

## Test Report (PFAS)

No.: TAOEC24004739933

Date: Jul 12, 2024

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Client Name: WANHUA CHEMICAL GROUP CO., LTD

Client Address: NO. 59 CHONGQING RD, YEDA YANTAI, SHANDONG CHINA

Sample Name: WANSUPER®POE C4s

Client Ref. Information: 65016、65056、65057、69057、69147

The above sample(s) and information were provided by the client.

SGS Job No.: QDP24-003055

Sample Receiving Date: Jul 03, 2024

Testing Period: Jul 03, 2024 ~ Jul 10, 2024

Test Requested: Select test(s) as requested by the client.

Test Method(s): Please refer to next page(s).

Test Result(s): Please refer to next page(s).

### Summary:

430 Perfluoroalkyl and polyfluoroalkyl substances (PFAS) Content	Pass
--	------

Signed for and on behalf of  
SGS-CSTC Standards Technical Services (Qingdao) Co., Ltd.

Alice Sun  
Approved Signatory

scan to see the report



1DF63B7E



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**Test Sample:**

**Test Part Description:**

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	TAO24-0047399-0001.C001	colorless transparent solid grains

**430 Perfluoroalkyl and polyfluoroalkyl substances (PFAS) Content**

**Test Method:**

Modified EN 17681-1:2022 and EN 17681-2:2022, analysis was performed by LC-MS or LC-MS/MS and GC-MS.

**Test Results: (Substances in the reporting list of PFAS)**

Substance Name	CAS No.	A1 Concentration (mg/kg)	MDL (mg/kg)
All tested PFAS in list	-	ND	-

**Notes:**

- (1) The table above only shows detected PFAS, and PFAS that below MDL are not reported. Please refer to Appendix for the full list of tested PFAS.
  - (2) MDL = Method Detection Limit  
ND = Not detected (lower than MDL)
  - (3) The target PFAS is prohibited, and this test requirement is quoted from the client. If PFAS is detected, it is recommended to refer to relevant regulation to confirm the relevant requirements of PFAS.
  - (4) ^=Substances refer to its salts/derivative listed in Appendix.
- Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.



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## Appendix:

List of PFAS, its salts & derivatives

No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
1	PFOS, its salts & derivatives	Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.010
2		Potassium Perfluorooctanesulfonate (PFOS-K)	2795-39-3	--
3		Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5	--
4		Sodium perfluorooctanesulfonate (PFOS-Na)	4021-47-0	--
5		Ammonium perfluorooctanesulfonate (PFOS-NH <sub>4</sub> )	29081-56-9	--
6		Perfluorooctane sulfonate diethanolamine salt (PFOS-NH <sub>2</sub> (C <sub>2</sub> H <sub>4</sub> OH) <sub>2</sub> )	70225-14-8	--
7		Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> )	56773-42-3	--
8		N-decyl-N,N-dimethyldecan-1-aminium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluorooctane-1-sulfonate (PFOS-N(C <sub>10</sub> H <sub>21</sub> ) <sub>2</sub> (CH <sub>3</sub> ) <sub>2</sub> )	251099-16-8	--
9		Tetrabutylammonium perfluorooctanesulfonate (PFOS-N(C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> )	111873-33-7	--
10		Perfluorooctane Sulfonyl fluoride (PFOS-F)	307-35-7	--
11		Magnesium bis(heptafluorooctanesulphonate) (PFOS-Mg)	91036-71-4	--
12		Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluorooctanesulfonate	71463-74-6	--
13		Perfluorooctanesulfonate	45298-90-6	--
14		Triethylammonium perfluorooctane sulfonate (PFOS-N(C <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> )	54439-46-2	--
15		Tetramethylammonium perfluorooctane sulfonate (PFOS-N(CH <sub>3</sub> ) <sub>4</sub> )	56773-44-5	--
16		N,N,N-Tripropylpentan-1-aminium heptafluorooctane-1-sulfonate (PFOS-N(C <sub>3</sub> H <sub>7</sub> ) <sub>3</sub> (C <sub>5</sub> H <sub>11</sub> ))	56773-56-9	--
17		N,N-Dibutyl-N-methylbutan-1-aminium heptafluorooctane-1-sulfonate (PFOS-N(C <sub>4</sub> H <sub>9</sub> ) <sub>3</sub> (CH <sub>3</sub> ))	124472-68-0	--
18		Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, salt with perfluoro-1-octanesulfonic acid (1:1)	213740-80-8	--
19		Diphenyl(2,4,6-trimethylphenyl)sulfonium perfluoro-1-octanesulfonate	258341-99-0	--
20		1-Hexadecylpyridinium perfluoro-1-octanesulfonate	334529-63-4	--
21		N,N,N-Triethyldecan-1-aminium heptafluorooctane-1-sulfonate	773895-92-4	--



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
22		Tetrabutylphosphonium perfluorooctane sulfonate (PFOS-P (C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> )	2185049-59-4	--
23		Perfluorooctanesulfonic acid diethylamine salt (PFOS-C <sub>4</sub> H <sub>11</sub> N)	2205029-08-7	--
24		heptyldimethyl{2-[(2-methylprop-2-enoyl)oxy]ethyl}azanium heptadecafluorooctane-1-sulfonate (PFOS-C <sub>15</sub> H <sub>30</sub> NO <sub>2</sub> )	1203998-97-3	--
25		Perfluorooctane sulfonic anhydride (PFOSAN)	423-92-7	--
26		FOSAA, its salts	Perfluorooctane sulfonamidoacetic Acid (FOSAA)	2806-24-8
27	N-[(Perfluorooctyl)sulfonyl]glycinate (FOSAA(anion))		909405-47-6	--
28	N-[(Perfluorooctyl)sulfonyl]glycine potassium salt (1:1) (FOSAA-K)		75260-69-4	--
29	N-[(Perfluorooctyl)sulfonyl]glycine sodium salt (1:1) (FOSAA-Na)		115716-87-5	--
30	N-MeFOSAA, its salts	N-Methylperfluoro-1-octanesulfonamidoacetic Acid (N-MeFOSAA)	2355-31-9	0.010
31		2-(N-Methylperfluorooctanesulfonamido)acetate (N-Me-FOSAA(anion))	909405-48-7	--
32		Potassium N-((heptadecafluorooctyl)sulphonyl)-N-methylglycinate (N-Me-FOSAA-K)	70281-93-5	--
33	N-EtFOSAA, its salts	N-Ethylperfluorooctane sulfonamidoacetic Acid (N-EtFOSAA)	2991-50-6	0.010
34		Glycine, N-ethyl-N-[(heptadecafluorooctyl)sulfonyl]-, potassium salt (N-Et-FOSAA-K)	2991-51-7	--
35		2-(N-Ethyl-perfluorooctanesulfonamido)acetate (N-Et-FOSAA(anion))	909405-49-8	--
36		Ammonium 2-(N-ethylperfluorooctanesulfonamido)acetate (N-Et-FOSAA-NH <sub>4</sub> )	2991-52-8	--
37		Sodium 2-(N-ethylperfluorooctanesulfonamido)acetate (N-Et-FOSAA-Na)	3871-50-9	--
38	--	N-ethylperfluoro-1-octanesulfonamide (N-EtFOSA)	4151-50-2	0.010
39	--	N-methylperfluoro-1-octanesulfonamide (N-MeFOSA)	31506-32-8	0.010
40	--	2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol (N-EtFOSE)	1691-99-2	0.010
41	--	2-(N-methylperfluoro-1-octanesulfonamido)-ethanol (N-MeFOSE)	24448-09-7	0.010
42	PFOSA, its salts	Perfluorooctane Sulfonamide (PFOSA)	754-91-6	0.010
43		Perfluorooctanesulfonamide lithium salt (1:1) (PFOSA-Li)	76752-79-9	--



