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有機フッ素化合物 標準液

Perfluorinated Compounds(PFCs)

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2020



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Standards for Environmental Testing and Research

Wellington Laboratories Japan Inc.
www.well-labs.co.jp

PFC-CVS-C

Catalogue Number	Product (methanol solution)	Qty/Conc				
用 PFC-CVS-C	PFC-C-CS5	1 kit				
	Calibraton Solution CS1 - CS5	(5 ampoules)				
PFC-C-CS1	CS1	200μl				
PFC-C-CS2	CS2	200μl				
PFC-C-CS3	CS3	200μl				
PFC-C-CS4	CS4	200μl				
PFC-C-CS5	CS5	200μl				
Native PFCs		PFC-C-CS1 (ng/ml)	PFC-C-CS2 (ng/ml)	PFC-C-CS3 (ng/ml)	PFC-C-CS4 (ng/ml)	PFC-C-CS5 (ng/ml)
Perfluoro-n-butanoic acid	PFBA	2.0	10	50	200	1000
Perfluoro-n-pentanoic acid	PFPeA	2.0	10	50	200	1000
Perfluoro-n-hexanoic acid	PFHxA	2.0	10	50	200	1000
Perfluoro-n-heptanoic acid	PFHpA	2.0	10	50	200	1000
Perfluoro-n-octanoic acid	PFOA	2.0	10	50	200	1000
Perfluoro-n-nonanoic acid	PFNA	2.0	10	50	200	1000
Perfluoro-n-decanoic acid	PFDA	2.0	10	50	200	1000
Perfluoro-n-undecanoic acid	PFUdA	2.0	10	50	200	1000
Perfluoro-n-dodecanoic acid	PFDaA	2.0	10	50	200	1000
Perfluoro-n-tridecanoic acid	PFTTrDA	2.0	10	50	200	1000
Perfluoro-n-tetradecanoic acid	PFTeDA	2.0	10	50	200	1000
Perfluoro-n-hexadecanoic acid	PFHxDA	2.0	10	50	200	1000
Perfluoro-n-octadecanoic acid	PFODA	2.0	10	50	200	1000
Potassium perfluoro-1-butanesulfonate	L-PFBS	2.0	10	50	200	1000
Sodium perfluoro-1-pentanesulfonate	L-PFPeS	2.0	10	50	200	1000
Sodium perfluoro-1-hexanesulfonate	L-PFHxS	2.0	10	50	200	1000
Sodium perfluoro-1-heptanesulfonate	L-PFHpS	2.0	10	50	200	1000
Sodium perfluoro-1-octanesulfonate	L-PFOS	2.0	10	50	200	1000
Sodium perfluoro-1-nonanesulfonate	L-PFNS	2.0	10	50	200	1000
Sodium perfluoro-1-decanesulfonate	L-PFDS	2.0	10	50	200	1000
Sodium perfluoro-1-dodecanesulfonate	L-PFDoS	2.0	10	50	200	1000
Mass-Labelled PFCs Extraction Standards						
Perfluoro-n-[1,2,3,4- ¹³ C ₄]butanoic acid	MPFBA	50	50	50	50	50
Perfluoro-n-[1,2,3,4,5- ¹³ C ₅]pentanoic acid	M5PFPeA	50	50	50	50	50
Perfluoro-n-[1,2,3,4,6- ¹³ C ₅]hexanoic acid	M5PFHxA	50	50	50	50	50
Perfluoro-n-[1,2,3,4- ¹³ C ₄]heptanoic acid	M4PFHpA	50	50	50	50	50
Perfluoro-n-[¹³ C ₈]octanoic acid	M8PFOA	50	50	50	50	50
Perfluoro-n-[¹³ C ₉]nonanoic acid	M9PFNA	50	50	50	50	50
Perfluoro-n-[1,2,3,4,5,6- ¹³ C ₆]decanoic acid	M6PFDA	50	50	50	50	50
Perfluoro-n-[1,2,3,4,5,6,7- ¹³ C ₇]undecanoic acid	M7PFUdA	50	50	50	50	50
Perfluoro-n-[1,2- ¹³ C ₂]dodecanoic acid	MPFDoA	50	50	50	50	50
Perfluoro-n-[1,2- ¹³ C ₂]tetradecanoic acid	M2PFTeDA	50	50	50	50	50
Sodium perfluoro-1-[2,3,4- ¹³ C ₃]butanesulfonate	M3PFBS	50	50	50	50	50
Sodium perfluoro-1-[1,2,3- ¹³ C ₃]hexanesulfonate	M3PFHxS	50	50	50	50	50
Sodium perfluoro-[¹³ C ₈]octanesulfonate	M8PFOS	50	50	50	50	50
Mass-Labelled PFCs Injection Standards						
Perfluoro-n-[1,2,3,4- ¹³ C ₃]butanoic acid	M3PFBA	50	50	50	50	50
Perfluoro-n-[1,2- ¹³ C ₂]octanoic acid	M2PFOA	50	50	50	50	50
Perfluoro-n-[1,2- ¹³ C ₂]decanoic acid	MPFDA	50	50	50	50	50
Sodium perfluoro-1-[1,2,3,4- ¹³ C ₄]octanesulfonate	MPFOS	50	50	50	50	50

NOTE: Listed concentrations are reported as the salt.

用 第一種特定化学物質

PFC-CVS-C

Catalogue Number		Product (methanol solution)		Qty/Conc	
用 MPFAC-C-ES		Mass-Labelled PFC Extraction Standards Soluiton		1.2ml	
用 MPFAC-C-IS		Mass-Labelled PFC Injection Standards Soluiton		1.2ml	
用 PFAC-MXC		Native PFC Stock Soluiton		1.2ml	
Native PFCs			MPFAC-C-ES (ng/ml)	MPFAC-C-IS (ng/ml)	PFAC-MXC (ng/ml)
Perfluoro-n-butanoic acid	PFBA	—	—	—	2000
Perfluoro-n-pentanoic acid	PFPeA	—	—	—	2000
Perfluoro-n-hexanoic acid	PFHxA	—	—	—	2000
Perfluoro-n-heptanoic acid	PFHpA	—	—	—	2000
Perfluoro-n-octanoic acid	PFOA	—	—	—	2000
Perfluoro-n-nonanoic acid	PFNA	—	—	—	2000
Perfluoro-n-decanoic acid	PFDA	—	—	—	2000
Perfluoro-n-undecanoic acid	PFUdA	—	—	—	2000
Perfluoro-n-dodecanoic acid	PFDoA	—	—	—	2000
Perfluoro-n-tridecanoic acid	PFTTrDA	—	—	—	2000
Perfluoro-n-tetradecanoic acid	PFTeDA	—	—	—	2000
Perfluoro-n-hexadecanoic acid	PFHxDA	—	—	—	2000
Perfluoro-n-octadecanoic acid	PFODA	—	—	—	2000
Potassium perfluoro-1-butanefulfonate	L-PFBS	—	—	—	2000
Sodium perfluoro-1-pentanesulfonate	L-PFPeS	—	—	—	2000
Sodium perfluoro-1-hexanesulfonate	L-PFHxS	—	—	—	2000
Sodium perfluoro-1-heptanesulfonate	L-PFHpS	—	—	—	2000
Sodium perfluoro-1-octanesulfonate	L-PFOS	—	—	—	2000
Sodium perfluoro-1-nonanesulfonate	L-PFNS	—	—	—	2000
Sodium perfluoro-1-decanesulfonate	L-PFDS	—	—	—	2000
Sodium perfluoro-1-dodecanesulfonate	L-PFDoS	—	—	—	2000
Mass-Labelled PFCs Extraction Standards					
Perfluoro-n-[1,2,3,4- ¹³ C ₄]butanoic acid	MPFBA	2000	—	—	—
Perfluoro-n-[1,2,3,4,5- ¹³ C ₅]pentanoic acid	M5PFPeA	2000	—	—	—
Perfluoro-n-[1,2,3,4,6- ¹³ C ₅]hexanoic acid	M5PFHxA	2000	—	—	—
Perfluoro-n-[1,2,3,4- ¹³ C ₄]heptanoic acid	M4PFHpA	2000	—	—	—
Perfluoro-n-[¹³ C ₈]octanoic acid	M8PFOA	2000	—	—	—
Perfluoro-n-[¹³ C ₉]nonanoic acid	M9PFNA	2000	—	—	—
Perfluoro-n-[1,2,3,4,5,6- ¹³ C ₆]decanoic acid	M6PFDA	2000	—	—	—
Perfluoro-n-[1,2,3,4,5,6,7- ¹³ C ₇]undecanoic acid	M7PFUdA	2000	—	—	—
Perfluoro-n-[1,2- ¹³ C ₂]dodecanoic acid	MPFDoA	2000	—	—	—
Perfluoro-n-[1,2- ¹³ C ₂]tetradecanoic acid	M2PFTeDA	2000	—	—	—
Sodium perfluoro-1-[2,3,4- ¹³ C ₃]butanesulfonate	M3PFBS	2000	—	—	—
Sodium perfluoro-1-[1,2,3- ¹³ C ₃]hexanesulfonate	M3PFHxS	2000	—	—	—
Sodium perfluoro-1-[¹³ C ₈]octanesulfonate	M8PFOS	2000	—	—	—
Mass-Labelled PFCs Injection Standards					
Perfluoro-n-[1,2,3,4- ¹³ C ₃]butanoic acid	M3PFBA	—	2000	—	—
Perfluoro-n-[1,2- ¹³ C ₂]octanoic acid	M2PFOA	—	2000	—	—
Perfluoro-n-[1,2- ¹³ C ₂]decanoic acid	MPFDA	—	2000	—	—
Sodium perfluoro-1-[1,2,3,4- ¹³ C ₄]octanesulfonate	MPFOS	—	2000	—	—

NOTE:Listed concentrations are reported as the salt.

