



**Stockholm Convention  
on Persistent Organic  
Pollutants**

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**Persistent Organic Pollutants Review Committee**

**Twentieth meeting**

Rome, 23–27 September 2024

Agenda item 4 (b) (ii)

**Technical work: consideration of recommendations to the  
Conference of the Parties: long-chain perfluorocarboxylic  
acids, their salts and related compounds**

**Draft indicative list of long-chain perfluorocarboxylic acids,  
their salts and related compounds**

**Note by the Secretariat**

The annex to the present note contains a draft indicative list of long-chain perfluorocarboxylic acids, their salts and related compounds, updated during the twentieth meeting of the Persistent Organic Pollutants Review Committee. The revisions are based on the draft indicative list set out in document UNEP/POPS/POPRC.19/INF/9. The present note, including its annex, has not been formally edited.

## Annex

### **Draft indicative list of long chain perfluorocarboxylic acids, their salts and related compounds**

1. An indicative list of CAS numbers for long-chain perfluorocarboxylic acids, their salts and related compounds is provided in Table 1 below.
2. Paragraph 4 of the proposal by Canada to list long-chain perfluorocarboxylic acids (PFCAs), their salts and related compounds in Annexes A, B and/or C to the Stockholm Convention on Persistent Organic Pollutants (UNEP/POPS/POPRC.17/7), along with the chemical identity section of the risk profile (UNEP/POPS/POPRC.18/11/Add.4) and the risk management evaluation (UNEP/POPS/POPRC.19/9/Add.2), specifies that it concerns PFCAs with carbon chain lengths from 9 to 21 inclusive, their salts and related compounds. Long-chain PFCAs and their salts are defined as a homologous series of substances with the molecular formula of  $C_nF_{2n+1}COOH$  (where  $8 \leq n \leq 20$ ).
3. Paragraph 5 of the proposal, along with the chemical identity section of the risk profile (UNEP/POPS/POPRC.18/11/Add.4) and the risk management evaluation (UNEP/POPS/POPRC.19/9/Add.2), defines related compounds as “any substance that is a precursor and may transform to long-chain PFCAs, where the perfluorinated alkyl moiety has the formula  $C_nF_{2n+1}$  (where  $8 \leq n \leq 20$ ) and is directly bonded to any chemical moiety other than a fluorine, chlorine or bromine atom”.

**Table 1: Indicative list of CAS numbers for long-chain perfluorocarboxylic acids, their salts and related compounds****Notes:**

- Long-chain perfluorocarboxylic acids (PFCAs) or their salts are defined as a homologous series of substances with the molecular formula of  $C_nF_{2n+1}COOH$  (where  $8 \leq n \leq 20$ );
- Compounds related to long-chain PFCAs are defined as any substance that is a precursor and may transform to long-chain PFCAs, where the perfluorinated alkyl moiety has the formula  $C_nF_{2n+1}$  (where  $8 \leq n \leq 20$ ) and is directly bonded to any chemical moiety other than a fluorine, chlorine or bromine atom.
- This table includes CAS numbers describing substances potentially meeting the definition of compounds related to long-chain PFCAs depending on the fluorocarbon chain length, which is not defined by the name.

CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
				Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<b>Long-chain PFCAs</b>							
<a href="#">375-95-1</a>	PFNA	Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9- heptadecafluoro-	Nonanoic acid, heptadecafluoro-	x			1
<a href="#">335-76-2</a>	PFDA	Decanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10- nonadecafluoro-	Decanoic acid, nonadecafluoro-	x			1
<a href="#">2058-94-8</a>	PFUnDA	Undecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,11-heneicosafuoro-	Undecanoic acid, heneicosafuoro-	x			1
<a href="#">307-55-1</a>	PFDoDA	Dodecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,12-tricosafuoro-	Dodecanoic acid, tricosafuoro-	x			1
<a href="#">72629-94-8</a>	PFTTrDA	Tridecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,13,13-pentacosafuoro-	Tridecanoic acid, pentacosafuoro-	x			1

<sup>1</sup> American Chemical Society, 2022. CAS SciFinder<sup>®</sup>. Available from: <https://scifinder-n.cas.org/>. (Accessed: 4 February 2022).

<sup>2</sup> Organisation for Economic Co-operation and Development (OECD), 2022. Comprehensive Global Database of PFASs. Available from: <https://www.oecd.org/chemicalsafety/portal-perfluorinated-chemicals/> (Accessed: 18 January 2023).

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">376-06-7</a>	PFTDA, PFTeDA	Tetradecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,13,14,14,14- heptacosaf fluoro-	Tetradecanoic acid, heptacosaf fluoro-	x			1
141074-63- 7	PFPeDA	Pentadecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,13,14,14,15,15,15- nonacosaf fluoro-	Pentadecanoic acid, nonacosaf fluoro-	x			1
<a href="#">67905-19-5</a>	PFHxDA	Hexadecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,13,14,14,15,15,16,16,16- hentriacontaf fluoro-	Hexadecanoic acid, hentriacontaf fluoro-	x			1
57475-95-3	PFHpDA	Heptadecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,13,14,14,15,15,16,16,17,17, 17-tritriacontaf fluoro-	Perfluoroheptadecanoic acid	x			1
<a href="#">16517-11-6</a>	PFODA, PFOcDA	Octadecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,13,14,14,15,15,16,16,17,17, 18,18,18-pentatriacontaf fluoro-	Octadecanoic acid, pentatriacontaf fluoro-	x			1
133921-38- 7	PFNDA	Nonadecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,13,14,14,15,15,16,16,17,17, 18,18,19,19,19-heptatriacontaf fluoro-	Perfluorononadecanoic acid	x			1
<a href="#">68310-12-3</a>	C <sub>20</sub> PFCA	Eicosanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,13,14,14,15,15,16,16,17,17, 18,18,19,19,20,20,20- nonatriacontaf fluoro-	Eicosanoic acid, nonatriacontaf fluoro-	x			1
2920913- 30-8	C <sub>21</sub> PFCA	Heneicosanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,13,14,14,15,15,16,16,17,17, 18,18,19,19,20,20,21,21,21- hentetracontaf fluoro-	Perfluoroheneicosanoic acid	x			1