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)	
44		Perfluorooctanesulfonamide Sodium salt (1:1) (PFOSA-Na)	76752-78-8	--	
45		Perfluorooctanesulfonamide Potassium salt (1:1) (PFOSA-K)	76752-70-0	--	
46		Perfluorooctanesulfonamide Ammonium salt (1:1) (PFOSA-NH <sub>4</sub> )	76752-72-2	--	
47		Heptadecafluorooctane-1-sulphonamide, compound with triethylamine (1:1) (PFOSA-C <sub>6</sub> H <sub>15</sub> N)	76752-82-4	--	
48	PFOA, its salts & derivatives	Perfluorooctanoic acid (PFOA)	335-67-1	0.010	
49		Sodium perfluorooctanoate (PFOA-Na)	335-95-5	--	
50		Potassium perfluorooctanoate (PFOA-K)	2395-00-8	--	
51		Silver perfluorooctanoate (PFOA-Ag)	335-93-3	--	
52		Perfluorooctanoyl fluoride (PFOA-F)	335-66-0	--	
53		Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	--	
54		Lithium perfluorooctanoate (PFOA-Li)	17125-58-5	--	
55		Cobalt perfluorooctanoate (PFOA-Co)	35965-01-6	--	
56		Cesium perfluorooctanoate (PFOA-Cs)	17125-60-9	--	
57		Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, chromium(3+) (PFOA-Cr(3+))	68141-02-6	--	
58		Pentadecafluorooctanoic acid--piperazine (2/1) (PFOA-NH(C <sub>4</sub> H <sub>10</sub> N))	423-52-9	--	
59		Pentadecafluorooctanoate (anion)	45285-51-6	--	
60		Perfluorooctanoic Anhydride	33496-48-9	--	
61		N,N,N-Triethylethanaminium perfluorooctanoate	98241-25-9	--	
62		Perfluorooctanoate N,N,N-Trimethylmethanaminium	32609-65-7	--	
63		Tetrapropylammonium perfluorooctanoate	277749-00-5	--	
64		Potassium pentadecafluorooctanoate--water (1/1/2) (PFOA-K(H <sub>2</sub> O) <sub>2</sub> )	98065-31-7	--	
65		Perfluorooctanoic acid compd. with ethanamine (1:1) (PFOA-C <sub>2</sub> H <sub>7</sub> N)	1376936-03-6	--	
66		Pentadecafluorooctanoic acid--pyridine (1/1) (PFOA-C <sub>5</sub> H <sub>5</sub> N)	95658-47-2	--	
67		pentadecafluorooctanoic acid- 1-phenylpiperazine(1:1) (PFOA-C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> )	1514-68-7	--	
68		N,N,N-Trimethyloctan-1-aminium pentadecafluorooctanoate (PFOA-C <sub>11</sub> H <sub>26</sub> N)	927835-01-6	--	
69		8:2 FTS, its salts	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	0.010
70			Potassium 1H,1H,2H,2H-Perfluorodecane sulfonate (8:2 FTS-K)	438237-73-1	--



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71		Ammonium 1H,1H,2H,2H-Perfluorododecane sulfonate (8:2 FTS-NH <sub>4</sub> )	149724-40-3	--
72		Sodium 1H,1H,2H,2H-Perfluorododecane sulfonate (8:2 FTS-Na)	27619-96-1	--
73		2-(Perfluorooctyl)ethane-1-sulfonate (8:2 FTS(anion))	481071-78-7	--
74	--	Methyl perfluorooctanoate (Me-PFOA)	376-27-2	0.200
75	--	Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	0.200
76	--	1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)*	27905-45-9	0.100
77	--	1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)*	1996-88-9	0.100
78	--	Perfluoro-1-iodooctane (PFOI)	507-63-1	0.200
79	8:2 FTCA, its salts	2H,2H-Perfluorodecane Acid (8:2 FTCA)	27854-31-5	0.010
80		Tetrabutylphosphonium 2H,2H-Perfluorodecanoate (8:2 FTCA-P(C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> )	882489-14-7	--
81	--	1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	678-39-7	0.100
82	--	1-Iodo-1H,1H,2H,2H-perfluorodecane (8:2 FTI)*	2043-53-0	0.100
83	--	1H,1H,2H,2H-Perfluorodecyltriethoxysilane (8:2 FTSi(OC <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> )*	101947-16-4	0.100
84	8:2 diPAP, its salts	Bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl) hydrogen phosphate (8:2diPAP)	678-41-1	0.010
85		Sodium bis(1H,1H,2H,2H-perfluorodecyl)phosphate (8:2diPAP-Na)	114519-85-6	--
86		Bis(2-hydroxyethyl)ammonium bis((perfluorooctyl)ethyl) hydrogen phosphate	57677-97-1	--
87		Bis[2-(perfluorooctyl)ethyl] phosphate ammonium salt (8:2 diPAP-NH <sub>4</sub> )	93776-20-6	--
88		8:2 Fluorotelomer phosphate diester ion (1-)	1411713-91-1	--
89	8:3 FTCA, its salts	2H,2H,3H,3H-Perfluoroundecanoic acid (8:3 FTCA)	34598-33-9	0.010
90		Potassium 2H,2H,3H,3H-Perfluoroundecanoate (8:3 FTCA-K)	83310-58-1	--
91		2H,2H,3H,3H-Perfluoroundecanoate (8:3 FTCA-Li)	67304-23-8	--
92	--	1H,1H,2H-Heptafluoro-1-decene (PFDE)*	21652-58-4	0.200
93	--	3-Perfluoroheptyl propanoic acid (7:3 FTCA)	812-70-4	0.010
94	--	1H,1H,2H,2H-Perfluorodecyltrichlorosilane*	78560-44-8	0.100
95	--	1H,1H,2H,2H-Perfluorodecyltrimethoxysilane*	83048-65-1	
96	--	2H-Perfluoro-2-decenoic acid (8:2 FTUCA)	70887-84-2	0.010
97	--	6:8 Perfluorophosphinic acid (6:8 PFPi)	610800-34-5	0.010
98	--	8:8 Perfluorophosphinic acid (8:8 PFPi)	40143-79-1	0.010