用 第一種特定化学物質

NATIVE LINEAR PERFLUOROALKYLSULFONATES (PFSAs)

Catalogue Number	Product (methanol solution)	Qty/Conc	
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

NOTE:Listed concentrations are reported as the salt.

NATIVE PERFLUOROALKYLSULFONATES: SOLUTION/MIXTURE

Catalogue Number	Product (methanol solution)	Qty/Conc	
 PFS-MXA	Native PFAS Solution/Mixture	1.2 ml	
	Potassium perfluoro-1-butanesulfonate	2 µg/ml	
	Sodium perfluoro-1-hexanesulfonate	2 µg/ml	
	Sodium perfluoro-1-heptanesulfonate	2 µg/ml	
	Sodium perfluoro-1-octanesulfonate	2 µg/ml	
	Sodium perfluoro-1-decanesulfonate	2 µg/ml	

NOTE:Listed concentrations are reported as the salt.

NATIVE CHLORO-PERFLUOROALKYLSULFONATE

Catalogue Number	Product (methanol solution)	Qty/Conc	
8Cl-PFOS	Sodium 8-chloroperfluoro-1-octanesulfonate	1.2 ml	50 µg/ml

NOTE:Listed concentrations are reported as the salt.

NATIVE PERFLUOROETHYLCYCLOHEXANESULFONATE

Catalogue Number	Product (methanol solution)	Qty/Conc	
PFECHS	Perfluoro-4-ethylcyclohexanesulfonate	1.2 ml	50 µg/ml

NOTE:Listed concentrations are reported as the salt.

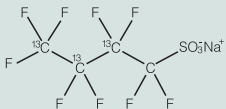
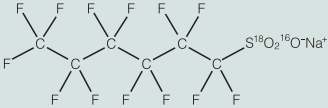
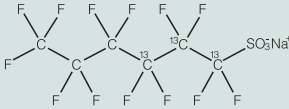
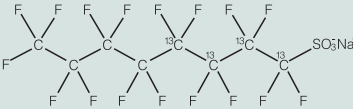
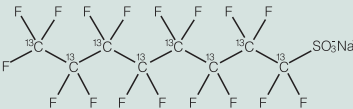
NATIVE BRANCHED PERFLUOROALKYLSULFONATES

Catalogue Number	Product (methanol solution)	Qty/Conc	
br-PFHxSK	L-PFHxS with branched isomers (Potassium Salt)	1.2 ml	50 µg/ml
 br-PFOSK	L-PFOSK with branched isomers	1.2 ml	50 µg/ml
 T-PFOS	Potassium perfluorooctanesulfonate (Technical Grade)	1.2 ml	50 µg/ml
NaP3MHPs	Sodium perfluoro-3-methylheptanesulfonate	1.2 ml	50 µg/ml
NaP6MHPs	Sodium perfluoro-6-methylheptanesulfonate	1.2 ml	50 µg/ml
ipPFNS	Sodium perfluoro-7-methyloctanesulfonate	1.2 ml	50 µg/ml

NOTE:Listed concentrations are reported as the salt.

 第一種特定化学物質

MASS-LABELLED PERFLUOROALKYLSULFONATES

Catalogue Number		Product
M3PFBS		Sodium perfluoro-1-[2,3,4- ¹³ C ₈]butanesulfonate 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₃
MPFHxS		Sodium perfluoro-1-hexane[¹⁸ O ₂]sulfonate 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >94% ¹⁸ O ₂
M3PFHxS		Sodium perfluoro-1-[1,2,3- ¹³ C ₃]hexanesulfonate 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₃
 MPFOS		Sodium perfluoro-1-[1,2,3,4- ¹³ C ₄]-octanesulfonate 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₄
 M8PFOS		Sodium perfluoro-[¹³ C ₈]octanesulfonate 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₈

NOTE:Listed concentrations are reported as the salt.

NATIVE LINEAR PERFLUOROALKYLCARBOXYLIC ACIDS (PFCAs)

Catalogue Number	Product (methanol solution)	Qty/Conc	
PFBA	Perfluoro-n-butanoic acid	1.2 ml	50 µg/ml
PFPeA	Perfluoro-n-pentanoic acid	1.2 ml	50 µg/ml
PFHxA	Perfluoro-n-hexanoic acid	1.2 ml	50 µg/ml
PFHpA	Perfluoro-n-heptanoic acid	1.2 ml	50 µg/ml
PFOA	Perfluoro-n-octanoic acid	1.2 ml	50 µg/ml
T-PFOA	Perfluorooctanoic acid (Technical Grade)	1.2 ml	50 µg/ml
PFNA	Perfluoro-n-nonanoic acid	1.2 ml	50 µg/ml
ipPFNA	Perfluoro-7-methyloctanoic acid (purity 90%)	1.2 ml	45 µg/ml
PFDA	Perfluoro-n-decanoic acid	1.2 ml	50 µg/ml
PFUdA	Perfluoro-n-undecanoic acid	1.2 ml	50 µg/ml
PFDaA	Perfluoro-n-dodecanoic acid	1.2 ml	50 µg/ml
PFTTrDA	Perfluoro-n-tridecanoic acid	1.2 ml	50 µg/ml
PFTeDA	Perfluoro-n-tetradecanoic acid	1.2 ml	50 µg/ml
PFHxDA	Perfluoro-n-hexadecanoic acid	1.2 ml	50 µg/ml
PFODA	Perfluoro-n-octadecanoic acid	1.2 ml	50 µg/ml

 第一種特定化学物質

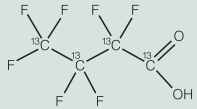
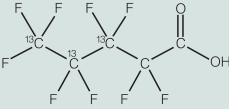
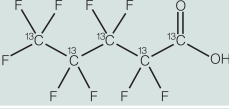
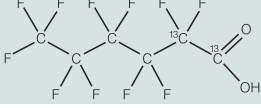
NATIVE PERFLUOROALKYLCARBOXYLIC ACIDS: SOLUTION/MIXTURE

Catalogue Number	Product (methanol solution)	Qty/Conc
PFC-MXA	Native PFCA Solution/Mixture	1.2 ml
	Perfluoro-n-butanoic acid	2 µg/ml
	Perfluoro-n-pentanoic acid	2 µg/ml
	Perfluoro-n-hexanoic acid	2 µg/ml
	Perfluoro-n-heptanoic acid	2 µg/ml
	Perfluoro-n-octanoic acid	2 µg/ml
	Perfluoro-n-nonanoic acid	2 µg/ml
	Perfluoro-n-decanoic acid	2 µg/ml
	Perfluoro-n-undecanoic acid	2 µg/ml
	Perfluoro-n-dodecanoic acid	2 µg/ml
	Perfluoro-n-tridecanoic acid	2 µg/ml
	Perfluoro-n-tetradecanoic acid	2 µg/ml

