



This document contains brochures of Wellington Reporters from the year **2015**. We have created a combined file that includes them all for the specified year:

- April 2015 Native Halogenated Carbazole
- April 2015 Native Perfluorinated Compounds
- June 2015 Native Branched Perfluorinated Compounds
- June 2015 Native Telomer Sulfonate
- September 2015 Mass-Labelled Perfluorobutanesulfonate
- October 2015 Native Tris(2,3-dibromopropyl) phosphate: TDBPP

# Distributed By



Greyhound Chromatography and Allied Chemicals 6 Kelvin Park Birkenhead Merseyside, CH41 1LT

Tel: 0151 649 4000 Fax: 0151 649 4001

Email: info@greyhoundchrom.com

Web: https://www.greyhoundchrom.com

April 13, 2015

### NEW PRODUCT

### NATIVE 3.6-DIBROMOCARBAZOLE

Halogenated carbazoles have recently been recognized as emerging environmental contaminants. Although their exact source has not been determined, both modern and historic sources (LED manufacturing and halogenated indigo dyes respectively) have been suggested. Since certain halogenated carbazole congeners can be lost during acid silica clean-up, it is very important that reference standards be used to monitor recoveries when processing samples. Therefore, in order to aid researchers in the detection of halogenated carbazoles in environmental samples, Wellington has added a 3,6-dibromo-9H-carbazole certified reference standard (BCZ-36) to our inventory.

BCZ-36

| Catalogue Number | Product (nonane)  | Qty    | Conc     |
|------------------|---|--------|----------|
| MCCZ-36          | 3,6-Dichloro-9H-[ <sup>13</sup> C <sub>12</sub> ]carbazole        | 1.2 ml | 50 µg/ml |
| MCCZ-1368        | 1,3,6,8-Tetrachloro-9H-[ <sup>13</sup> C <sub>12</sub> ]carbazole | 1.2 ml | 50 μg/ml |

| Catalogue Number | Product (nonane)                 | Qty    | Conc     |
|------------------|----------------------------------|--------|----------|
| CCZ-3            | 3-Chloro-9H-carbazole            | 1.2 ml | 50 μg/ml |
| CCZ-36           | 3,6-Dichloro-9H-carbazole        | 1.2 ml | 50 μg/ml |
| CCZ-1368         | 1,3,6,8-Tetrachloro-9H-carbazole | 1.2 ml | 50 μg/ml |
| CCZ-2367         | 2,3,6,7-Tetrachloro-9H-carbazole | 1.2 ml | 50 µg/ml |

| Catalogue Number | Product (nonane)                | Qty    | Conc     |
|------------------|---------------------------------|--------|----------|
| BCZ-3            | 3-Bromo-9H-carbazole            | 1.2 ml | 50 µg/ml |
| BCZ-27           | 2,7-Dibromo-9H-carbazole        | 1.2 ml | 50 µg/ml |
| BCZ-36           | 3,6-Dibromo-9H-carbazole        | 1.2 ml | 50 µg/ml |
| BCZ-136          | 1,3,6-Tribromo-9H-carbazole     | 1.2 ml | 50 µg/ml |
| BCZ-1368         | 1 3 6 8-Tetrabromo-9H-carbazole | 1.2 ml | 50 ua/ml |

| Catalogue Number | Product (nonane)                      | Qty    | Conc     |
|------------------|---------------------------------------|--------|----------|
| 1-B-36-CCZ       | 1-Bromo-3,6-Dichloro-9H-carbazole     | 1.2 ml | 50 µg/ml |
| 18-B-36-CCZ      | 1,8-Dibromo-3,6-Dichloro-9H-carbazole | 1.2 ml | 50 μg/ml |

Distributed Throughout Europe and Middle East By-



NEW



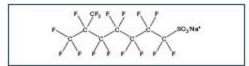
Greyhound Chromatography & Allied Chemicals 6 Kelvin Park, Birkenhead, Merseyside, CH41 1LT, U.K. Tel: (+44)-0-151-649-4000 Fax: (+44)-0-151-649-4001

E-mail: info@ greyhoundchrom.com Web: www.greyhoundchrom.com

April 13, 2015

#### NEW PERFLUORINATED PRODUCTS

In addition to our extensive range of certified reference standards for linear perfluoroalkyl carboxylic acids and perfluoroalkane sulfonates, Wellington also offers individual reference standards of some branched isomers. It is well documented that branched and linear perfluorinated compounds can have varying isomer profiles in biological samples. Therefore, to aid researchers in the analysis of these compounds, Wellington is adding two additional branched perfluoroalkyl reference standards (P355TMHxA and NaP6MHpS) to our line of perfluorinated compounds.