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99	8:8 PFPI, its salts	Bis(heptadecafluorooctyl)phosphinic Acid Sodium Salt (8:8 PFPI-Na)	500776-69-2	--
100		Bis(perfluorooctyl) phosphinic acid erbium(3+) salt (8:8 PFPI-Er)	500776-70-5	--
101		Bis(perfluorooctyl) phosphinic acid ytterbium(3+) salt (8:8 PFPI-Yb)	500776-71-6	--
102	--	1H,1H,2H,2H-perfluorodecyl acetate (8:2 FTOAc)*	37858-04-1	0.100
103	8:2 monoPAP, its salts	8:2 Fluorotelomer phosphate monoester (8:2 monoPAP)	57678-03-2	0.100
104		Sodium 1H,1H,2H,2H-perfluorodecyl phosphate (8:2 monoPAP-Na)	92678-93-8	--
105	PFNA, its salts	Perfluorononane Acid (PFNA)	375-95-1	0.010
106		Perfluorononanoate Na-Salt (PFNA-Na)	21049-39-8	--
107		Nonanoic acid, heptadecafluoro-, ammonium salt (PFNA-NH <sub>4</sub> )	4149-60-4	--
108		Potassium perfluorononanoate (PFNA-K)	21049-38-7	--
109		Perfluorononanoate Li-Salt (PFNA-Li)	60871-92-3	--
110		Silver perfluorononanoate (PFNA-Ag)	7358-16-9	--
111		Methanaminium perfluorononanoate (PFNA-NH <sub>3</sub> (CH <sub>3</sub> ))	77032-23-6	--
112		Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-, compd. with N-ethylethanamine (1:1) PFNA-NH <sub>2</sub> (C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub>	77032-27-0	--
113		Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-, compd. with N-methylmethanamine (1:1) (PFNA-NH <sub>2</sub> (CH <sub>3</sub> ) <sub>2</sub> )	77032-24-7	--
114		Nonanoic acid, heptadecafluoro-, compd. with N,N-diethylethanamine (1:1) (9CI) (PFNA-NH(C <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> )	327176-80-7	--
115		Nonanoic acid, heptadecafluoro-, compd. with piperidine (1:1) (9CI) (PFNA-NH <sub>2</sub> (C <sub>5</sub> H <sub>10</sub> ))	95682-66-9	--
116		Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-, compd. with benzenamine (1:1) (PFNA-NH <sub>3</sub> (C <sub>6</sub> H <sub>5</sub> ))	95682-67-0	--
117		Nonanoic acid, heptadecafluoro-, compd. with cyclohexanamine (1:1) (9CI) (PFNA-NH <sub>3</sub> (C <sub>6</sub> H <sub>11</sub> ))	328531-06-2	--
118		Perfluorononanoate (anion)	72007-68-2	--
119		4-[(6-Methoxy-3-pyridazinyl)sulfamoyl]anilinium heptadecafluorononanoate (PFNA-C <sub>11</sub> H <sub>12</sub> N <sub>4</sub> O <sub>3</sub> S)	298703-33-0	--
120	Perfluorononanoic anhydride (PFNAA)	228407-54-3	--	
121	PFDA, its salts	Perfluorodecane Acid (PFDA)	335-76-2	0.010
122		Sodium perfluorodecanoate (PFDA-Na)	3830-45-3	--



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# Test Report (PFAS)

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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
123		Perfluorodecanoate ammonium salt (PFDA-NH <sub>4</sub> )	3108-42-7	--
124		Potassium perfluorodecanoate (PFDA-K)	51604-85-4	--
125		Silver perfluorodecanoate (PFDA-Ag)	5784-82-7	--
126		Lithium perfluorodecanoate (PFDA-Li)	84743-32-8	--
127		Perfluorodecanoate (anion)	73829-36-4	--
128		Perfluorodecanoic anhydride (PFDA)	942199-24-8	--
129		PFUnDA, its salts	Perfluoroundecanoic Acid (PFUnDA)	2058-94-8
130	Perfluoroundecanoic acid sodium salt (PFUnDA-Na)		60871-96-7	--
131	Ammonium perfluoroundecanoate (PFUnDA-NH <sub>4</sub> )		4234-23-5	--
132	Potassium perfluoroundecanoate (PFUnDA-K)		30377-53-8	--
133	Calcium perfluoroundecanoate (PFUnDA-Ca)		97163-17-2	--
134	Perfluoroundecanoate (anion)		196859-54-8	--
135	PFDoDA, its salts		Perfluorododecanoic Acid (PFDoDA)	307-55-1
136		Ammonium tricosafuorododecanoate (PFDoDA-NH <sub>4</sub> )	3793-74-6	--
137		Sodium perfluorododecanoate (PFDoDA-Na)	60872-01-7	--
138		Perfluorododecanoate (anion)	171978-95-3	--
139	PFTrDA, its salts	Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	0.010
140		Ammonium perfluorotridecanoate (PFTrDA-NH <sub>4</sub> )	4288-72-6	--
141		Perfluorotridecanoate (anion)	862374-87-6	--
142	PFTDA, its salts	Perfluorotetradecanoic Acid (PFTDA)	376-06-7	0.010
143		Perfluorotetradecanoate (anion)	365971-87-5	--
144	--	Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	172155-07-6	0.010
145	PFDS, its salts	Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.010
146		Sodium perfluorodecanesulfonate (PFDS-Na)	2806-15-7	--
147		Potassium perfluorodecanesulfonate (PFDS-K)	2806-16-8	--
148		Ammonium perfluorodecanesulfonate (PFDS-NH <sub>4</sub> )	67906-42-7	--
149		Perfluorodecane sulfonate (anion)	126105-34-8	--
150		Perfluorodecane sulfonic anhydride (PFDSA)	51667-62-0	--
151	--	1H,1H,2H,2H-Perfluoro-1-dodecanol (10:2 FTOH)	865-86-1	0.100
152	--	1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)*	17741-60-5	0.100
153	--	1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)*	2144-54-9	0.100
154	--	1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	0.100