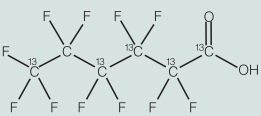
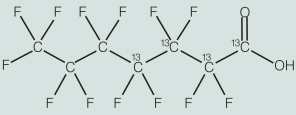
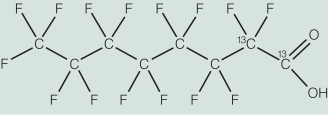
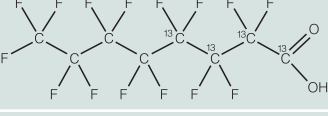
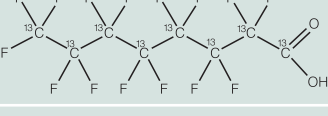
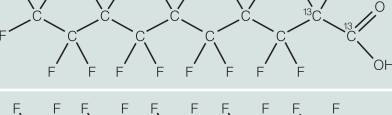
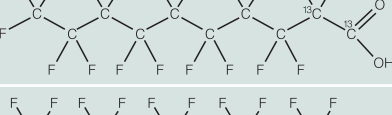
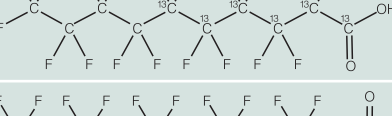
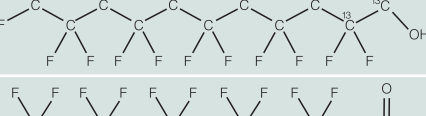
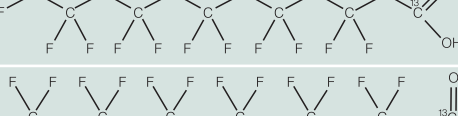
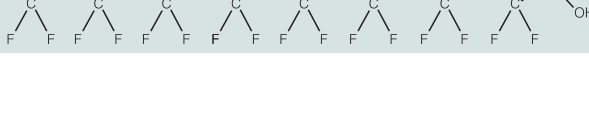
NATIVE BRANCHED PERFLUOROALKYLCARBOXYLIC ACIDS

Catalogue Number	Product (methanol solution)	Qty/Conc
T-PFOA	Technical Ammonium Perfluorooctanoate	1.2 ml 50 µg/ml
P3MHpA	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	1.2 ml 50 µg/ml
P355TMHxA	Perfluoro-3,5,5-trimethylhexanoic acid	1.2 ml 50 µg/ml
P37DMOA	Perfluoro-3,7-dimethyloctanoic acid	1.2 ml 50 µg/ml

MASS-LABELLED PERFLUOROALKYLCARBOXYLIC ACIDS

Catalogue Number	Product
M3PFBA	 Perfluoro-n-[2,3,4- ¹³C₃]butanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% 2,3,4- ¹³C₃
MPFBA	 Perfluoro-n-[1,2,3,4- ¹³C₄]butanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³C₄
M3PFPeA	 Perfluoro-n-[3,4,5- ¹³C₃]pentanoic acid 1.2ml 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% 3,4,5- ¹³C₃
M5PFPeA	 Perfluoro-n-[1,2,3,4,5- ¹³C₅]pentanoic acid 1.2ml 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³C₅
MPFHxA	 Perfluoro-n-[1,2- ¹³C₂]hexanoic acid 1.2 ml; 50 µg/ml (±2.5µg/ml); in methanol >99% linear; >99% ¹³C₂

MASS-LABELLED PERFLUOROALKYLCARBOXYLIC ACIDS

Catalogue Number	Product
M5PFHxA 	Perfluoro-n-[1,2,3,4,6- ¹³ C ₅]hexanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₅
M4PFHpA 	Perfluoro-n-[1,2,3,4- ¹³ C ₄]heptanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₄
M2PFOA 	Perfluoro-n-[1,2- ¹³ C ₂]octanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₂
MPFOA 	Perfluoro-n-[1,2,3,4- ¹³ C ₄]octanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₄
M8PFOA 	Perfluoro-n-[¹³ C ₈]octanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; 97.9% ¹³ C ₈ and 2.1% ¹³ C ₄
MPFNA 	Perfluoro-n-[1,2,3,4,5- ¹³ C ₅]nonanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₅
M9PFNA 	Perfluoro-n-[¹³ C ₉]nonanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₉
MPFDA 	Perfluoro-n-[1,2- ¹³ C ₂]decanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₂
MPFDA-A 	Perfluoro-n-[1,2- ¹³ C ₂]decanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in acetonitrile >99% linear; >99% ¹³ C ₂
M6PFDA 	Perfluoro-n-[1,2,3,4,5,6- ¹³ C ₆]decanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₆
MPFUdA 	Perfluoro-n-[1,2- ¹³ C ₂]undecanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₂
M7PFUdA 	Perfluoro-n-[1,2,3,4,5,6,7- ¹³ C ₇]undecanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₇
MPFDoA 	Perfluoro-n-[1,2- ¹³ C ₂]dodecanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₂
M2PFTeDA 	Perfluoro-n-[1,2- ¹³ C ₂]tetradecanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₂
M2PFHxDA 	Perfluoro-n-[1,2- ¹³ C ₂]hexadecanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; >99% ¹³ C ₂

MIXED NATIVE PFCAs AND PFASs: SOLUTION/MIXTURE

Catalogue Number	Product (methanol solution)	Qty/Conc
用 PFAC-MXA	Native PFCAs and PFASs Solution/Mixture	1.2 ml
Perfluoro-n-butanoic acid		5 µg/ml
Perfluoro-n-pentanoic acid		5 µg/ml
Perfluoro-n-hexanoic acid		5 µg/ml
Perfluoro-n-heptanoic acid		5 µg/ml
Perfluoro-n-octanoic acid		5 µg/ml
Perfluoro-n-nonanoic acid		5 µg/ml
Perfluoro-n-decanoic acid		5 µg/ml
Potassium perfluoro-1-butanedisulfonate		5 µg/ml
Sodium perfluoro-1-hexanesulfonate		5 µg/ml
Sodium perfluoro-1-octanesulfonate		5 µg/ml
用 PFAC-MXB	Native PFCAs and PFASs Solution/Mixture	1.2 ml
Perfluoro-n-butanoic acid		2 µg/ml
Perfluoro-n-pentanoic acid		2 µg/ml
Perfluoro-n-hexanoic acid		2 µg/ml
Perfluoro-n-heptanoic acid		2 µg/ml
Perfluoro-n-octanoic acid		2 µg/ml
Perfluoro-n-nonanoic acid		2 µg/ml
Perfluoro-n-decanoic acid		2 µg/ml
Perfluoro-n-undecanoic acid		2 µg/ml
Perfluoro-n-dodecanoic acid		2 µg/ml
Perfluoro-n-tridecanoic acid		2 µg/ml
Perfluoro-n-tetradecanoic acid		2 µg/ml
Perfluoro-n-hexadecanoic acid		2 µg/ml
Perfluoro-n-octadecanoic acid		2 µg/ml
Potassium perfluoro-1-butanedisulfonate		2 µg/ml
Sodium perfluoro-1-hexanesulfonate		2 µg/ml
Sodium perfluoro-1-octanesulfonate		2 µg/ml
Sodium perfluoro-1-decanedisulfonate		2 µg/ml

MIXED MASS-LABELLED PFCAs AND PFASs: SOLUTION/MIXTURE

Catalogue Number	Product (methanol solution)	Qty/Conc
用 MPFAC-MXA	Mass-Labelled PFCAs and PFASs Solution/Mixture	1.2 ml
Perfluoro-n-[1,2,3,4- ¹³ C ₄]butanoic acid		2 µg/ml
Perfluoro-n-[1,2- ¹³ C ₂]hexanoic acid		2 µg/ml
Perfluoro-n-[1,2,3,4- ¹³ C ₄]octanoic acid		2 µg/ml
Perfluoro-n-[1,2,3,4,5- ¹³ C ₅]nonanoic acid		2 µg/ml
Perfluoro-n-[1,2- ¹³ C ₂]decanoic acid		2 µg/ml
Perfluoro-n-[1,2- ¹³ C ₂]undecanoic acid		2 µg/ml
Perfluoro-n-[1,2- ¹³ C ₂]dodecanoic acid		2 µg/ml
Sodium perfluoro-1-hexane[¹⁸ O ₂]sulfonate		2 µg/ml
Sodium perfluoro-1-[1,2,3,4- ¹³ C ₄]octanesulfonate		2 µg/ml

NOTE: Listed concentrations for the perfluoroalkylsulfonates are reported as the salt.