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<b>Long-chain PFCAs salts</b>							
<a href="#">4149-60-4</a>		Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9- heptadecafluoro-, ammonium salt (1:1)	Nonanoic acid, heptadecafluoro-, ammonium salt		x		1,3
<a href="#">21049-39-8</a>		Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9- heptadecafluoro-, sodium salt (1:1)	Perfluorononan-1-oic acid, sodium salt		x		3
<a href="#">3830-45-3</a>		Decanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10- nonadecafluoro-, sodium salt (1:1)	Sodium nonadecafluorodecanoate		x		3
<a href="#">3108-42-7</a>		Decanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10- nonadecafluoro-, ammonium salt (1:1)	Ammonium nonadecafluorodecanoate		x		3
<b>Polyfluorinated phosphates and related substances</b>							
<a href="#">65530-63-4</a>	monoPAP	Ethanol, 2,2'-iminobis-, compd. with $\alpha$ - fluoro- $\omega$ -[2- (phosphonooxy)ethyl]poly(difluoromet hylene) (2:1)	Ethanol, 2,2'-iminobis-, compd. with $\alpha$ - fluoro- $\omega$ -[2- (phosphonooxy)ethyl]poly(difluoromet hylene) (2:1)			x	1,4
<a href="#">65530-64-5</a>	diPAP	Ethanol, 2,2'-iminobis-, compd. with $\alpha,\alpha'$ -[phosphinicobis(oxy-2,1- ethanediyl)]bis[ $\omega$ - fluoropoly(difluoromethylene)] (1:1)	Ethanol, 2,2'-iminobis-, compd. with $\alpha,\alpha'$ -[phosphinicobis(oxy-2,1- ethanediyl)]bis[ $\omega$ - fluoropoly(difluoromethylene)] (1:1)			x	1,4
<a href="#">65530-70-3</a>	diPAP	Poly(difluoromethylene), $\alpha,\alpha'$ - [phosphinicobis(oxy-2,1- ethanediyl)]bis[ $\omega$ -fluoro-, ammonium salt (1:1)	Poly(difluoromethylene), $\alpha,\alpha'$ - [phosphinicobis(oxy-2,1- ethanediyl)]bis[ $\omega$ -fluoro-, ammonium salt			x	1
<a href="#">65530-71-4</a>	monoPAP	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ - [2-(phosphonooxy)ethyl]-, ammonium salt (1:1)	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ - [2-(phosphonooxy)ethyl]-, monoammonium salt			x	1
<a href="#">65530-72-5</a>	diPAP	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ - [2-(phosphonooxy)ethyl]-, ammonium salt (1:2)	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ - [2-(phosphonooxy)ethyl]-, diammonium salt			x	1

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">65530-74-7</a>	monoPAP	Ethanol, 2,2'-iminobis-, compd. with $\alpha$ -fluoro- $\omega$ -[2-(phosphonoxy)ethyl]poly(difluoromethylene) (1:1)	Ethanol, 2,2'-iminobis-, compd. with $\alpha$ -fluoro- $\omega$ -[2-(phosphonoxy)ethyl]poly(difluoromethylene) (1:1)			x	1,4
<a href="#">68412-68-0</a>		Phosphonic acid, perfluoro-C6-12-alkyl derivs.	Phosphonic acid, perfluoro-C6-12-alkyl derivs.			x	1,3
<a href="#">68412-69-1</a>		Phosphinic acid, bis(perfluoro-C6-12-alkyl) derivs.	Phosphinic acid, bis(perfluoro-C6-12-alkyl) derivs.			x	1,3
<a href="#">74499-44-8</a>		Phosphoric acid, $\gamma$ - $\omega$ -perfluoro-C8-16-alkyl esters, compds. with diethanolamine	Phosphoric acid, $\gamma$ - $\omega$ -perfluoro-C8-16-alkyl esters, compds. with diethanolamine			x	4
<a href="#">1895-26-7</a>	10:2 diPAP	1-Dodecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuoro-, 1,1'- (hydrogen phosphate)	bis[3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl]hydrogen phosphate			x	3
<a href="#">63295-27-2</a>		1,2-Tridecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,13,13,13-eicosafuoro-12-(trifluoromethyl)-, 1-(dihydrogen phosphate)	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,13,13,13-icosafuoro-2-hydroxy-12-(trifluoromethyl)tridecyl dihydrogen phosphate			x	3
<a href="#">63295-28-3</a>		1,2-Pentadecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafuoro-14-(trifluoromethyl)-, 1-(dihydrogen phosphate)	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafuoro-2-hydroxy-14-(trifluoromethyl)pentadecyl dihydrogen phosphate			x	3
<a href="#">94158-70-0</a>		1,2-Tridecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-heneicosafuoro-, 1-(dihydrogen phosphate)	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-heneicosafuoro-2-hydroxytridecyl dihydrogen phosphate			x	3
<a href="#">94200-42-7</a>		1,2-Pentadecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafuoro-, 1-(dihydrogen phosphate)	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafuoro-2-hydroxypentadecyl dihydrogen phosphate			x	3