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
155	10:2 FTS, its salts	1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	0.010
156		1H,1H,2H,2H-Perfluorododecanesulfonic Acid Sodium (10:2 FTS-Na)	108026-35-3	--
157	--	1,1,2,2-Tetrahydroperfluorododecyl iodide (10:2 FTI)*	2043-54-1	0.100
158	--	1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)*	30046-31-2	0.100
159	PFNS, its salts	Perfluoro nonane sulfonic acid (PFNS)	68259-12-1	0.010
160		Sodium perfluoro-1-nonanesulfonate (PFNS-Na)	98789-57-2	--
161		ammonium nonadecafluorononanesulphonate (PFNS-NH <sub>4</sub> )	17202-41-4	--
162		Potassium perfluorononanesulfonate (PFNS-K)	29359-39-5	--
163		Perfluorononane sulfonate (anion)	474511-07-4	--
164	PFUnDS, its salts	Perfluoroundecane sulfonic acid (PFUnDS)	749786-16-1	0.010
165		Perfluoroundecanesulfonate (anion)	441296-91-9	--
166	PFDoDS, its salts	Perfluorododecanesulfonic acid (PFDoDS)	79780-39-5	0.010
167		Sodium perfluoro-1-dodecanesulfonate (PFDoDS-Na)	1260224-54-1	--
168		Potassium perfluorododecanesulfonate (PFDoDS-K)	85187-17-3	--
169		Perfluorododecane sulfonate (anion)	343629-43-6	--
170	PFTrDS, its salts	Perfluorotridecane sulfonic acid (PFTrDS)	791563-89-8	0.010
171		Sodium perfluoro-1-tridecanesulfonate (PFTrDS-Na)	174675-49-1	--
172	10:2 diPAP, its salts	10:2 Fluortelomerphosphatediester (10:2 diPAP)	1895-26-7	0.100
173		Bis((perfluorodecyl)ethyl) hydrogen phosphate 2,2'-iminodiethanol (10:2 diPAP-C <sub>4</sub> H <sub>11</sub> O <sub>2</sub> )	57677-98-2	--
174	--	Perfluorodecyl iodide (PFDI)*	423-62-1	0.100
175	--	Perfluorododecyl iodide (PFDoDI)*	307-60-8	0.100
176	--	2H-Perfluoro-2-dodecenoic acid (10:2 FTUCA)	70887-94-4	0.010
177	--	2-Perfluorodecyl ethanoic acid (10:2 FTCA)	53826-13-4	0.010
178	--	1H,1H,2H,2H-perfluorododecyl acetate (10:2 FTOAc)*	37858-05-2	0.100
179	PFHxS, its salts & derivatives	Perfluorohexanesulfonic acid (PFHxS)	355-46-4	0.010
180		Perfluorohexanesulfonate Na-salt (PFHxS-Na)	82382-12-5	--
181		Perfluorohexanesulfonate K-salt (PFHxS-K)	3871-99-6	--
182		1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, lithium salt (1:1) (PFHxS-Li)	55120-77-9	--
183		Ammonium perfluorohexane-1-sulphonate (PFHxS-NH <sub>4</sub> )	68259-08-5	--



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
184		Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-BTPP)	1000597-52-3	--
185		N,N,N-tributylbutan-1-aminium tridecafluorohexane-1-sulfonate(PFHxS-N(C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> )	108427-54-9	--
186		N,N,N-triethylethanaminium tridecafluorohexane-1-sulfonate(PFHxS-N(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> )	108427-55-0	--
187		1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. With pyrrolidine (1:1) (PFHxS-NC <sub>4</sub> H <sub>9</sub> )	1187817-57-7	--
188		Ethanaminium, N-[4-[[4-(diethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (Calculated in terms of PFHxS) (PFHxS-(NC <sub>10</sub> H <sub>14</sub> ) <sub>3</sub> C <sub>5</sub> H <sub>4</sub> )	1310480-24-0	--
189		Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-(NC <sub>8</sub> H <sub>10</sub> ) <sub>2</sub> C <sub>13</sub> H <sub>12</sub> )	1310480-27-3	--
190		Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(phenylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-(NC <sub>8</sub> H <sub>10</sub> ) <sub>2</sub> C <sub>17</sub> H <sub>12</sub> )	1310480-28-4	--
191		Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1) (PFHxS-C <sub>42</sub> H <sub>70</sub> O <sub>35</sub> )	1329995-45-0	--
192		Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1)(PFHxS-C <sub>48</sub> H <sub>80</sub> O <sub>40</sub> )	1329995-69-8	--
193		Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (TPS-PFHxS)	144116-10-9	--
194		Quinolinium, 1-(carboxymethyl)-4-[2-[4-[4-(2,2-diphenylethenyl)phenyl]-1,2,3,3a,4,8b-hexahydrocyclopent[b]indol-7-yl]ethenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)(PFHxS-C <sub>44</sub> H <sub>37</sub> N <sub>2</sub> O <sub>2</sub> )	1462414-59-0	--



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
195		Iodonium, diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-I(C <sub>6</sub> H <sub>5</sub> ) <sub>2</sub> )	153443-35-7	--
196		Methanaminium, N,N,N-trimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) (PFHxS-TMA)	189274-31-5	--
197		1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd.with 2-methyl-2-propanamine (1:1)(PFHxS-NH <sub>2</sub> (CH <sub>3</sub> ) <sub>3</sub> )	202189-84-2	--
198		Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)(PFHxS-I(C <sub>6</sub> H <sub>4</sub> ) <sub>2</sub> (C <sub>4</sub> H <sub>9</sub> ) <sub>2</sub> )	213740-81-9	--
199		1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, gallium salt (9CI)(PFHxS-Ga)	341035-71-0	--
200		Sulfonium, bis(4-methylphenyl)phenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)(PFHxS-S(C <sub>7</sub> H <sub>7</sub> ) <sub>2</sub> C <sub>6</sub> H <sub>5</sub> )	341548-85-4	--
201		1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, scandium(3+) salt (3:1)(PFHxS-Sc)	350836-93-0	--
202		1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, neodymium(3+) salt (3:1)(PFHxS-Nd)	41184-65-0	--
203		1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, yttrium(3+) salt (3:1)(PFHxS-Y)	41242-12-0	--
204		Sulfonium, (thiodi-4,1-phenylene)bis[diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:2)( PFHxS-S <sub>3</sub> (C <sub>6</sub> H <sub>5</sub> ) <sub>4</sub> (C <sub>6</sub> H <sub>4</sub> ) <sub>2</sub> )	421555-73-9	--
205		Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic(PFHxS-I (C <sub>6</sub> H <sub>4</sub> ) <sub>2</sub> (C <sub>5</sub> H <sub>11</sub> ) <sub>2</sub> )	421555-74-0	--
206		Perfluorohexane sulphonyl fluoride(PFHxS-F)	423-50-7	--
207		Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)(PFHxS-S(C <sub>6</sub> H <sub>4</sub> ) <sub>3</sub> (C <sub>4</sub> H <sub>9</sub> ) <sub>3</sub> )	425670-70-8	--
208		1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, zinc salt (PFHxS-Zn)	70136-72-0	--
209		Tridecafluorohexanesulphonic acid, compound with 2,2'-iminodiethanol (1:1)(PFHxS-NH(C <sub>2</sub> H <sub>5</sub> O) <sub>2</sub> )	70225-16-0	--
210		1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with N,N-diethylethanamine (1:1)(PFHxS-N(C <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> )	72033-41-1	--
211		Iodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-	866621-50-3	--