MIXED NATIVE PFAS: SOLUTION/MIXTURES

Catalogue Number	Product (methanol/4% isopropanol, / <1% water)	Qty/Conc
用 PFAC-24PAR	Native PFAS Precision and Recovery Standard Solution	1.2 ml
Perfluoro-n-butanoic acid	PFBA	2000
Perfluoro-n-pentanoic acid	PFPeA	2000
Perfluoro-n-hexanoic acid	PFHxA	2000
Perfluoro-n-heptanoic acid	PFHpA	2000
Perfluoro-n-octanoic acid	PFOA	2000
Perfluoro-n-nonanoic acid	PFNA	2000
Perfluoro-n-decanoic acid	PFDA	2000
Perfluoro-n-undecanoic acid	PFUdA	2000
Perfluoro-n-dodecanoic acid	PFDoA	2000
Perfluoro-n-tridecanoic acid	PFTrDA	2000
Perfluoro-n-tetradecanoic acid	PFTeDA	2000
Perfluoro-1-octanesulfonamide	FOSA	2000
N-methylperfluoro-1-octanesulfonamidoacetic acid	N-MeFOSAA	2000
N-ethylperfluoro-1-octanesulfonamidoacetic acid	N-EtFOSAA	2000
Potassium perfluoro-1-butanesulfonate	L-PFBS	2000
Sodium perfluoro-1-pentanesulfonate	L-PFPeS	2000
Potassium perfluorohexanenesulfonate	PFHxSK: linear isomer	1620
	PFHxSK: Σ branched isomers	378
Sodium perfluoro-1-heptanesulfonate	L-PFHpS	2000
Potassium perfluorooctanenesulfonate	PFOSK: linear isomer	1580
	PFOSK: Σ branched isomers	422
Sodium perfluoro-1-nonanesulfonate	L-PFNS	2000
Sodium perfluoro-1-decanesulfonate	L-PFDS	2000
Sodium 1H,1H,2H,2H-perfluorohexane sulfonate	4:2FTS	2000
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate	6:2FTS	2000
Sodium 1H,1H,2H,2H-perfluorodecane sulfonate	8:2FTS	2000

NOTE: Listed concentrations are reported as the salt.

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MIXED NATIVE PFAS: SOLUTION/MIXTURES

Catalogue Number	Product (methanol/6% isopropanol,/ <1% water)	Qty/Conc
用 PFAC-30PAR	Native PFAS Precision and Recovery Standard Solution	1.2 ml
Perfluoro-n-butanoic acid	PFBA	1000
Perfluoro-n-pentanoic acid	PFPeA	1000
Perfluoro-n-hexanoic acid	PFHxA	1000
Perfluoro-n-heptanoic acid	PFHpA	1000
Perfluoro-n-octanoic acid	PFOA	1000
Perfluoro-n-nonanoic acid	PFNA	1000
Perfluoro-n-decanoic acid	PFDA	1000
Perfluoro-n-undecanoic acid	PFUdA	1000
Perfluoro-n-dodecanoic acid	PFDoA	1000
Perfluoro-n-tridecanoic acid	PFTrDA	1000
Perfluoro-n-tetradecanoic acid	PFTeDA	1000
Perfluoro-1-butanefulfonamide	FBSA	1000
Perfluoro-1-hexanesulfonamide	FHxSA	1000
Perfluoro-1-octanesulfonamide	FOSA	1000
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid	HFPO-DA	1000
N-methylperfluoro-1-octanesulfonamidoacetic acid	N-MeFOSAA: linear isomer	760
	N-MeFOSAA: Σ branched isomers	240
N-ethylperfluoro-1-octanesulfonamidoacetic acid	N-EtFOSAA: linear isomer	775
	N-EtFOSAA: Σ branched isomers	225
Potassium perfluoro-1-butanefulfonate	L-PFBS	1000
Sodium perfluoro-1-pentanesulfonate	L-PFPeS	1000
Potassium perfluorohexanenesulfonate	PFHxSK: linear isomer	811
	PFHxSK: Σ branched isomers	189
Sodium perfluoro-1-heptanesulfonate	L-PFHpS	1000
Potassium perfluorooctanenesulfonate	PFOSK: linear isomer	788
	PFOSK: Σ branched isomers	211
Sodium perfluoro-1-nonanesulfonate	L-PFNS	1000
Sodium perfluoro-1-decanesulfonate	L-PFDS	1000
Sodium 1H,1H,2H,2H-perfluorohexane sulfonate	4:2FTS	1000
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate	6:2FTS	1000
Sodium 1H,1H,2H,2H-perfluorodecane sulfonate	8:2FTS	1000
Sodium dodecafluoro-3H-4,8-dioxanoneate	NaDONA	1000
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	1000
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	1000

NOTE: Listed concentrations are reported as the salt.

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MIXED NATIVE PFAS: SOLUTION/MIXTURES

Catalogue Number	Product (methanol <1% water)	Qty/Conc
 EPA-537PDS-R1	EPA Method 537 Analyte Primary Dilution Standard (branched/linear mix)	1.2 ml
Perfluoro-n-hexanoic acid	PFHxA	2000
Perfluoro-n-heptanoic acid	PFHpA	2000
Perfluoro-n-octanoic acid	PFOA	2000
Perfluoro-n-nonanoic acid	PFNA	2000
Perfluoro-n-decanoic acid	PFDA	2000
Perfluoro-n-undecanoic acid	PFUdA	2000
Perfluoro-n-dodecanoic acid	PFDoA	2000
Perfluoro-n-tridecanoic acid	PFTrDA	2000
Perfluoro-n-tetradecanoic acid	PFTeDA	2000
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid	HFPO-DA	2000
N-methylperfluoro-1-octanesulfonamidoacetic acid	N-MeFOSAA: linear isomer	1520
	N-MeFOSAA: Σ branched isomers	480
N-ethylperfluoro-1-octanesulfonamidoacetic acid	N-EtFOSAA: linear isomer	1550
	N-EtFOSAA: Σ branched isomers	450
Potassium perfluoro-1-butanesulfonate	L-PFBS	2000
Potassium perfluorohexanenesulfonate	PFHxSK: linear isomer	1620
Potassium perfluorooctanenesulfonate	PFHxSK: Σ branched isomers	378
	PFOSK: linear isomer	1580
	PFOSK: Σ branched isomers	422
Sodium dodecafluoro-3H-4,8-dioxanonoate	NaDONA	1000
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	1000
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	1000

NOTE:Listed concentrations are reported as the salt.

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MIXED NATIVE PFAS: SOLUTION/MIXTURES

Catalogue Number	Product (methanol <1% water)	Qty/Conc
 EPA-537PDSL-R1	EPA Method 537 Analyte Primary Dilution Standard (linear isomers only)	1.2 ml
Perfluoro-n-hexanoic acid	PFHxA	2000
Perfluoro-n-heptanoic acid	PFHpA	2000
Perfluoro-n-octanoic acid	PFOA	2000
Perfluoro-n-nonanoic acid	PFNA	2000
Perfluoro-n-decanoic acid	PFDA	2000
Perfluoro-n-undecanoic acid	PFUdA	2000
Perfluoro-n-dodecanoic acid	PFDoA	2000
Perfluoro-n-tridecanoic acid	PFTTrDA	2000
Perfluoro-n-tetradecanoic acid	PFTeDA	2000
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid	HFPO-DA	2000
N-methylperfluoro-1-octanesulfonamidoacetic acid	N-MeFOSAA	2000
N-ethylperfluoro-1-octanesulfonamidoacetic acid	N-EtFOSAA	2000
Potassium perfluoro-1-butanesulfonate	L-PFBS	2000
Sodium perfluoro-1-hexanesulfonate	L-PFHxS	2000
Sodium perfluoro-1-octanesulfonate	L-PFOS	2000
Sodium dodecafluoro-3H-4,8-dioxanonoate	NaDONA	2000
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9CI-PF3ONS	2000
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11CI-PF3OUdS	2000

NOTE:Listed concentrations are reported as the salt.

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MIXED NATIVE PFAS: SOLUTION/MIXTURES

Catalogue Number	Product (methanol <1% water)	Qty/Conc
用 EPA-533PAR	EPA Method 533 Native Analyte Primary Diluion Standard (br/linear mix)	1.2 ml
Perfluoro-n-butanoic acid	PFBA	500
Perfluoro-n-pentanoic acid	PFPeA	500
Perfluoro-n-hexanoic acid	PFHxA	500
Perfluoro-n-heptanoic acid	PFHpA	500
Perfluoro-n-octanoic acid	PFOA	500
Perfluoro-n-nonanoic acid	PFNA	500
Perfluoro-n-decanoic acid	PFDA	500
Perfluoro-n-undecanoic acid	PFUdA	500
Perfluoro-n-dodecanoic acid	PFDoA	500
Perfluoro-n-tridecanoic acid	PFTTrDA	500
Perfluoro-n-tetradecanoic acid	PFTeDA	500
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid	HFPO-DA	500
Perfluoro-4-oxapentanoic acid	PF4OPeA	500
Perfluoro-5-oxahexanoic acid	PF5OHxA	500
Perfluoro-3,6-dioxaheptanoic acid	3,6-OPFHpA	500
Potassium perfluoro-1-butanedisulfonate	L-PFBS	500
Sodium perfluoro-1-pentadisulfonate	L-PFPeS	500
Potassium perfluorohexanedisulfonate	PFHxSK: linear isomer	406
	PFHxSK: Σ branched isomers	94.5
Sodium perfluoro-1-heptadisulfonate	L-PFHpS	500
Potassium perfluorooctanedisulfonate	PFOSK: linear isomer	394
	PFOSK: Σ branched isomers	106
Sodium 1H,1H,2H,2H-perfluorohexane sulfonate	4:2FTS	500
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate	6:2FTS	500
Sodium 1H,1H,2H,2H-perfluorodecane sulfonate	8:2FTS	500
Sodium dodecafluoro-3H-4,8-dioxanonanoate	NaDONA	500
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	500
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	500
Potassium perfluoro(2-ethoxyethane)sulfonate	PFEESA	500
PFAC-MXF	Native Replacement PFAS Solution/Mixture	1.2 ml
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid	HFPO-DA	2000
Sodium dodecafluoro-3H-4,8-dioxanonanoate	NaDONA	2000
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	2000
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	2000
PFAC-MXG	Native Perfluoroether-Carboxylic Acids and -Sulfonate Solution/Mixture	1.2 ml
Perfluoro-4-oxapentanoic acid	PF4OPeA	2000
Perfluoro-5-oxahexanoic acid	PF5OHxA	2000
Perfluoro-3,6-dioxaheptanoic acid	3,6-OPFHpA	2000
Potassium perfluoro(2-ethoxyethane)sulfonate	PFEESA	2000