NaP6MHpS

| - |   |   |   |    |   |   |
|---|---|---|---|----|---|---|
| Λ | ı | L | - | B. | п | , |
| , | п | С | - | Ľ  | и | • |

| Catalogue Humbel | rioduct (methanol)                        | Qtyrconc |          |  |
|------------------|---|----------|----------|--|
| NaP6MHpS         | Sodium perfluoro-6-methylheptanesulfonate | 1.2 ml   | 50 µg/ml |  |
| ipPFNS           | Sodium perfluoro-7-methyloctanesulfonate  | 1.2 ml   | 50 µg/ml |  |

NEW

| Catalogue Number | Product (methanol)                     | Qty    | /Conc    |
|------------------|--|--------|----------|
| P355TMHxA        | Perfluoro-3,5,5-trimethylhexanoic acid | 1.2 ml | 50 μg/ml |
| ipPFNA           | Perfluoro-7-methyloctanoic acid (90%)  | 1.2 ml | 45 µg/ml |
| P37DMOA          | Perfluoro-3.7-dimethyloctanoic acid    | 1.2 ml | 50 µg/ml |

Also, to supplement our existing inventory of polyfluorinated secondary telomer alcohols, we are introducing a 1-perfluoropentyl ethanol (5:2sFTOH) reference standard.

5:2sFTOH

NEW

| Catalogue Number | Product (methanol)        | Qty/Conc        |
|------------------|---------------------------|-----------------|
| 5:2sFTOH         | 1-Perfluoropentyl ethanol | 1.2 ml 50 µg/ml |
| 7:2sFTOH         | 1-Perfluoroheptyl ethanol | 1.2 ml 50 μg/ml |





Distributed Throughout Europe and Middle East By-

Greyhound Chromatography & Allied Chemicals 6 Kelvin Park, Birkenhead, Merseyside, CH41 1LT, U.K.

Tel: (+44)-0-151-649-4000 Fax: (+44)-0-151-649-4001

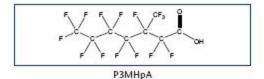
E-mail: info@ greyhoundchrom.com Web: www.greyhoundchrom.com

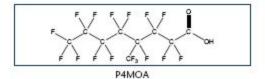


lune 19, 2015

#### NEW BRANCHED PERFLUOROALKYL REFERENCE STANDARDS

It is well documented that many environmental samples contain both branched and linear isomers of perfluoroalkyl carboxylic acids and perfluoroalkanesulfonate salts. In response to customer requests for quantitative individual reference standards for these compounds, Wellington has synthesized additional branched perfluoroalkyl compounds (P3MHpA, P4MOA, and NaP3MHpS) to complement our currently available selection of standards. A typical commercial sample of perfluorooctanesulfonic acid (PFOS) contains 5% and 11% of NaP3MHpS and NaP6MHpS respectively. Similarly, technical mixtures of perfluorooctanoic acid (PFOA) contain approximately 3% of P3MHpA. It is hoped that the continued introduction of certified branched perfluoroalkyl reference standards will aid researchers in the analysis of these compounds in environmental and biological samples.