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
		hexanesulfonic acid (1:1) (9Cl) (PFHxS-I(C <sub>6</sub> H <sub>4</sub> ) <sub>2</sub> (C <sub>4</sub> H <sub>9</sub> ) <sub>2</sub> )		
212		Sulfonium, (4-methylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-S(C <sub>6</sub> H <sub>5</sub> ) <sub>2</sub> C <sub>7</sub> H <sub>7</sub> )	910606-39-2	--
213		Sulfonium, [4-[(2-methyl-1-oxo-2-propen-1-yl)oxy]phenyl]diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6,6,7-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-S(C <sub>6</sub> H <sub>5</sub> ) <sub>2</sub> C <sub>10</sub> H <sub>9</sub> O <sub>2</sub> )	911027-68-4	--
214		1-Hexanesulfonic acid, 9,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, cesium salt (1:1) (PFHxS-Cs) (PFHxS-Cs)	92011-17-1	--
215		Dibenzo[k,n][1,4,7,10,13]tetraoxathiacyclopentadecinium, 19-[4-(1,1-dimethylethyl)phenyl]-6,7,9,10,12,13-hexahydro-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-SC <sub>28</sub> H <sub>31</sub> O <sub>4</sub> )	928049-42-7	--
216		Perfluorohexylsulfonyl chloride (PFHxS-Cl)	55591-23-6	--
217		Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with 2-ethyltricyclo[3.3.1.1 <sup>3,7</sup> ]dec-2-yl 2-methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.1 <sup>3,7</sup> ]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (PFHxS-Sulfonium, propenoate polymer)	911027-69-5	--
218		Perfluorohexane sulfonate (anion)	108427-53-8	--
219		Tetrabutylphosphonium perfluorohexane sulfonate (PFHxS-P (C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> )	2310194-12-6	--
220	--	N-Methylperfluoro-1-hexanesulfonamide (N-Me-PFHxSA)	68259-15-4	0.010
221	--	Perfluorohexane sulfonamide (PFHxSA)	41997-13-1	0.010
222	--	N-[3-(dimethylamino)propyl]tridecafluorohexanesulphonamide (N-AP-FHxSA)	50598-28-2	0.010
223	--	2-[methyl[(tridecafluorohexyl)sulphonyl]amino]ethyl acrylate)) (N-MeFHSEA)	67584-57-0	0.200
224	--	2-Propenoic acid, 2-methyl-, 2-[methyl[(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexyl)sulfonyl]amino]ethyl ester	67584-61-6	0.200
225	--	2-Propenoic acid, 2-methyl-, 2-[ethyl[(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexyl)sulfonyl]amino]ethyl ester	67906-70-1	0.200



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## Test Report (PFAS)

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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
226	--	1-Hexanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N-(2-hydroxyethyl)-N-methyl-(MeFHxSE)	68555-75-9	0.010
227	EtFHxSAA, its salts	Glycine, N-ethyl-N-[(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoroethyl)sulfonyl] (EtFHxSAA)	68957-32-4	0.010
228		Potassium N-ethyl-n-[(tridecafluoroethyl)sulfonyl]glycinate (EtFHxSAA-K)	67584-53-6	--
229		Sodium N-ethyl-N-((tridecafluoroethyl)sulphonyl)glycinate (EtFHxSAA-Na)	68555-70-4	--
230	PFHxA, its salts & derivatives	Perfluorohexane Acid (PFHxA)	307-24-4	0.010
231		Ammonium perfluorohexanoate (APFHx)	21615-47-4	--
232		Sodium perfluorohexanoate (PFHxA-Na)	2923-26-4	--
233		Potassium perfluorohexanoate (PFHxA-K)	3109-94-2	--
234		Perfluorohexanoyl fluoride (PFHxA-F)	355-38-4	--
235		Silver perfluorohexanoate (PFHxA-Ag)	336-02-7	--
236		Lithium perfluorohexanoate (PFHxA-Li)	90430-61-8	--
237		Perfluorohexanoic anhydride	308-13-4	--
238		Hexanoic acid, undecafluoro-, compd. with piperazine (2:1) (8Cl,9Cl)	423-47-2	--
239		Perfluorohexanoate (anion)	92612-52-7	--
240		Perfluorohexanoyl chloride (PFHxA-Cl)	335-53-5	--
241		Undecafluorohexanoic acid--hexan-1-amine (1/1) (PFHxA-C <sub>6</sub> H <sub>15</sub> N)	565225-91-4	--
242		1-phenylpiperazine; 2,2,3,3,4,4,5,5,6,6,6-undecafluorohexanoic acid (PFHxA-C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> )	985-60-4	--
243	--	1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	647-42-7	0.100
244	--	1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	2043-47-2	0.400
245	--	1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	17527-29-6	0.200
246	6:2 FTS, its salts	1H,1H,2H,2H-Perfluorooctanesulphonic acid (6:2 FTS)	27619-97-2	0.010
247		Sodium 1H,1H,2H,2H-Perfluorooctanesulfonate (6:2 FTS-Na)	27619-94-9	--
248		Potassium 1H,1H,2H,2H-Perfluorooctanesulfonate (6:2 FTS-K)	59587-38-1	--
249		Ammonium 1H,1H,2H,2H-Perfluorooctanesulfonate (6:2 FTS-NH <sub>4</sub> )	59587-39-2	--
250		1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-, barium salt (2:1) (6:2 FTS-Ba)	1807944-82-6	--
251		2-(Perfluorohexyl)ethane-1-sulfonate (6:2FTS(anion))	425670-75-3	--
252	--	1H,1H,2H,2H-Perfluorooctyltriethoxysilane (6:2 FTSi(OC <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> )	51851-37-7	0.500