NOTE:Listed concentrations are reported as the salt.

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MIXED MASS-LABELLED PFAS: SOLUTION/MIXTURES

Catalogue Number	Product (methanol <1% water)	Qty/Conc
EPA-537SS-R1	EPA Method 537 Surrogate Primary Dilution Standard (SUR PDS)	1.2 ml
Perfluoro-n-[1,2- ¹³ C ₂]hexanoic acid	MPFHxA	1000
Perfluoro-n-[1,2- ¹³ C ₂]decanoic acid	MPFDA	1000
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)- ¹³ C ₃ -propanoic acid	M3HFPO-DA	1000
N-ethyl-d5-perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	4000

用 EPA-537IS	EPA Method 537 Internal Standard Primary Dilution Standard (IS PDS)	1.2 ml
Perfluoro-n-[1,2- ¹³ C ₂]octanoic acid	M2PFOA	1000
N-methyl-d3-perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	4000
Sodium perfluoro-1-[1,2,3,4- ¹³ C ₄]octanesulfonate	MPFOS	3000

Catalogue Number	Product (methanol/2% isopropanol,/ <1% water)	Qty/Conc
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用 MPFAC-24ES	Mass-Labelled PFAS Extraction Standard Solution	1.2 ml
Perfluoro-n-[1,2,3,4- ¹³ C ₄]butanoic acid	MPFBA	1000
Perfluoro-n-[1,2,3,4,5- ¹³ C ₅]pentanoic acid	M5PFPeA	1000
Perfluoro-n-[1,2,3,4,6- ¹³ C ₅]hexanoic acid	M5PFHxA	1000
Perfluoro-n-[1,2,3,4- ¹³ C ₄]heptanoic acid	M4PFHpA	1000
Perfluoro-n-[¹³ C ₈]octanoic acid	M8PFOA	1000
Perfluoro-n-[¹³ C ₉]nonanoic acid	M9PFNA	1000
Perfluoro-n-[1,2,3,4,5,6- ¹³ C ₆]decanoic acid	M6PFDA	1000
Perfluoro-n-[1,2,3,4,5,6,7- ¹³ C ₇]undecanoic acid	M7PFUDa	1000
Perfluoro-n-[1,2- ¹³ C ₂]dodecanoic acid	MPFDoA	1000
Perfluoro-n-[1,2- ¹³ C ₂]tetradecanoic acid	M2PFTeDA	1000
Perfluoro-1-[¹³ C ₈]octanesulfonamide	M8FOSA	1000
N-methyl-d3-perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	1000
N-ethyl-d5-perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	1000
Sodium perfluoro-1-[2,3,4- ¹³ C ₃]butanesulfonate	M3PFBS	1000
Sodium perfluoro-1-[1,2,3- ¹³ C ₃]hexanesulfonate	M3PFHxS	1000
Sodium perfluoro-[¹³ C ₈]octanesulfonate (>97%)	M8PFOS	1000
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- ¹³ C ₂]-hexane sulfonate	M2-4:2FTS	1000
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- ¹³ C ₂]-decane sulfonate	M2-6:2FTS	1000
N-ethyl-d5-perfluoro-1-octanesulfonamidoacetic acid	M2-8:2FTS	1000

Catalogue Number	Product (methanol <1% water)	Qty/Conc
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用 EPA-533ES	EPA Method 533 Isotope Dilution Standard PDS	1.2 ml
Perfluoro-n-[1,2,3,4- ¹³ C ₄]butanoic acid	MPFBA	500
Perfluoro-n-[1,2,3,4,5- ¹³ C ₅]pentanoic acid	M5PFPeA	500
Perfluoro-n-[1,2,3,4,6- ¹³ C ₅]hexanoic acid	M5PFHxA	500
Perfluoro-n-[1,2,3,4- ¹³ C ₄]heptanoic acid	M4PFHpA	500
Perfluoro-n-[¹³ C ₈]octanoic acid	M8PFOA	500
Perfluoro-n-[¹³ C ₉]nonanoic acid	M9PFNA	500
Perfluoro-n-[1,2,3,4,5,6- ¹³ C ₆]decanoic acid	M6PFDA	500
Perfluoro-n-[1,2,3,4,5,6,7- ¹³ C ₇]undecanoic acid	M7PFUDa	500
Perfluoro-n-[1,2- ¹³ C ₂]dodecanoic acid	MPFDoA	500
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)- ¹³ C ₃ -propanoic acid	M3HFPO-DA	500
Sodium perfluoro-1-[2,3,4- ¹³ C ₃]butanesulfonate	M3PFBS	500
Sodium perfluoro-1-[1,2,3- ¹³ C ₃]hexanesulfonate	M3PFHxS	500
Sodium perfluoro-[¹³ C ₈]octanesulfonate (>97%)	M8PFOS	500
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- ¹³ C ₂]-hexane sulfonate	M2-4:2FTS	2000
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- ¹³ C ₂]-decane sulfonate	M2-6:2FTS	2000
N-ethyl-d5-perfluoro-1-octanesulfonamidoacetic acid	M2-8:2FTS	2000

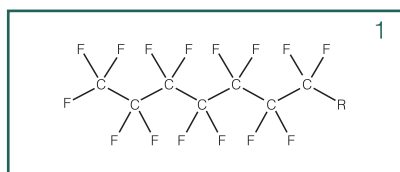
用 EPA-533IS	EPA Method 533 Isotope Performance Standard PDS	1.2 ml
Perfluoro-n-[2,3,4- ¹³ C ₃]butanoic acid	M3PFBA	1000
Perfluoro-n-[1,2- ¹³ C ₂]octanoic acid	M2PFOA	1000
Sodium perfluoro-1-[1,2,3,4- ¹³ C ₄]octanesulfonate	MPFOS	3000

NOTE:Listed concentrations are reported as the salt.

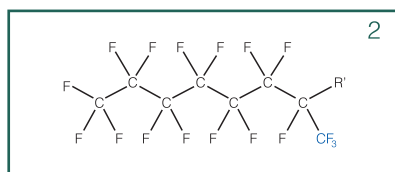
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PFOS/PFOA ISOMERS

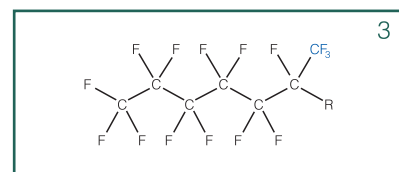
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P1MHpS	Perfluoro-1-methylheptane sulfonate	200µl	1.00 µg/ml
P3MHpS	Perfluoro-3-methylheptane sulfonate	200µl	1.00 µg/ml
	Perfluoro-3-methylheptanoic acid		1.90 µg/ml
P4MHpS	Perfluoro-4-methylheptane sulfonate	200µl	1.00 µg/ml
	Perfluoro-4-methylheptanoic acid		2.20 µg/ml
P5MHpS	Perfluoro-5-methylheptane sulfonate	200µl	1.00 µg/ml
	Perfluoro-5-methylheptanoic acid		1.96 µg/ml
P6MHpS	Perfluoro-6-methylheptane sulfonate	200µl	1.00 µg/ml
	Perfluoro-6-methylheptanoic acid		3.10 µg/ml
P55DMHxS	Perfluoro-5,5-dimethylhexane sulfonate	200µl	1.00 µg/ml
	Perfluoro-5,5-dimethylhexanoic acid		1.95 µg/ml
P45DMHxS	Perfluoro-4,5-dimethylhexane sulfonate	200µl	1.00 µg/ml
	Perfluoro-4,5-dimethylhexanoic acid		1.22 µg/ml
	Perfluoro-3,5-dimethylhexane sulfonate		0.50 µg/ml
	Perfluoro-3,5-dimethylhexanoic acid		0.60 µg/ml



