub>10</sub> PFSAs, FOSA, N-MeFOSAA, N-EtFOSAA, as well as 4:2, 6:2, and 8:2FTS). To facilitate isomer specific quantification of PFHxS and PFOS, this solution was designed to include characterized mixtures of the linear and branched isomers of the C<sub>6</sub> and C<sub>8</sub> perfluoroalkanesulfonates. The mass-labelled solution/mixture (MPFAC-24ES) is a 19 component mixture containing suitable surrogates for the PFAC-24PAR.

Catalogue Number	Product (methanol)	Qty	Conc
PFAC-24PAR	Native PFAS Precision and Recovery Standard Solution (24 components)	1.2 ml	2.0 µg/ml ea
MPFAC-24ES	Mass-Labelled PFAS Extraction Standard Solution (19 components)	1.2 ml	1.0 µg/ml ea

These new solution/mixtures complement our existing line of mixed PFAS reference standards.

Catalogue Number	Product (methanol)	Qty	Conc
PFC-MXA	Native PFCA Solution/Mixture (C <sub>4</sub> -C <sub>14</sub> )	1.2 ml	2.0 µg/ml ea
PFS-MXA	Native PFSA Solution/Mixture (C <sub>4</sub> , C <sub>6</sub> , C <sub>8</sub> , C <sub>10</sub> )	1.2 ml	2.0 µg/ml ea
PFAC-MXA	Native PFCA/PFSA Solution/Mixture (10)	1.2 ml	5.0 µg/ml ea
PFAC-MXB	Native PFCA/PFSA Solution/Mixture (17)	1.2 ml	2.0 µg/ml ea
PFAC-MXC	Native PFCA/PFSA Solution/Mixture (21)	1.2 ml	2.0 µg/ml ea
MPFAC-MXA	Mass-Labelled PFCA/PFSA Solution/Mixture (9)	1.2 ml	2.0 µg/ml ea
MPFAC-C-ES	Mass-Labelled PFCA/PFSA Extraction Standard (13)	1.2 ml	2.0 µg/ml ea
MPFAC-C-IS	Mass-Labelled PFCA/PFSA Injection Standard (4)	1.2 ml	2.0 µg/ml ea
EPA-537IS	U.S. EPA Method 537 Internal Standard PDS (3)	1.2 ml	variable
EPA-537SS	U.S. EPA Method 537 Surrogate PDS (3)	1.2 ml	variable



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