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">94200-43-8</a>		1,2-Heptadecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,14,15,15,16,16,17,17,17- nonacosafuoro-, 1-(dihydrogen phosphate)	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,14,15,15,16,16,17,17,17- nonacosafuoro-2- hydroxyheptadecyl dihydrogen phosphate			x	3
<a href="#">94200-46-1</a>		1,2-Tridecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,13-heneicosafuoro-, 1- (dihydrogen phosphate), diammonium salt	diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,13-henicosafuoro-2- hydroxytridecyl phosphate			x	3
<a href="#">94200-47-2</a>		1,2-Pentadecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,14,15,15,15,15- pentacosafuoro-, 1-(dihydrogen phosphate), diammonium salt	diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,14,15,15,15,15- pentacosafuoro-2-hydroxypentadecyl phosphate			x	3
<a href="#">94200-48-3</a>		1,2-Heptadecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,14,15,15,16,16,17,17,17- nonacosafuoro-, 1-(dihydrogen phosphate), diammonium salt	diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,14,15,15,16,16,17,17,17- nonacosafuoro-2-hydroxyheptadecyl phosphate			x	3
<a href="#">94200-50-7</a>		1,2-Tridecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 3,13,13-icosafuoro-12- (trifluoromethyl)-, 1-(dihydrogen phosphate), diammonium salt	diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 3,13,13-icosafuoro-2-hydroxy-12- (trifluoromethyl)tridecyl phosphate			x	3
<a href="#">94200-51-8</a>		1,2-Pentadecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,15,15,15-tetracosafuoro-14- (trifluoromethyl)-, 1-(dihydrogen phosphate), diammonium salt	diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,15,15,15-tetracosafuoro-2- hydroxy-14-(trifluoromethyl)pentadecyl phosphate			x	3
<b>Polyfluorinated iodides</b>							
<a href="#">2043-53-0</a>	8:2 FTI	Decane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8- heptadecafluoro-10-iodo-				x	5

CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
				Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">2043-54-1</a>	10:2 FTI	Dodecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-heneicosafuoro-12-iodo-	Dodecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-heneicosafuoro-12-iodo-			x	3
<a href="#">30046-31-2</a>	12:2 FTI	Tetradecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafuoro-14-iodo-	Tetradecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafuoro-14-iodo-			x	3
<a href="#">65510-55-6</a>	14:2 FTI	Hexadecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-nonacosafuoro-16-iodo-	Hexadecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-nonacosafuoro-16-iodo-			x	3
<a href="#">65510-56-7</a>	9:2 FTI	Undecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-nonadecafluoro-11-iodo-	Undecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-nonadecafluoro-11-iodo-			x	3
<a href="#">68188-12-5</a>	FTI	Alkyl iodides, C4-20, $\gamma$ - $\omega$ -perfluoro	Alkyl iodides, C4-20, $\gamma$ - $\omega$ -perfluoro			x	3
<a href="#">68390-33-0</a>	FTI	Alkyl iodides, C10-12, $\gamma$ - $\omega$ -perfluoro	Alkyl iodides, C10-12, $\gamma$ - $\omega$ -perfluoro			x	3
307-50-6		Undecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-tricosafuoro-11-iodo-	Undecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-tricosafuoro-11-iodo-			x	3
<a href="#">307-60-8</a>		Dodecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafuoro-12-iodo-	Dodecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafuoro-12-iodo-			x	3
<a href="#">307-63-1</a>		1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-Nonacosafuoro-14-iodotetradecane	Tetradecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-nonacosafuoro-14-iodo-			x	3
335-79-5		Pentadecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15-hentriacontafuoro-15-iodo-	Pentadecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15-hentriacontafuoro-15-iodo-			x	3
376-04-5		Tridecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13-heptacosafuoro-13-iodo-	Tridecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13-heptacosafuoro-13-iodo-			x	3
<a href="#">423-62-1</a>		Decane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-heneicosafuoro-10-iodo-	Decane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-heneicosafuoro-10-iodo-			x	3
<a href="#">558-97-4</a>		Nonane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-nonadecafluoro-9-iodo-	Nonane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-nonadecafluoro-9-iodo-			x	3