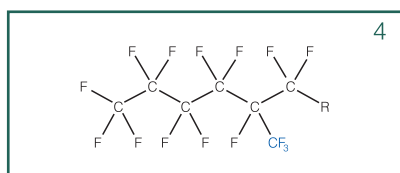
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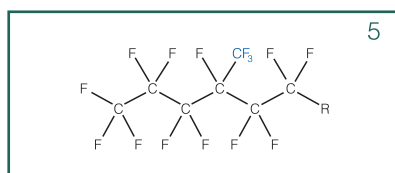
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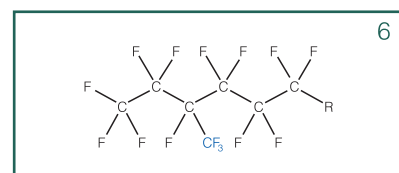
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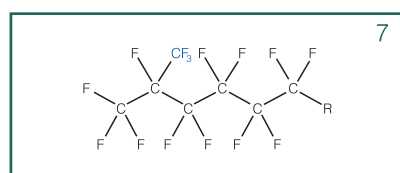
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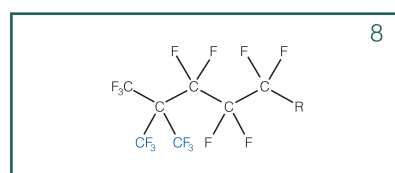
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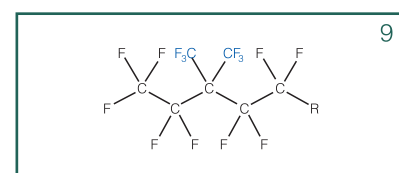
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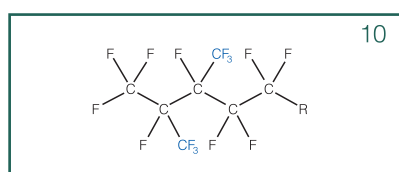
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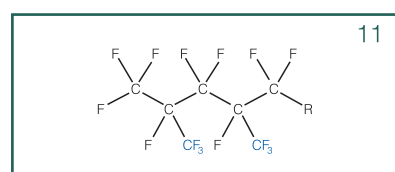
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Perfluoro-4,4-dimethyl-



Perfluoro-4,5-methyl-



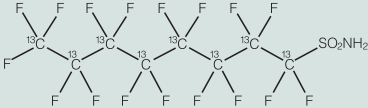
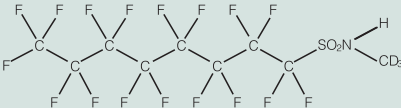
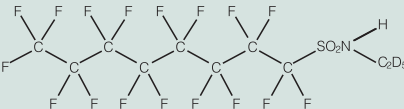
Perfluoro-3,5-dimethyl-

NOTE: R=CO₂⁻ and CF₂SO₃⁻ except for Isomer 2 where R'=SO₃⁻ only

NATIVE PERFLUOROOCETANESULFONAMIDES (FOSAs)

Catalogue Number	Product	Qty/Conc	
FBSA-I	Perfluoro-1-butanefulfonamide in ifopropanol	1.2 ml	50 µg/ml
FHxSA-I	Perfluoro-1-hexanesulfonamide in methanol	1.2 ml	50 µg/ml
FOSA-I	Perfluoro-1-octanesulfonamide in methanol	1.2 ml	50 µg/ml
FDSA-I	Perfluoro-1-decanefulfonamide in methanol	1.2 ml	50 µg/ml
N-MeFBSA-M	N-methylperfluoro-1-butanefulfonamide in methanol	1.2 ml	50 µg/ml
N-MeFOSA-M	N-methylperfluoro-1-octanesulfonamide in methanol	1.2 ml	50 µg/ml
N,N-Me2FOSA-M	N,N-dimethylperfluoro-1-octanesulfonamide in methanol	1.2 ml	50 µg/ml
N-EtFOSA-M	N-ethylperfluoro-1-octanesulfonamide in methanol	1.2 ml	50 µg/ml

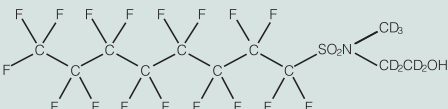
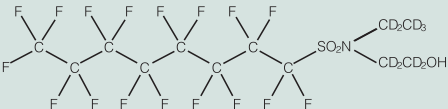
MASS-LABELLED PERFLUOROOCETANESULFONAMIDES

Catalogue Number	Product
M8FOSA- I	 Perfluoro-1-[¹³C₈]octanesulfonamide 1.2 ml; 50 µg/ml (±2.5µg/ml); in Isopropanol >99% linear; >99% ¹³C₈
d-N-MeFOSA-M	 N-methyl-d₃-perfluoro-1-octanesulfonamide 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; 98% ²H₃
d-N-EtFOSA-M	 N-ethyl-d₅-perfluoro-1-octanesulfonamide 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; 98% ²H₅

NATIVE PERFLUOROOCETANESULFONAMIDOETHANOLS (FOSEs)

Catalogue Number	Product (nonane solution)	Qty/Conc	
N-MeFOSE-M	2-(N-methylperfluoro-1-octanesulfonamido)-ethanol	1.2 ml	50 µg/ml
N-EtFOSE-M	2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol	1.2 ml	50 µg/ml

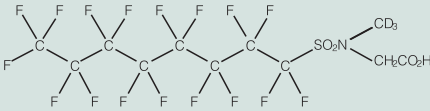
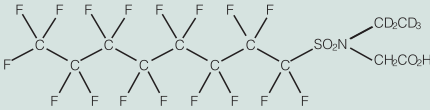
MASS-LABELLED PERFLUOROOCETANESULFONAMIDOETHANOLS

Catalogue Number	Product
d7-N-MeFOSE-M	 2-(N-methyl-d₃-perfluoro-1-octane - sulfonamido)ethan-d₄-ol 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; 98% ²H₇
d9-N-EtFOSE-M	 2-(N-ethyl-d₅-perfluoro-1-octane - sulfonamido)ethan-d₄-ol 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; 98% ²H₉

NATIVE PERFLUOROOCETANESULFONAMIDOACETIC ACIDS (FOSAAs)

Catalogue Number	Product (methanol solution)	Qty/Conc	
FOSAA	Perfluoro-1-octanesulfonamidoacetic acid	1.2 ml	50 µg/ml
N-MeFOSAA	N-methylperfluoro-1-octanesulfonamidoacetic acid	1.2 ml	50 µg/ml
br-NMeFOSAA	N-methylperfluoro-1-octanesulfonamidoacetic acid isomeric mixture	1.2 ml	50 µg/ml
N-EtFOSAA	N-ethylperfluoro-1-octanesulfonamidoacetic acid	1.2 ml	50 µg/ml
br-NEtFOSAA	N-ethylperfluoro-1-octanesulfonamidoacetic acid isomeric mixture	1.2 ml	50 µg/ml

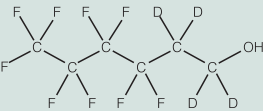
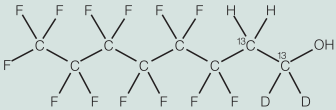
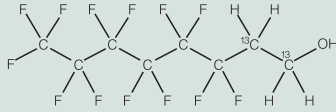
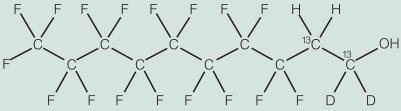
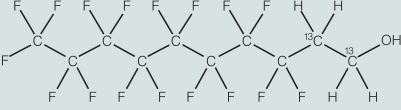
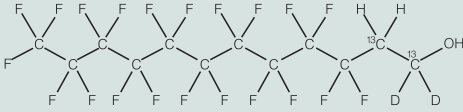
MASS-LABELLED PERFLUOROOCTANESULFONAMIDOACETIC ACIDS

Catalogue Number	Product
d3-N-MeFOSAA 	N-methyl-d ₃ -perfluoro-1-octane - sulfonamidoacetic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; 98% ² H ₃
d5-N-EtFOSAA 	N-ethyl-d ₅ -perfluoro-1-octane - sulfonamidoacetic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol >99% linear; 98% ² H ₅

NATIVE TELOMER ALCOHOLS (FTOHs)