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
253	--	1H,1H,2H,2H-Perfluorooctyltrichlorosilane	78560-45-9	0.200
254	--	1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-6-iodohexane (PFHx-I)	355-43-1	0.200
255	--	1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-8-iodononane	38550-34-4	0.200
256	--	n-[3-(dimethylamino)propyl]-3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctanesulphonamide n-oxide	80475-32-7	0.100
257	--	thiocyanic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester	26650-09-9	0.200
258	6:2 monoPAP, its salts	6:2 Fluorotelomer phosphate monoester (6:2 monoPAP)	57678-01-0	0.100
259		Diammonium 6:2 fluorotelomer phosphate monoester (6:2 monoPAP-NH <sub>4</sub> NH <sub>4</sub> )	1000852-37-8	-
260	--	2h,2h,3h,3h-perfluorononanoic acid (6:3 FTCA)	27854-30-4	0.100
261	--	3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-thiol (6:2 FTSH)	34451-26-8	0.200
262	--	1H,1H,2H,2H-Perfluorooctyldimethylchlorosilane (6:2 FTSiMe <sub>2</sub> Cl)	102488-47-1	0.200
263	--	1H,1H-Tridecafluoro-1-iodoheptane (6:1 FTI)	212563-43-4	0.200
264	--	4,4,5,5,6,6,7,7,8,8,9,9,9-Tridecafluorononyl iodide (6:3 FTI)	89889-20-3	0.200
265	6:2 FTPA, its salts	Perfluorohexyl ethylphosphonic acid (6:2 FTPA)	252237-40-4	0.100
266		Tridecafluorooctyl-phosphonic acid sodium salt (1:1) (Cheminox FHP <sub>2</sub> OH-Na(PFHEPA-Na))	1189052-95-6	--
267	--	1-hexanol, 2,2,3,3,4,4,5,5,6,6,6-undecafluoro-(5:1 FTOH)	423-46-1	0.200
268	--	2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoroheptan-1-ol (6:1 FTOH)	375-82-6	0.200
269	--	4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluorononan-1-ol (6:3 FTOH)	80806-68-4	0.200
270	--	3,3,4,4,5,5,6,6,7,7,7-undecafluoro-2-heptanol (5:2 sFTOH)	914637-05-1	0.200
271	--	1-(perfluorohexyl)octane (F <sub>6</sub> H <sub>8</sub> )	133331-77-8	0.200
272	--	1H,1H-Tridecafluoroheptylamine (6:1 FTNH <sub>2</sub> )	423-49-4	0.200
273	--	2H-Perfluoro-2-octenoic acid (6:2 FTUCA)	70887-88-6	0.010
274	6:6 PFPi, its salts	6:6 Perfluorophosphinic acid (6:6 PFPi)	40143-77-9	0.010
275		Bis(perfluorohexyl)phosphinic acid sodium salt (6:6 PFPi-Na)	70609-44-8	--
276		Bis(perfluorohexyl) phosphinic acid ytterbium(3+) salt (6:6 PFPi-Yb)	500776-72-7	--
277		Bis(perfluorohexyl) phosphinic acid erbium(3+) salt (6:6 PFPi-Er)	500776-73-8	--
278	PFBA, its salts	Perfluorobutane Acid (PFBA)	375-22-4	0.010
279		Ammonium perfluorobutanoate (PFBA-NH <sub>4</sub> )	10495-86-0	--



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
280		Sodium perfluorobutanoate (PFBA-Na)	2218-54-4	--
281		Potassium heptafluorobutanoate (PFBA-K)	2966-54-3	--
282		Silver perfluorobutanoate (PFBA-Ag)	3794-64-7	--
283		Lithium perfluorobutanoate (PFBA-Li)	4146-76-3	--
284		Heptafluorobutanoic acid-piperazine (1:1)	375-04-2	--
285		Perfluorobutanoate (anion)	45048-62-2	--
286		PFBS, its salts & derivatives	Perfluorobutanesulfonic acid (PFBS)	375-73-5
287	Perfluorobutanesulfonate K-salt (PFBS-K)		29420-49-3	--
288	Perfluorobutanesulfonic Acid Hydrate (PFBS-H <sub>2</sub> O)		59933-66-3	--
289	lithium perfluorobutanesulfonate (PFBS-Li)		131651-65-5	--
290	Triphenyl Sulfonium Perfluorobutane Sulfonate (TPS-PFBS)		144317-44-2	--
291	Dimethyl(phenyl)sulfanium perfluorobutanesulfonate (PFBS-S(CH <sub>3</sub> ) <sub>2</sub> C <sub>6</sub> H <sub>5</sub> )		220133-51-7	--
292	Tetrabutyl-phosphonium nonafluoro-butane-1-sulfonate (PFBS-P(C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> )		220689-12-3	--
293	N,N,N,-triethylethanaminium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulfonate(PFBS-N(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> )		25628-08-4	--
294	Nonafluorobutanesulfonyl fluoride (PFBS-F)		375-72-4	--
295	Morpholinium perfluorobutanesulfonate (PFBS-NC <sub>4</sub> H <sub>9</sub> O)		503155-89-3	--
296	Magnesium perfluorobutanesulfonate (PFBS-Mg)		507453-86-3	--
297	Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate (PFBS-NH <sub>4</sub> )		68259-10-9	--
298	1-(4-butoxy-1-naphthyl)tetrahydrothiophenium nonafluorobutane-1-sulfonate (PFBS-SC <sub>18</sub> H <sub>23</sub> O)		209482-18-8	--
299	1,1,2,2,3,3,4,4,4-Nonafluorobutane-1-sulfonyl chloride (PFBS-Cl)		2991-84-6	--
300	Sodium perfluorobutanesulfonate (PFBS-Na)		60453-92-1	--
301	Bis(4-tert-butylphenyl)iodonium perfluoro-1-butanesulfonate (PFBS-I(C <sub>6</sub> H <sub>4</sub> ) <sub>2</sub> (C <sub>4</sub> H <sub>9</sub> ) <sub>2</sub> )		194999-85-4	--
302	1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonic acid, compound with 2,2'-iminodiethanol (1:1) (PFBS-NH(C <sub>2</sub> H <sub>5</sub> O) <sub>2</sub> )		70225-18-2	--
303	Tetrabutylammonium nonafluorobutanesulfonate ((PFBS-N(C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> ))		108427-52-7	--
304	Diphenyliodonium nonafluorobutane-1-sulfonate((PFBS-I(C <sub>6</sub> H <sub>5</sub> ) <sub>2</sub> ))		194999-82-1	--
305	Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonate (1:1)		241806-75-7	--