NaP3MHpS

# NEW

| Catalogue Number | ber Product (methanol)                    |        | Qty/Conc |  |  |
|------------------|---|--------|----------|--|--|
| NaP3MHpS         | Sodium perfluoro-3-methylheptanesulfonate | 1.2 ml | 50 μg/ml |  |  |
| NaP6MHpS         | Sodium perfluoro-6-methylheptanesulfonate | 1.2 ml | 50 µg/ml |  |  |
| ip PFNS          | Sodium perfluoro-7-methyloctanesulfonate  | 1.2 ml | 50 µg/ml |  |  |

# NEW NEW

| Catalogue Number | rioduct (illetilatioi)                 | Q1)    | /conc    |
|------------------|--|--------|----------|
| P355TMHxA        | Perfluoro-3,5,5-trimethylhexanoic acid | 1.2 ml | 50 μg/ml |
| РЗМНрА           | Perfluoro-3-methylheptanoic acid       | 1.2 ml | 50 μg/ml |
| P4MOA            | Perfluoro-4-methyloctanoic acid        | 1.2 ml | 50 μg/ml |
| ipPFNA           | Perfluoro-7-methyloctanoic acid (90%)  | 1.2 ml | 45 µg/ml |
| P37DMOA          | Perfluoro-3,7-dimethyloctanoic acid    | 1.2 ml | 50 μg/ml |
|                  |  |        |          |



Distributed Throughout Europe and Middle East By-

Greyhound Chromatography & Allied Chemicals 6 Kelvin Park, Birkenhead, Merseyside, CH41 1LT, U.K. Tel: (+44)-0-151-649-4000 Fax: (+44)-0-151-649-4001 E-mail: info@ greyhound chrom.com

Web: www.greyhoundchrom.com





lune 29, 2015

#### **NEW PRODUCT**

#### Native Telomer Sulfonate 10:2FTS

The effectiveness of aqueous film-forming foams (AFFFs) for the purpose of fighting hydrocarbonfueled fires has resulted in the development of multiple formulations containing complex mixtures of fluorocarbon- and hydrocarbon-based surfactants. Polyfluorinated sulfonates (commonly referred to as telomer sulfonates) are known components of aqueous film-forming foams (AFFFs) which are used to extinguish Class B flammable liquid fires. Unfortunately, their widespread use has resulted in their detection in environmental samples.

In order to assist in the development of robust analytical methods, Wellington has prepared a reference standard solution of 10:2FTS to complement our existing selection of telomer sulfonate standards and aid researchers in the generation of accurate data.

Sodium 1H,1H,2H,2H-perfluorododecane sulfonate

| Catalogue Number | Product (methanol)                              | Qty/Conc |          |  |
|------------------|---|----------|----------|--|
| 4:2FTS           | Sodium 1H, 1H, 2H, 2H-perfluorohexane sulfonate | 1.2 ml   | 50 µg/ml |  |
| 6:2FTS           | Sodium 1H,1H,2H,2H-perfluorooctane sulfonate    | 1.2 ml   | 50 μg/ml |  |
| 8:2FTS           | Sodium 1H,1H,2H,2H-perfluorodecane sulfonate    | 1.2 ml   | 50 μg/ml |  |
| 10:2FTS          | Sodium 1H,1H,2H,2H-perfluorododecane sulfonate  | 1.2 ml   | 50 µg/ml |  |

#### NEW

The following mass-labelled telomer sulfonates are also available...

| Catalogue Number | Product (methanol)  |        | Qty/Conc |  |
|------------------|---|--------|----------|--|
| M2-4:2FTS        | Sodium 1H,1H,2H,2H-perfluoro-[1,2- <sup>13</sup> C <sub>2</sub> ]hexane sulfonate | 1.2 ml | 50 µg/ml |  |
| M2-6:2FTS        | Sodium 1H,1H,2H,2H-perfluoro-[1,2-13C <sub>2</sub> ]octane sulfonate              | 1.2 ml | 50 μg/ml |  |
| M2-8:2FTS        | Sodium 1H,1H,2H,2H-perfluoro-[1,2-13C <sub>2</sub> ]decane sulfonate              | 1.2 ml | 50 µg/ml |  |

Distributed Throughout Europe and Middle East By-

Greyhound Chromatography & Allied Chemicals 6 Kelvin Park, Birkenhead, Merseyside, CH41 1LT, U.K.