Catalogue Number	Product (methanol solution)	Qty/Conc
FBET	2-Perfluorobutyl ethanol (4:2)	1.2 ml 50 µg/ml
5:2sFTOH	1-Perfluoropentyl ethanol (5:2 secondary)	1.2 ml 50 µg/ml
FHET	2-Perfluorohexyl ethanol (6:2)	1.2 ml 50 µg/ml
7:2sFTOH	1-Perfluoroheptyl ethanol (7:2 secondary)	1.2 ml 50 µg/ml
FOET	2-Perfluorooctyl ethanol (8:2)	1.2 ml 50 µg/ml
FDET	2-Perfluorodecyl ethanol (10:2)	1.2 ml 50 µg/ml

MASS-LABELLED TELOMER ALCOHOLS

Catalogue Number	Product
MFBET 	2-Perfluorobutyl-[1,1,2,2- ² H ₄]-ethanol (4:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ; > 98% 1,1,2,2- ² H ₄
MFHET 	2-Perfluorohexyl-[1,1- ² H ₂]-[1,2- ¹³ C ₂]-ethanol (6:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ; 98% 1,1- ² H ₂ , >99% 1,2- ¹³ C ₂
M2FHET 	2-Perfluorohexyl- [1,2- ¹³ C ₂]-ethanol (6:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ; >99% 1,2- ¹³ C ₂
MFOET 	2-Perfluorooctyl-[1,1- ² H ₂]-[1,2- ¹³ C ₂]-ethanol (8:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ; 98% 1,1- ² H ₂ , >99% 1,2- ¹³ C ₂
M2FOET 	2-Perfluorooctyl- [1,2- ¹³ C ₂]-ethanol (8:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ; >99% 1,2- ¹³ C ₂
MFDET 	2-Perfluorodecyl-[1,1- ² H ₂]-[1,2- ¹³ C ₂]-ethanol (10:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ; 98% 1,1- ² H ₂ , >99% 1,2- ¹³ C ₂

NATIVE TELOMER ACIDS (FTAs)

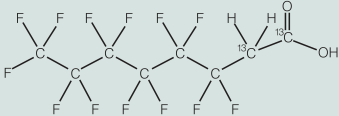
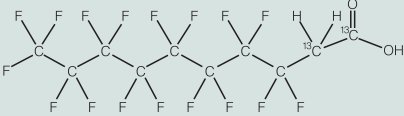
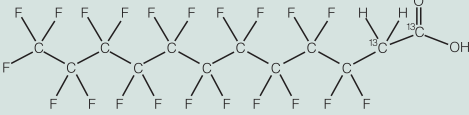
Catalogue Number	Product (isopropanol solution)	Qty/Conc	
FHEA	2-Perfluorohexyl ethanoic acid (6:2)	1.2 ml	50 µg/ml
FOEA	2-Perfluorooctyl ethanoic acid (8:2)	1.2 ml	50 µg/ml
FDEA	2-Perfluorodecyl ethanoic acid (10:2)	1.2 ml	50 µg/ml

Catalogue Number	Product (methanol solution)	Qty/Conc	
FPrPA	3-Perfluoropropyl propanoic acid (3:3)	1.2 ml	50 µg/ml
FPePA	3-Perfluoropentyl propanoic acid (5:3)	1.2 ml	50 µg/ml
FHpPA	3-Perfluoroheptyl propanoic acid (7:3)	1.2 ml	50 µg/ml

NATIVE TELOMER ACIDS: SOLUTION/MIXTURE

Catalogue Number	Product (isopropanol solution)	Qty/Conc
FTA-MXA	Native FTA Solution/Mixture	1.2 ml
	2-Perfluorohexyl ethanoic acid (6:2)	2 µg/ml
	2-Perfluorooctyl ethanoic acid (8:2)	2 µg/ml
	2-Perfluorodecyl ethanoic acid (10:2)	2 µg/ml

MASS-LABELLED TELOMER ACIDS

Catalogue Number	Product
MFHEA 	2-Perfluorohexyl-[1,2- ¹³ C ₂]-ethanoic acid (6:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in isopropanol ; >99% ¹³ C ₂
MFOEA 	2-Perfluorooctyl-[1,2- ¹³ C ₂]-ethanoic acid (8:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in isopropanol ; >99% ¹³ C ₂
MFDEA 	2-Perfluorodecyl-[1,2- ¹³ C ₂]-ethanoic acid (10:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in isopropanol ; >99% ¹³ C ₂

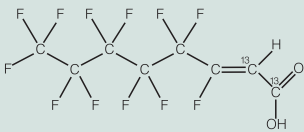
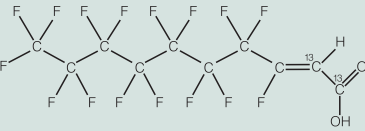
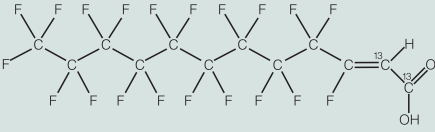
MASS-LABELLED TELOMER ACIDS: SOLUTION/MIXTURE

Catalogue Number	Product (isopropanol solution)	Qty/Conc
MFTA-MXA	Mass-Labelled FTA Solution/Mixture	1.2 ml
	2-Perfluorohexyl -[1,2- ¹³ C ₂]-ethanoic acid (6:2)	2 µg/ml
	2-Perfluorooctyl -[1,2- ¹³ C ₂]-ethanoic acid (8:2)	2 µg/ml
	2-Perfluorodecyl -[1,2- ¹³ C ₂]-ethanoic acid (10:2)	2 µg/ml

NATIVE UNSATURATED TELOMER ACIDS (FTUAs)

Catalogue Number	Product (methanol solution)	Qty/Conc	
FHUEA	2H-Perfluoro-2-octenoic acid (6:2)	1.2 ml	50 µg/ml
FOUEA	2H-Perfluoro-2-decenoic acid (8:2)	1.2 ml	50 µg/ml
FDUEA	2H-Perfluoro-2-dodecenoic acid (10:2)	1.2 ml	50 µg/ml

MASS-LABELLED UNSATURATED TELOMER ACIDS

Catalogue Number	Product
MFHUEA 	2H-Perfluoro-[1,2- ¹³ C ₂]-2-octenoic acid (6:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in isopropanol ; > 99% ¹³ C ₂
MFOUEA 	2H-Perfluoro-[1,2- ¹³ C ₂]-2-decenoic acid (8:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in isopropanol ; >99% ¹³ C ₂
MFDUEA 	2H-Perfluoro-[1,2- ¹³ C ₂]-2-dodecenoic acid (10:2) 1.2 ml; 50 µg/ml (±2.5 µg/ml); in isopropanol ; >99% ¹³ C ₂

NATIVE CHLOROPERFLUOROETHER SULFONATES (CI-PFESAs)

Catalogue Number	Product (methanol solution)	Qty/Conc	
9CI-PF3ONS	Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	1.2 ml	50 µg/ml
11CI-PF3OUdS	Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	1.2 ml	50 µg/ml

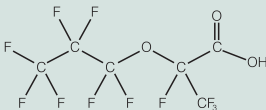
NATIVE POLYFLUOROETHER CARBOXYLATES (PFECAs)

Catalogue Number	Product (methanol solution)	Qty/Conc	
NaDONA	Sodium dodecafluoro-3H-4,8-dioxanonanoate	1.2 ml	50 µg/ml
PF4OPeA	Perfluoro-4-oxapentanoic acid (PFMPA)	1.2 ml	50 µg/ml
PF5OHxA	Perfluoro-5-oxahexanoic acid (PFMBA)	1.2 ml	50 µg/ml
3,6-OPFHpA	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	1.2 ml	50 µg/ml
P5MeODIOXOAc	Perfluoro([5-methoxy-1,3-dioxolan-4-yl]oxy)acetic acid (C6O4)	1.2 ml	50 µg/ml

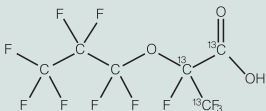
NATIVE POLYFLUOROETHER SULFONATES (PFESAs)

Catalogue Number	Product (methanol solution)	Qty/Conc	
PFEESA	Potassium perfluoro(2-ethoxyethane)sulfonate	1.2 ml	50 µg/ml

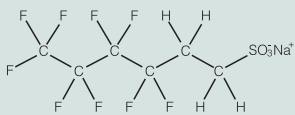
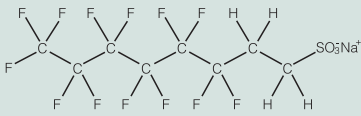
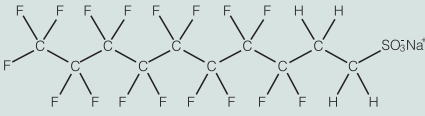
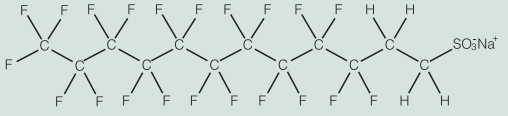
NATIVE HEXAFLUOROPROPYLENE OXIDE DIMER ACID