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
306		Sulfonium, (4-cyclohexylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefulfonate (1:1)	425670-64-0	--
307		Thiophenium, tetrahydro-1-(1-methyl-1H-indol-3-yl)-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefulfonate (1:1)	867373-18-0	--
308		Pyridinium, 1-ethyl-3-methyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefulfonate (1:1)	1015420-87-7	--
309		1H-Imidazolium, 1-methyl-3-octyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefulfonate (1:1)	905972-83-0	--
310		1H-Imidazolium, 3-hexyl-1-methyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefulfonate (1:1)	1001557-05-6	--
311		2-Propanaminium, N,N-dimethyl-N-(1-methylethyl)-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefulfonate (1:1)	374571-81-0	--
312		Sulfonium, [4-[2-(1,1-dimethylethoxy)-2-oxoethoxy]phenyl]diphenyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefulfonate (1:1)	857285-80-4	--
313		1-Butanaminium, N,N-dibutyl-N-methyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefulfonate (1:1)	124472-66-8	--
314		1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, zinc salt (2:1) (PFBS-Zn)	502457-69-4	--
315		1-Pentanaminium, N,N,N-tripropyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefulfonate (1:1)	56773-55-8	--
316		Perfluorobutanesulfonic acid tetramethylammonium salt (PFBS-N(CH <sub>3</sub> ) <sub>4</sub> )	25628-17-5	--
317		1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, 1,1'-anhydride	36913-91-4	--
318		Perfluorobutane sulfonate (anion)	45187-15-3	--
319		1-(4-butoxy-1-naphthyl)tetrahydrothiophenium nonafluorobutane-1-sulfonate	EC: 468-770-4	--
320		Triethylammonium perfluorobutane sulfonate	182059-38-7	--
321		N-(2-Hydroxyethyl)-N,N-dimethyl-1-octanaminium perfluoro-1-butanefulfonate (1:1)	334529-55-4	--
322		1-Hexadecylpyridinium perfluoro-1-butanefulfonate	334529-62-3	--
323		1-Butylpyridinium perfluoro-1-butanefulfonate	334529-64-5	--
324		N-Methyl-N,N-dioctyl-1-octanaminium perfluoro-1-butanefulfonate	495417-51-1	--
325		Sulfonium, tris(4-methylphenyl)-, salt with perfluoro-1-butanefulfonic acid (1:1)	722538-68-3	--
326		Perfluoropentane Acid (PFPeA)	2706-90-3	0.010



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# Test Report (PFAS)

No.: TAOEC24004739933

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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
327	PFPeA, its salts	Sodium perfluoropentanoate(PFPeA-Na)	2706-89-0	--
328		Potassium perfluoropentanoate(PFPeA-K)	336-23-2	--
329		Lithium perfluoropentanoate (PFPeA-Li)	198482-22-3	--
330		Silver perfluoropentanoate (PFPeA-Ag)	2795-30-4	--
331		Ammonium perfluoropentanoate(PFPeA-NH <sub>4</sub> )	68259-11-0	--
332		Perfluoropentanoate (anion)	45167-47-3	--
333		Nonafluoropentanoic acid -1-benzylthiourea (1:1) (PFPeA-C <sub>8</sub> H <sub>10</sub> N <sub>2</sub> S)	64808-55-5	--
334		Perfluoropentanoic anhydride (PFPeAA)	308-28-1	--
335	HPFHpA, its salts	7H-Dodecanefluoroheptane Acid (HPFHpA)	1546-95-8	0.010
336		Sodium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate (HPFHpA-Na)	2264-25-7	--
337		Ammonium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate (HPFHpA-NH <sub>4</sub> )	376-34-1	--
338		7-H-Perfluoroheptanoate (HPFHpA(anion))	69681-35-2	--
339	PFHpS, its salts	Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	0.010
340		Perfluoroheptanesulfonate Na-salt (PFHpS-Na)	21934-50-9	--
341		Potassium Perfluoroheptanesulfonate (PFHpS-K)	60270-55-5	--
342		Ammonium perfluoroheptanesulfonate (PFHpS-NH <sub>4</sub> )	68259-07-4	--
343		Lithium perfluoroheptanesulfonate (PFHpS-Li)	117806-54-9	--
344		1-Heptanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-, compd. with 2,2'-iminobis[ethanol] (1:1)	70225-15-9	--
345		Perfluoroheptane sulfonate (anion)	146689-46-5	--
346		Triethylammonium perfluoroheptane sulfonate	72033-40-0	--
347		Tetraethylammonium perfluoroheptane sulfonate	439863-97-5	--
348		Perfluoroheptane sulfonic anhydride (PFHpSA)	140429-92-1	--
349	PFHpA, its salts	Perfluoroheptane Acid (PFHpA)	375-85-9	0.010
350		Sodium perfluoroheptanoate (PFHpA-Na)	20109-59-5	--
351		Potassium perfluoroheptanoate (PFHpA-K)	21049-36-5	--
352		Ammonium perfluoroheptanoate (PFHpA-NH <sub>4</sub> )	6130-43-4	--
353		Cesium perfluoroheptanoate (PFHpA-Cs)	171198-24-6	--
354		Silver perfluoroheptanoate (PFHpA-Ag)	424-05-5	--
355		Lithium perfluoroheptanoate (PFHpA-Li)	60871-90-1	--
356		Perfluoroheptanoate (anion)	120885-29-2	--
357		2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid (HFPO-DA)	13252-13-6	0.010



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)	
358	HFPO-DA, its salts & derivatives	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, ammonium salts (HFPO-DA-NH <sub>4</sub> )	62037-80-3	--	
359		2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, K- salts (HFPO-DA-K)	67118-55-2	--	
360		2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, its acyl halides (HFPO-DA-F)	2062-98-8	--	
361		Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (+)-	75579-39-4	--	
362		Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (-)-	75579-40-7	--	
363		Sodium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate	67963-75-1	--	
364		Perfluoro(2-propoxypropanoate)	122499-17-6	--	
365		2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid--N-propylpropan-1-amine (1/1)	165951-17-7	--	
366		Triethylaminium perfluoro-2-propoxypropanoate	165951-18-8	--	
367		4-[(6-Methoxy-3-pyridazinyl)sulfamoyl]anilinium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate	298703-31-8	--	
368		2,3,6-Triiodobenzoic acid (1-methyl-3-piperidiny)methyl ester compd. with perfluoro-2-(propoxy)propanoate (1:1) (HFPO-C <sub>14</sub> H <sub>16</sub> I <sub>3</sub> NO <sub>2</sub> )	2412106-69-3	--	
369		4:2 FTS, its salts	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	757124-72-4	0.010
370			1H,1H,2H,2H-perfluorohexane sulfonate acid sodium salt	27619-93-8	--
371	4:2 Fluorotelomer sulfonate (4:2 FTS(anion))		414911-30-1	--	
372	PFPeS, its salts	Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.010	
373		Sodium perfluoro-1-pentanesulfonate (PFPeS-Na)	630402-22-1	--	
374		Potassium perfluoropentane-1-sulphonate (PFPeS-K)	3872-25-1	--	
375		Ammonium perfluoropentanesulfonate (PFPeS-NH <sub>4</sub> )	68259-09-6	--	
376		Bis(2-hydroxyethyl) ammonium 1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane-1-sulphonate	70225-17-1	--	
377		Undecafluoropentane-1-sulfonic acid lithium salt (PFPeS-Li)	1046864-81-6	--	
378		Perfluoropentane sulfonate (anion)	175905-36-9	--	
379		Triethylammonium perfluoropentane sulfonate	72033-42-2	--	
380		Perfluoropentane sulfonic anhydride (PFPeSA)	161877-72-1	--	
381		--	2-Perfluorohexyl ethanoic acid (6:2 FTCA)	53826-12-3	0.010