				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">677-93-0</a>		Decane, 1,1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10- eicosafluoro-10-iodo-2- (trifluoromethyl)-	Decane,1,1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,9, 9,10,10-eicosafluoro-10-iodo-2- (trifluoromethyl)-			x	3
<a href="#">3248-61-1</a>		Dodecane, 1,1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10, 11,11,12,12-tetracosafluoro-12-iodo-2- (trifluoromethyl)-	Dodecane,1,1,1,2,3,3,4,4,5,5,6,6,7,7,8,8, 9,9,10,10,11,11,12,12-tetracosafluoro- 12-iodo-2-(trifluoromethyl)-			x	3
<a href="#">3248-63-3</a>		Tetradecane, 1,1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10, 11,11,12,12,13,13,14,14- octacosafluoro-14-iodo-2- (trifluoromethyl)-	Tetradecane,1,1,1,2,3,3,4,4,5,5,6,6,7,7, 8,8,9,9,10,10,11,11,12,12,13,13,14,14- octacosafluoro-14-iodo-2- (trifluoromethyl)-			x	3
<a href="#">90622-71-2</a>		Alkyl iodides, C6-18, perfluoro	Alkyl iodides, C6-18, perfluoro			x	3
<b>Polyfluorinated thioethers</b>							
<a href="#">65530-69-0</a>		Poly(difluoromethylene), $\alpha$ -[2-[(2- carboxyethyl)thio]ethyl]- $\omega$ -fluoro-, lithium salt (1:1)	Poly(difluoromethylene), $\alpha$ -[2-[(2- carboxyethyl)thio]ethyl]- $\omega$ -fluoro-, lithium salt			x	1,4
<a href="#">65530-83-8</a>		Poly(difluoromethylene), $\alpha$ -[2-[(2- carboxyethyl)thio]ethyl]- $\omega$ -fluoro-	Poly(difluoromethylene), $\alpha$ -[2-[(2- carboxyethyl)thio]ethyl]- $\omega$ -fluoro-			x	1,4
<a href="#">68187-25-7</a>		Butanoic acid, 4-[[3- (dimethylamino)propyl]amino]-4-oxo-, 2(or 3)-[( $\gamma$ - $\omega$ -perfluoro-C6-20- alkyl)thio] derivs.	Butanoic acid, 4-[[3- (dimethylamino)propyl]amino]-4-oxo-, 2(or 3)-[( $\gamma$ - $\omega$ -perfluoro-C6-20- alkyl)thio] derivs.			x	1,4
<a href="#">68187-47-3</a>		1-Propanesulfonic acid, 2-methyl-, 2- [[1-oxo-3-[( $\gamma$ - $\omega$ -perfluoro-C4-16- alkyl)thio]propyl]amino] derivs., sodium salts	1-Propanesulfonic acid, 2-methyl-, 2- [[1-oxo-3-[( $\gamma$ - $\omega$ -perfluoro-C4-16- alkyl)thio]propyl]amino] derivs., sodium salts			x	1,4
<b>Fluorotelomer alcohols (FTOHs)</b>							
<a href="#">678-39-7</a>	8:2 FTOH	1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10- heptadecafluoro-	1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10- heptadecafluoro			x	1

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
87017-97-8	9:2 FTOH	1-Undecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 1-nonadecafluoro-				x	5
<a href="#">865-86-1</a>	10:2 FTOH	1-Dodecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,12-heneicosafuoro-	1-Dodecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,12-heneicosafuoro-			x	1,3,4
1545-59-1	11:2 FTOH	1-Tridecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,13-tricosafuoro-				x	5
<a href="#">39239-77-5</a>	12:2 FTOH	1-Tetradecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,14-pentacosafuoro-	1-Tetradecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,14-pentacosafuoro-			x	1,3,4
176676-70-3	13:2 FTOH	1-Pentadecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,15- heptacosafuoro-				x	5
<a href="#">60699-51-6</a>	14:2 FTOH	1-Hexadecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,16- nonacosafuoro-	1-Hexadecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,16- nonacosafuoro-			x	1,3
<a href="#">65104-67-8</a>	16:2 FTOH	1-Octadecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,17,17,18, 18,18-tritriacontafuoro-	1-Octadecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,17,17,18, 18,18-tritriacontafuoro-			x	1
<a href="#">65104-65-6</a>	18:2 FTOH	1-Eicosanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,17,17,18, 18,19,19,20,20,20-heptatriacontafuoro-	1-Eicosanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,17,17,18, 18,19,19,20,20,20-heptatriacontafuoro-			x	1
<a href="#">68391-08-2</a>		Alcohols, C8-14, $\gamma$ - $\omega$ -perfluoro	Alcohols, C8-14, $\gamma$ - $\omega$ -perfluoro			x	1,4
<b>Polyfluorinated alcohol derivatives</b>							
<a href="#">65545-80-4</a>		Poly(oxy-1,2-ethanediyl), $\alpha$ -hydro- $\omega$ - hydroxy-, ether with $\alpha$ -fluoro- $\omega$ -(2- hydroxyethyl)poly(difluoromethylene) (1:1)	Poly(oxy-1,2-ethanediyl), $\alpha$ -hydro- $\omega$ - hydroxy-, ether with $\alpha$ -fluoro- $\omega$ -(2- hydroxyethyl)poly(difluoromethylene) (1:1)			x	1,4

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">71002-41-0</a>		Poly(difluoromethylene), α-[2-(acetyloxy)-2-[(carboxymethyl)dimethylammonio]ethyl]-ω-fluoro-, inner salt	Poly(difluoromethylene), α-[2-(acetyloxy)-2-[(carboxymethyl)dimethylammonio]ethyl]-ω-fluoro-, hydroxide, inner salt			x	1,4
<a href="#">123171-68-6</a>		Poly(difluoromethylene), α-[2-(acetyloxy)-3-[(carboxymethyl)dimethylammonio]propyl]-ω-fluoro-, inner salt	Poly(difluoromethylene), α-[2-(acetyloxy)-3-[(carboxymethyl)dimethylammonio]propyl]-ω-fluoro-, hydroxide, inner salt			x	1
<b>Polyfluorinated acrylates and methacrylates</b>							
<a href="#">16083-87-7</a>		2-Propenoic acid, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl ester	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl acrylate			x	3
<a href="#">52956-82-8</a>		2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,14,14,14-tetracosafuoro-13-(trifluoromethyl)tetradecyl ester	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,14,14,14-tetracosafuoro-13-(trifluoromethyl)tetradecyl acrylate			x	3
<a href="#">65104-45-2</a>		2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl 2-methyl-2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-methyl-2-propenoate	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl 2-methyl-2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-methyl-2-propenoate			x	3,4