Catalogue Number	Product
HFPO-DA 	2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol

MASS-LABELLED HEXAFLUOROPROPYLENE OXIDE DIMER ACID

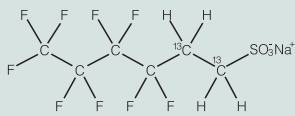
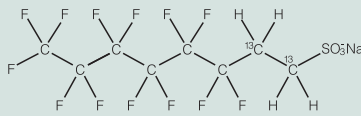
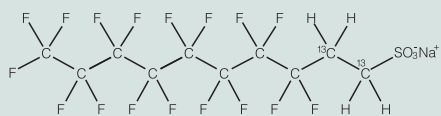
Catalogue Number	Product
M3HFPO-DA 	2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)- ¹³ C ₃ -propanoic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol

NATIVE TELOMER SULFONATES(FTSs)

Catalogue Number	Product
4:2FTS 	Sodium 1H,1H,2H,2H,-perfluorohexane sulfonate (4:2) 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol
6:2FTS 	Sodium 1H,1H,2H,2H,-perfluorooctane sulfonate (6:2) 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol
8:2FTS 	Sodium 1H,1H,2H,2H,-perfluorodecane sulfonate (8:2) 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol
10:2FTS 	Sodium 1H,1H,2H,2H-perfluorododecane sulfonate (10:2) 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol

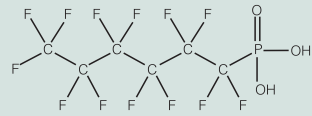
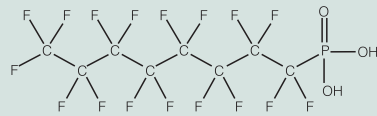
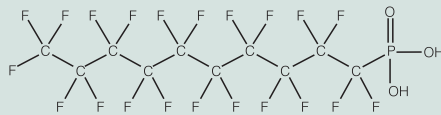
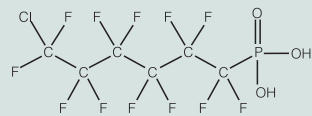
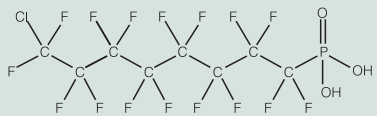
NOTE:Listed concentrations are reported as the salt.

MASS-LABELLED TELOMER SULFONATES (FTSs)

Catalogue Number	Product
M2-4:2FTS 	Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- ¹³ C ₂]-hexane sulfonate (4:2) 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol
M2-6:2FTS 	Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- ¹³ C ₂]-octane sulfonate (6:2) 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol
M2-8:2FTS 	Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- ¹³ C ₂]-decane sulfonate (8:2) 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol

NOTE:Listed concentrations are reported as the salt.

NATIVE PERFLUOROALKYLPHOSPHONIC ACIDS (PFAPAs)

Catalogue Number	Product
PFHxPA 	Perfluorohexylphosphonic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ;
PFOPA 	Perfluorooctylphosphonic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ;
PFDDPA 	Perfluorodecylphosphonic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ;
Cl-PFHxPA 	6-Chloroperfluorohexylphosphonic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ;
Cl-PFOPA 	8-Chloroperfluorooctylphosphonic acid 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ;

NATIVE SODIUM PERFLUOROALKYL PHOSPHINATES (X:XPFPi)

Catalogue Number		Product
6:6 PFPi		Sodium bis(perfluorohexyl)phosphinate 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol
6:8 PFPi		Sodium perfluorohexylfluorooctylphosphinate 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol
8:8 PFPi		Sodium bis(perfluorooctyl)phosphinate 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol

NATIVE POLYFLUORINATED PHOSPHATE ESTERS (PAPs and diPAPs)

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

MASS-LABELLED POLYFLUORINATED PHOSPHATE ESTERS (M2-PAPs and M4-diPAPs)

Catalogue Number		Product
M2-6:2PAP		Sodium 1H,1H,2H,2H-[1,2- ¹³ C ₂]perfluorooctylphosphate 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ; >99% ¹³ C ₂
M2-8:2PAP		Sodium 1H,1H,2H,2H-[1,2- ¹³ C ₂]perfluorodecylphosphate 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ; >99% ¹³ C ₂
M4-6:2diPAP		Sodium bis(1H,1H,2H,2H-[1,2- ¹³ C ₂]perfluorooctyl)- phosphate 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ; >99% ¹³ C ₄
M4-8:2diPAP		Sodium bis(1H,1H,2H,2H-[1,2- ¹³ C ₂]perfluorodecyl)- phosphate 1.2 ml; 50 µg/ml (±2.5 µg/ml); in methanol ; >99% ¹³ C ₄

NATIVE POLYFLUORINATED PHOSPHATE ESTERS (SAmPAPs)

Catalogue Number		Product
SAmPAP		Sodium 2-(N-ethylperfluorooctane-1 - sulfonamido)ethyl phosphate 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol
diSAmPAP		Sodium bis-[2-(N-ethylperfluorooctane-1 - sulfonamido)ethyl] phosphate 1.2 ml x 50 µg/ml (±2.5µg/ml); in methanol

NATIVE TELOMER ACRYLATES (X:2FTAcr)

Catalogue Number	Product (isooctane solution)	Qty/Conc	
8:2FTAcr	1H,1H,2H,2H-Perfluorodecyl acrylate	1.2 ml	50 µg/ml
10:2FTAcr	1H,1H,2H,2H-Perfluorododecyl acrylate (97%)	1.2 ml	50 µg/ml

NATIVE TELOMER ACETATES (X:2FTOAc)

Catalogue Number	Product (isooctane solution)	Qty/Conc	
8:2FTOAc	1H,1H,2H,2H-Perfluorodecyl acetate	1.2 ml	50 µg/ml
10:2FTOAc	1H,1H,2H,2H-Perfluorododecyl acetate	1.2 ml	50 µg/ml

NATIVE AFFF PFAS

Catalogue Number	Product (methanol solution)	Qty/Conc	
N-AP-FHxSA	1H,1H,2H,2H-Perfluorododecyl acetate	1.2 ml	50 µg/ml
N-TAmP-FHxSA	N-[3-(perfluoro-1-hexanesulfonamido)propan-1-yl]-N,N,N-trimethylammonium	1.2 ml	50 µg/ml
N-CMAmP-6:2FOSA	N-(carboxymethyl)-N,N-dimethyl-N-[3-(1H,1H,2H,2H-perfluoro-1-octanesulfonamido)propan-1-yl]ammonium (6:2FTAB)	1.2 ml	50 µg/ml
5:3FTB	2-[(4,4,5,5,6,6,7,7,8,8,8-Undecafluorooctyl)dimethylammonio]acetate	1.2 ml	50 µg/ml
5:1:2FTB	2-[(3,4,4,5,5,6,6,7,7,8,8,8-Dodecafluorooctyl)dimethylammonio]acetate	1.2 ml	50 µg/ml

用途確認書について

「第一種特定化学物質」に指定されている化合物については、製造、輸入、使用は原則として禁止されています。但し、試験研究用に使用する場合に限り、使用することが出来ます。この為、使用目的等を明記した「用途確認書」を弊社宛に提出頂き次第、販売させていただきますのでご了承ください。

「化学物質の審査及び製造等の規制に関する法律（略称：化審法）」に指定されている第一種特定化学物質に該当する本カタログ掲載製品は、本文中に以下の略号で表示しています。

用 第一種特定化学物質

本カタログ掲載品中の第一種特定化学物質該当製品

・ PFC-CVS-C	P1	・ PFAC-MXA	P7
・ MPFAC-C-ES	P2	・ PFAC-MXB	P7
・ MPFAC-C-IS	P2	・ MPFAC-MXA	P7
・ PFAC-MXC	P2	・ PFAC-24PAR	P8
・ L-PFOS	P3	・ PFAC-30PAR	P9
・ L-PFOSK	P3	・ EPA-537PDS-R1	P10
・ PFS-MXA	P3	・ EPA-537PDSSL-R1	P11
・ br-PFOSK	P3	・ EPA-533PAR	P12
・ T-PFOS	P3	・ EPA-537IS	P13
・ MPFOS	P4	・ MPFAC-24ES	P13
・ M8PFOS	P4	・ EPA-533ES	P13
		・ EPA-533IS	P13

ご購入をお考えの「第一種特定化学物質」該当製品がございましたら、下記までご連絡ください。該当製品の「用途確認書ひな型」をお送り致します。

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