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
382	--	3-Perfluoropentyl propanoic acid (5:3 FTCA)	914637-49-3	0.010
383	PFHxDA, its salts	Perfluorohexadecanoic Acid (PFHxDA)	67905-19-5	0.010
384		Hentriacontafluorohexadecanoate anion (PFHxDA(anion))	1214264-30-8	--
385	PFODA, its salts	Perfluorooctadecanoic Acid (PFODA)	16517-11-6	0.010
386		Perfluorooctadecanoate anion (PFODA(anion))	798556-82-8	--
387	--	1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2 FTMA)	2144-53-8	0.200
388	ADONA, its salts	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	0.010
389		Ammonium 4,8-dioxa-3H-perfluorononanoate (ADONA-NH <sub>4</sub> )	958445-44-8	--
390		Sodium 4,8-dioxa-3H-perfluorononanoate (ADONA-Na)	2250081-67-3	--
391	--	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	0.010
392	--	Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	0.010
393	--	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	0.010
394	9Cl-PF <sub>3</sub> ONS, its salts	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF <sub>3</sub> ONS)	756426-58-1	0.010
395		Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF <sub>3</sub> ONS-K)	73606-19-6	--
396		Ammonium perfluoro-2-[(6-chlorohexyl)oxy]ethane-1-sulfonate (9Cl-PF <sub>3</sub> ONS-NH <sub>4</sub> )	1383434-28-3	--
397	11Cl-PF <sub>3</sub> OUdS, its salts	11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF <sub>3</sub> OUdS)	763051-92-9	0.010
398		Potassium 11-chloroeicosafuoro-3-oxaundecane-1-sulfonate (11Cl-PF <sub>3</sub> OUdS-K)	83329-89-9	--
399	--	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	0.010
400	--	3-Perfluoropropyl propanoic acid (3:3 FTCA)	356-02-5	0.010
401	PFPeDA, its salts	Perfluoropentadecanoic Acid (PFPeDA)	141074-63-7	0.100
402		Nonacosafuoropentadecanoate (PFPeDA(anion))	1214264-29-5	--
403	--	1H,1H,2H,2H-Perfluorohexyl methacrylate (4:2 FTMA)	1799-84-4	0.200
404	--	2-(N-ethylperfluorooctanesulfamido) ethyl acrylate (EtFOSAC)	423-82-5	0.200
405	--	1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-8-iodooctane (6:2 FTI)	2043-57-4	0.100
406	--	Perfluorobutane sulfon amides (PFBSA)	30334-69-1	0.100
407	--	1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methylbutane-1-sulphonamide (PFBS-NC <sub>3</sub> H <sub>8</sub> O)	34454-97-2	0.010
408	--	11H-Perfluoroundecanoic acid (11H-PFUnDA)	1765-48-6	0.100



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No.	Group Name	Substance Name	CAS No.	MDL (mg/kg)
409	11H-PFUnDA, its salts	Potassium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-icosaf luoroundecanoate (11H-PFUnDA-K)	307-71-1	--
410		Ammonium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-icosaf luoroundecanoate (11H-PFUnDA-NH <sub>4</sub> )	5081-02-7	--
411		11-H-Perfluoroundecanoate (11H-PFUnDA(anion))	69681-37-4	--
412	PFPrA, its salts	Pentafluoropropionic acid (PFPrA)	422-64-0	0.100
413		Sodium pentafluoropropionate (PFPrA-Na)	378-77-8	--
414		Silver pentafluoropropionate (PFPrA-Ag)	509-09-1	--
415		Potassium pentafluoropropionate (PFPrA-K)	378-76-7	--
416		Ammonium pentafluoropropionate (PFPrA-NH <sub>4</sub> )	2730-58-7	--
417	HFPO-TA, its salts	Hexafluoropropylene oxide trimer acid (HFPO-TA)	13252-14-7	0.200
418		Propanoic acid, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propoxy]-, potassium salt (HFPO-TA-K)	67118-57-4	--
419		Perfluoro-2,5-dimethyl-3,6-dioxanonanoic acid, sodium salt (HFPO-TA-Na)	67963-76-2	--
420		Propanoic acid, 2,3,3,3-tetrafluoro-2-(1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy)-, ammonium salt (HFPO-TA-NH <sub>4</sub> )	13043-05-5	--
421		Perfluoro(2,5-dimethyl-3,6-dioxanonanoyl) fluoride (HFPO-TA-F)	2641-34-1	--
422	--	Perfluoroethane sulfonic acid (PFEtS)	354-88-1	0.010
423	6:2 diPAP, its salts	6:2 Fluorotelomer phosphate diester (6:2 diPAP)	57677-95-9	0.010
424		Sodium bis[2-(perfluorohexyl)ethyl]phosphate (6:2 diPAP-Na)	407582-79-0	--
425		Bis(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) phosphate ion(1-) (6:2 diPAP(Anion))	667465-18-1	--
426	TFSI, its salts	Bis(trifluoromethane)sulfonimide (TFSI)	82113-65-3	0.010
427		1-Butyl-1-methylpyrrolidinium Bis(trifluoromethanesulfonyl)imide	223437-11-4	--
428		Tributylmethylammonium Bis(trifluoromethanesulfonyl)imide	405514-94-5	--
429		Lithium Bis(trifluoromethane)sulfonimide (TFSI-Li)	90076-65-6	--
430		1-Decyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide	433337-23-6	--



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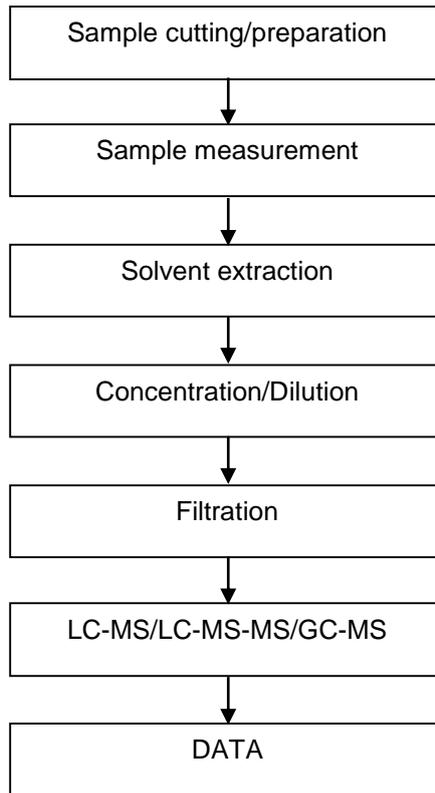
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ATTACHMENTS

### PFASs/ PFOS/PFOA Testing Flow Chart



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