Tel: (+44)-0-151-649-4000 Fax: (+44)-0-151-649-4001

E-mail: info@ greyhound chrom.com Web: www.greyhoundchrom.com



September 29, 2015

### NEW PRODUCT

#### Mass-Labelled Perfluorobutanesulfonate M3PFBS

Wellington is pleased to announce the long awaited release of a mass-labelled perfluorobutanesulfonate reference standard (M3PFBS). Although it has a short biological half-life, PFBS is frequently detected in environmental samples, and it seems to be chemically stable and persistent. One major concern is that it is not removed from water using conventional treatment methods and may end up in drinking water. Many research groups are particularly interested in monitoring the levels of PFBS in water and biological samples since a steady state and continuous exposure may lead to human health effects. Thus, a surrogate standard for PFBS is highly desirable. For these reasons, and in response to customer requests, Wellington has invested a significant amount of time and effort into synthesizing a carbon-13 labelled perfluorobutanesulfonate reference standard to aid in the accurate detection and quantification of this compound.

Sodium perfluoro-1-[2,3,4-13C3]butanesulfonate

#### NEW

| Catalogue Number | Product (methanol)   | Qty/Conc |          |
|------------------|--|----------|----------|
| M3PFBS           | Sodium perfluoro-1-[2,3,4- <sup>13</sup> C₃]butanesulfonate              | 1.2 ml   | 50 µg/ml |
| MPFHxS           | Sodium perfluoro-1-hexane[ <sup>18</sup> O <sub>2</sub> ]sulfonate       | 1.2 ml   | 50 µg/ml |
| M3PFHxS          | Sodium perfluoro-1-[1,2,3- <sup>13</sup> C <sub>3</sub> ]hexanesulfonate | 1.2 ml   | 50 μg/ml |
| MPFOS            | Sodium perfluoro-1-[1,2,3,4-13C <sub>4</sub> ]octanesulfonate            | 1.2 ml   | 50 μg/ml |
| M8PFOS           | Sodium perfluoro-1-[13C <sub>8</sub> ]octanesulfonate                    | 1.2 ml   | 50 µg/ml |

We also offer certified reference standards for native perfluoroalkanesulfonates ( $C_4$  -  $C_{10}$ , and  $C_{12}$ ) as well as many other per- and poly-fluorinated compounds.

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.





October 30, 2015

### NEW PRODUCT

## NATIVE TRIS(2, 3-DIBROMOPROPYL) PHOSPHATE

Tris(2,3-dibromopropyl) phosphate (TDBPP) was famously banned from being used as a flame-retardant in children's clothing in 1977, but it was also extensively used in other products such as polyurethane and polystyrene foams. Although it is not currently produced, applied, or marketed as a flame retardant, TDBPP may be added to polymers for other purposes. In order to aid researchers in the detection of organophosphorus compounds in environmental samples, Wellington has produced a certified reference standard for TDBPP to complement our existing inventory.

**TDBPP** 

| Catalogue Number | Product (toluene)                      | Qty    | Conc     |
|------------------|--|--------|----------|
| TPP              | Triphenyl phosphate                    | 1.2 ml | 50 μg/ml |
| тотр             | Tri-o-tolyl phosphate                  | 1.2 ml | 50 µg/ml |
| TMTP             | Tri-m-tolyl phosphate (97% purity)     | 1.2 ml | 50 μg/ml |
| TPTP             | Tri-p-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              | Tri-ethyl phosphate                    | 1.2 ml | 50 μg/ml |
| TPrP             | Tri-n-propyl phosphate                 | 1.2 ml | 50 µg/ml |
| TBP              | Tri-n-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[(2R)-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 |

NEW

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.



WELLINGTON LABORATORIES

Wellington also offers a selection of mass-labelled organophosphorus compounds as certified reference standards.

| Catalogue Number | Product (toluene)  | Qty    | Conc     |
|------------------|--|--------|----------|
| MTPP             | <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             | Tri-ethyl phosphate-d <sub>1S</sub>                                    | 1.2 ml | 50 µg/ml |
| dTPrP            | Tri-n-propyl phosphate-d <sub>21</sub>                                 | 1.2 ml | 50 µg/ml |
| dTBP             | Tri-n-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 |