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">74256-14-7</a>		2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,1 2,12-icosafuoro-11- (trifluoromethyl)dodecyl ester	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,1 2,12-icosafuoro-11- (trifluoromethyl)dodecyl methacrylate			x	3
<a href="#">74256-15-8</a>		2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,14,14,14-tetracosafuoro-13- (trifluoromethyl)tetradecyl ester	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,14,14,14-tetracosafuoro-13- (trifluoromethyl)tetradecyl methacrylate			x	3
<a href="#">1996-88-9</a>	8:2 FTMAC	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10- heptadecafluorododecyl ester				x	5
<a href="#">2144-54-9</a>	10:2 FTMAC	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,12-heneicosafuorododecyl ester	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,12-heneicosafuorododecyl ester			x	1,3,4
<a href="#">6014-75-1</a>	12:2 FTMAC	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,14- pentacosafuorotetradecyl ester	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,14- pentacosafuorotetradecyl ester			x	1,3,4
<a href="#">4980-53-4</a>	14:2 FTMAC	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,16- nonacosafuorohexadecyl ester	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,16- nonacosafuorohexadecyl ester			x	1,3,4
<a href="#">59778-97-1</a>	16:2 FTMAC	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,17,17,18, 18,18-tritriacontafuorooctadecyl ester	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,17,17,18, 18,18-tritriacontafuorooctadecyl ester			x	1,4
<a href="#">65104-66-7</a>	18:2 FTMAC	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,17,17,18, 18,19,19,20,20,20- heptatriacontafluoroeicosyl ester	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,13,13,14,14,15,15,16,16,17,17,18, 18,19,19,20,20,20- heptatriacontafluoroeicosyl ester			x	1,4
<a href="#">17741-60-5</a>		2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,12-heneicosafuorododecyl ester	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1 2,12,12-heneicosafuorododecyl ester			x	1,3
<a href="#">85631-54-5</a>		2-Propenoic acid, $\gamma$ - $\omega$ -perfluoro-C8-14- alkyl esters	2-Propenoic acid, $\gamma$ - $\omega$ -perfluoro-C8-14- alkyl esters			x	1,3,4

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCA s	Long-chain PFCA salts	Long-chain PFCA related compounds	
<a href="#">65530-66-7</a>		Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]-	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-			x	1
65605-70-1		Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[(1-oxo-2-propen-1-yl)oxy]ethyl]-	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[(1-oxo-2-propenyl)oxy]ethyl]-			x	1
<b>Polyfluorinated carboxylate</b>							
<a href="#">65530-59-8</a>		Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, 2-hydroxy-1,2,3-propanetricarboxylate (3:1)	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, 2-hydroxy-1,2,3-propanetricarboxylate (3:1)			x	1,4
<a href="#">65605-56-3</a>		Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, dihydrogen 2-hydroxy-1,2,3-propanetricarboxylate	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, dihydrogen 2-hydroxy-1,2,3-propanetricarboxylate			x	1,4
<a href="#">65605-57-4</a>		Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, hydrogen 2-hydroxy-1,2,3-propanetricarboxylate	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, hydrogen 2-hydroxy-1,2,3-propanetricarboxylate			x	1,4
<b>Polyfluorinated urethane</b>							
110053-43-5		Imidodicarbonic diamide, <i>N,N'</i> ,2-tris(6-isocyanatoethyl)-, reaction products with 3-chloro-1,2-propanediol and $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)poly(difluoromethylene)	Imidodicarbonic diamide, <i>N,N'</i> ,2-tris(6-isocyanatoethyl)-, reaction products with 3-chloro-1,2-propanediol and $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)poly(difluoromethylene)			x	1
<b>Fluoro ester</b>							
<a href="#">148878-17-5</a>		2-Propenoic acid, 2-methyl-, C2-18-alkyl esters, polymers with $\alpha$ -fluoro- $\omega$ -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene) and vinylidene chloride	2-Propenoic acid, 2-methyl-, C2-18-alkyl esters, polymers with $\alpha$ -fluoro- $\omega$ -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene) and vinylidene chloride			x	1
<a href="#">65530-65-6</a>		Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[(1-oxooctadecyl)oxy]ethyl]-	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[(1-oxooctadecyl)oxy]ethyl]-			x	1

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<b>Carboxylic acid and ester derivatives</b>							
125768-41-4		9-Octadecenoic acid (9Z)-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl ester	9-Octadecenoic acid (9Z)-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl ester			x	4
220237-52-5		9-Octadecenoic acid (9Z)-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl ester	9-Octadecenoic acid (9Z)-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl ester			x	4
<a href="#">94095-37-1</a>		Pentanoic acid, 4,4-bis[(γ-ω-perfluoro-C6-12-alkyl)thio] derivs., compds. with diethanolamine	Pentanoic acid, 4,4-bis[(γ-ω-perfluoro-C6-12-alkyl)thio] derivatives, compounds with diethanolamine			x	4
<a href="#">71608-61-2</a>		Pentanoic acid, 4,4-bis[(γ-ω-perfluoro-C8-20-alkyl)thio] derivs., compds. with diethanolamine	Pentanoic acid, 4,4-bis[(γ-ω-perfluoro-C8-20-alkyl)thio] derivatives, compounds with diethanolamine			x	4
253682-98-3		Butanedioic acid, monopolyisobutylene derivs., 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl ester	Butanedioic acid, monopolyisobutylene derivs., 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl ester			x	4
253682-97-2		Butanedioic acid, monopolyisobutylene derivs., 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuoro tetradecyl ester	Butanedioic acid, monopolyisobutylene derivs., 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuoro tetradecyl ester			x	4
<a href="#">70983-60-7</a>		1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-, 3-[(γ-ω-perfluoro-C6-20-alkyl)thio] derivs., chlorides	1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-, 3-[(γ-ω-perfluoro-C6-20-alkyl)thio] derivs., chlorides			x	1,4
<b>Alkyl ammonium and amine derivatives</b>							
<a href="#">98219-29-5</a>		Betaines, N-(hydroxyethyl)-N-methyl-N-(2-sulfoethyl)-N-(1,1,2-trihydroperfluoro-C8-14-2-alkenyl)	Betaines, N-(hydroxyethyl)-N-methyl-N-(2-sulfoethyl)-N-(1,1,2-trihydroperfluoro-C8-14-2-alkenyl)			x	4

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
115340-82-4		Betaines, (hydroxyethyl)methyl( $\gamma$ , $\omega$ -perfluoro-C <sub>8-14</sub> - $\beta$ -alkenyl)(2-sulfopropyl)	Betaines, (hydroxyethyl)methyl( $\gamma$ , $\omega$ -perfluoro-C8-14-.beta.-alkenyl)(2-sulfopropyl)			x	4
<a href="#">92129-34-5</a>		Quaternary ammonium compounds, (hydroxyethyl)dimethyl( $\gamma$ - $\omega$ -perfluoro-C8-14- $\beta$ -alkenyl), Me sulfates (salts)	Quaternary ammonium compounds, (hydroxyethyl)dimethyl( $\gamma$ - $\omega$ -perfluoro-C8-14-.beta.-alkenyl), methyl sulfates			x	4
115535-36-9		Quaternary ammonium compounds, trimethyl( $\delta$ - $\omega$ -perfluoro-C <sub>8-14</sub> - $\beta$ -alkenyl), chlorides	Quaternary ammonium compounds, trimethyl(.delta.- $\omega$ -perfluoro-C8-14-.beta.-alkenyl), chlorides			x	4
127133-57-7		Quaternary ammonium compounds, diethylmethyl( $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> - $\beta$ -alkenyl), Me sulfates	Quaternary ammonium compounds, diethylmethyl( $\gamma$ - $\omega$ -perfluoro-C8-14-.beta.-alkenyl), methyl sulfates			x	4
145477-02-7		Quaternary ammonium compounds, diethylmethyl( $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> - $\beta$ -alkenyl), tetraphenylborates	Quaternary ammonium compounds, diethyl methyl ( $\gamma$ - $\omega$ -perfluoro-C8-14-.beta.-alkenyl), tetraphenyl borates			x	4
153325-45-2		Quaternary ammonium compounds, diethylmethyl( $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> - $\beta$ -alkenyl), tetraphenylborates	Quaternary ammonium compounds, diethyl methyl ( $\gamma$ - $\omega$ -perfluoro-C8-14-.beta.-alkenyl), tetrafluoroborates			x	4
<a href="#">65530-57-6</a>		Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[[2-(trimethylammonio)ethyl]thio]ethyl]-, methyl sulfate (1:1)	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[[2-(trimethylammonio)ethyl]thio]ethyl]-, methyl sulfate			x	4
<b>Other derivatives</b>							
<a href="#">71356-38-2</a>		Piperazinium, 1-(carboxymethyl)-1-(2-hydroxyethyl)-4-(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-nonadecafluoro-1-oxodecyl)-, inner salt	Piperazinium, 1-(carboxymethyl)-1-(2-hydroxyethyl)-4-(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-nonadecafluoro-1-oxodecyl)-, hydroxide, inner salt			x	4
<a href="#">68140-21-6</a>		Thiols, C10-20, $\gamma$ - $\omega$ -perfluoro	Thiols, C10-20, $\gamma$ - $\omega$ -perfluoro			x	4
<a href="#">68516-17-6</a>		Sulfuric acid, mono( $\gamma$ - $\omega$ -perfluoro-C6-12-alkyl) esters, ammonium salts	Sulfuric acid, mono( $\gamma$ - $\omega$ -perfluoro-C6-12-alkyl) esters, ammonium salts			x	4

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">59493-72-0</a>		1-Propanaminium, 3-[[4- [(heptadecafluorononen-1- yl)oxy]benzoyl]amino]-N,N,N- trimethyl-, iodide (1:1)	1-Propanaminium, 3-[[4- [(heptadecafluorononenyl)oxy]benzoyl] amino]-N,N,N-trimethyl-, iodide			x	4
<a href="#">84238-62-0</a>		Sulfuric acid, mono( $\gamma$ - $\omega$ -perfluoro-C8- 12-alkyl) esters, ammonium salts	Sulfuric acid, mono( $\gamma$ - $\omega$ -perfluoro-C8- 12-alkyl) esters, ammonium salts			x	4
<b>Others</b>							
<a href="#">68891-05-4</a>		Ethene, tetrafluoro-, homopolymer, $\alpha$ - fluoro- $\omega$ -(2-hydroxyethyl)-, citrate, reaction products with 1,6- diisocyanatohexane	Ethene, tetrafluoro-, homopolymer, $\alpha$ - fluoro- $\omega$ -(2-hydroxyethyl)-, citrate, reaction products with 1,6- diisocyanatohexane			x	1
<a href="#">86508-42-1<sup>3</sup></a>		Perfluoro compounds, C5-18	Perfluoro compounds, C5-18			x	1
<a href="#">148240-84- 0</a>		1,3-Propanediol, 2,2-bis[[ $(\gamma$ - $\omega$ - perfluoro-C4-10-alkyl)thio]methyl] derivs., phosphates	1,3-Propanediol, 2,2-bis[[ $(\gamma$ - $\omega$ - perfluoro-C4-10-alkyl)thio]methyl] derivs., phosphates			x	1
277752-44- 0		Hexanedioic acid, dimethyl ester, polymers with 2,2-bis(bromomethyl)- 1,3-propanediol-ethanethiol- tetrafluoroethylene telomer reaction products	3-cyclohexene-1-carboxylic acid, 6- [[di-2-propenylamino]carbonyl](1R, 6R), reaction products with pentafluoridoethane- tetrafluoroethylene telomer, ammonium salts			x	1
333784-46- 6		2-Propenoic acid, 2-methyl-, 2- ethylhexyl ester, polymers with maleic anhydride, 2-[[2- mercaptoethoxy]carbonyl]amino]ethyl methacrylate, $\gamma$ - $\omega$ -perfluoro-C <sub>8-16</sub> -alkyl acrylate and stearyl methacrylate	Graft polymer of alkyl methacrylate- maleic anhydride-2- [[[(mercaptoethyl)oxy]carbonyl]amino] ethyl methacrylate copolymer and octadecyl methacrylate-2- (perfluoro(alkyl(C=6,8,10,12,14)))ethyl acrylate copolymer			x	1

<sup>3</sup> Substances described by this CAS number could include perfluorinated amines and ether compounds with fluorocarbon chains that meet the definition of compounds related to long-chain PFCAs. However, as indicated in the addendum to the risk management evaluation (UNEP/POPS/POPRC.20/10/Add.3), some commercial products described by this CAS number were determined not to include compounds meeting this definition.



				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
333784-44-4		2-Propenoic acid, 2-methyl-, 3-chloro-2-hydroxypropyl ester, polymers with 2,3-dihydroxypropyl methacrylate, $\gamma$ - $\omega$ -perfluoro-C <sub>8-16</sub> -alkyl acrylate, polyethylene glycol methacrylate Me ether and polypropylene glycol monomethacrylate	Poly[3-chloro-2-hydroxypropyl methacrylate, 2,3-dihydroxypropyl methacrylate, hydroxypoly(2-23)(oxypropylene)methacrylate, methoxypoly(2-23)(oxyethylene)methacrylate, 2-(perhalo(alkyl(C=6,8,10,12,14)))ethyl acrylate]			x	1
<a href="#">174125-96-3</a>		2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymers with $\delta$ - $\omega$ -perfluoro-C <sub>10-16</sub> -alkyl acrylate and vinyl acetate	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymers with $\delta$ - $\omega$ -perfluoro-C <sub>10-16</sub> -alkyl acrylate and vinyl acetate			x	1
<a href="#">70983-59-4</a>		Poly(oxy-1,2-ethanediyl), $\alpha$ -methyl- $\omega$ -hydroxy-, 2-hydroxy-3-[( $\gamma$ - $\omega$ -perfluoro-C <sub>6-20</sub> -alkyl)thio]propyl ethers	Poly(oxy-1,2-ethanediyl), $\alpha$ -methyl- $\omega$ -hydroxy-, 2-hydroxy-3-[( $\gamma$ - $\omega$ -perfluoro-C <sub>6-20</sub> -alkyl)thio]propyl ethers			x	1,4
182700-77-2		Siloxanes and Silicones, di-Me, hydroxy-terminated, polymers with tetradecanedioic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-tricosafuoro-1-tridecanol-terminated	Siloxanes and silicones, di-Me, hydroxy-terminated, polymers with tetradecanedioic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-tricosafuoro-1-tridecanol-terminated			x	1
<a href="#">65530-61-2</a>		Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl]-	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl]-			x	1
<a href="#">70969-47-0</a>		Thiols, C <sub>8-20</sub> , $\gamma$ - $\omega$ -perfluoro, telomers with acrylamide	Thiols, C <sub>8-20</sub> , $\gamma$ - $\omega$ -perfluoro, telomers with acrylamide			x	1
<a href="#">68333-92-6</a>		Fatty acids, C <sub>7-13</sub> , perfluoro	Fatty acids, C <sub>7-13</sub> , perfluoro			x	3
<a href="#">91032-01-8</a>		Fatty acids, C <sub>7-19</sub> , perfluoro	Fatty acids, C <sub>7-19</sub> , perfluoro			x	3
<a href="#">15811-52-6</a>		Dodecanoyl fluoride, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-docosafuoro-11-(trifluoromethyl)-	Dodecanoyl fluoride, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-docosafuoro-11-(trifluoromethyl)-			x	3
<a href="#">16486-96-7</a>		Dodecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-docosafuoro-11-(trifluoromethyl)-	Dodecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-docosafuoro-11-(trifluoromethyl)-			x	3

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">18024-09-4</a>		Tetradecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,14,14,14-hexacosafuoro- 13-(trifluoromethyl)-	Tetradecanoic acid,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,1 0,11,11,12,12,13,14,14,14- hexacosafuoro-13-(trifluoromethyl)-			x	3
<a href="#">68015-87-2</a>		Dodecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 12,12,12-docosafuoro-11- (trifluoromethyl)-, compd. with ethanamine (1:1)	Dodecanoic acid,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,1 0,11,12,12,12-docosafuoro-11- (trifluoromethyl)-, compd. with ethanamine(1:1)			x	3
<a href="#">68025-62-7</a>		Tetradecanoyl fluoride, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,14,14,14-hexacosafuoro- 13-(trifluoromethyl)-	Tetradecanoyl fluoride,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,1 0,10,11,11,12,12,13,14,14,14- hexacosafuoro-13-(trifluoromethyl)-			x	3
<a href="#">3658-63-7</a>		Decanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10- octadecafluoro-9-(trifluoromethyl)-, ammonium salt (1:1)	Decanoic acid,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,10,10, 10-octadecafluoro-9-(trifluoromethyl)-, ammonium salt			x	3
<a href="#">3793-74-6</a>		Dodecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,12-tricosafuoro-, ammonium salt (1:1)	Ammonium tricosafuorododecanoate			x	3
<a href="#">72968-38-8</a>		Fatty acids, C7-13, perfluoro, ammonium salts	Fatty acids, C7-13, perfluoro, ammonium salts			x	3
<a href="#">93062-53-4</a>		Phosphinic acid, bis(perfluoro-C6-12- alkyl) derivs., aluminum salts	Phosphinic acid, bis(perfluoro-C6-12- alkyl)derivs., aluminum salts			x	3
<a href="#">93776-16-0</a>		1-Pentadecanaminium, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,14,15,15,15- pentacosafuoro-2-hydroxy-N,N-bis(2- hydroxyethyl)-N-methyl-, iodide (1:1)	bis(2- hydroxyethyl)methyl(4,4,5,5,6,6,7,7,8,8 ,9,9,10,10,11,11,12,12,13,13,14,14,15,1 5,15-pentacosafuoro-2- hydroxypentadecyl)ammonium iodide			x	3
<a href="#">93776-17-1</a>		1-Tridecanaminium, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,13-henicosafuoro-2-hydroxy- N,N-bis(2-hydroxyethyl)-N-methyl-, iodide (1:1)	[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,13-henicosafuoro-2- hydroxytridecan-1-yl][bis(2- hydroxyethyl)]methylammonium iodide			x	3

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">94159-76-9</a>		1-Pentadecanaminium, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,15,15-tetracosafuoro-2- hydroxy-N,N-bis(2-hydroxyethyl)-N- methyl-14-(trifluoromethyl)-, iodide (1:1)	bis(2- hydroxyethyl)methyl[4,4,5,5,6,6,7,7,8,8 ,9,9,10,10,11,11,12,12,13,13,14,15,15,1 5-tetracosafuoro-2-hydroxy-14- (trifluoromethyl)pentadecyl] ammonium iodide			x	3
<a href="#">94159-79-2</a>		2-Pentadecanol, 1-[[3- (dimethylamino)propyl]amino]- 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,14,15,15,15- pentacosafuoro-	1-[[3-(dimethylamino)propyl]amino]- 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,14,15,15,15- pentacosafuoropentadecan-2-ol			x	3
<a href="#">94159-80-5</a>		2-Tridecanol, 1-[[3- (dimethylamino)propyl]amino]- 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,13-heneicosafuoro-	1-[[3-(dimethylamino)propyl]amino]- 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,13-heneicosafuorotridecan-2-ol			x	3
<a href="#">94159-82-7</a>		2-Pentadecanol, 1-[[3- (dimethylamino)propyl]amino]- 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,15,15,15-tetracosafuoro-14- (trifluoromethyl)-	1-[[3-(dimethylamino)propyl]amino]- 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 2,13,13,14,15,15,15-tetracosafuoro-14- (trifluoromethyl)pentadecan-2-ol			x	3
<a href="#">94159-83-8</a>		2-Tridecanol, 1-[[3- (dimethylamino)propyl]amino]- 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 3,13,13-icosafuoro-12- (trifluoromethyl)-	1-[[3-(dimethylamino)propyl]amino]- 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1 3,13,13-icosafuoro-12- (trifluoromethyl)tridecan-1-ol			x	3
<a href="#">93776-12-6</a>		1-Propanaminium, N-(2-carboxyethyl)- N,N-dimethyl-3- [(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12, 12,13,13,14,14,15,15,15- pentacosafuoro-2- hydroxypentadecyl)amino]-, inner salt	(2-carboxylatoethyl)(dimethyl)[3- [(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12, 12,13,13, 14,14,15,15,15- pentacosafuoro-2- hydroxypentadecyl)amino]propyl]amm onium			x	3

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">93776-13-7</a>		1-Propanaminium, N-(2-carboxyethyl)-3- [(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluoro-2-hydroxytridecyl)amino]-N,N-dimethyl-, inner salt	(2-carboxylatoethyl)[3- [(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluoro-2-hydroxytridecyl)amino]propyl]dimethyl ammonium			x	3
<a href="#">93776-15-9</a>		1-Propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3- [[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl]amino]-, inner salt	(2-carboxylatoethyl)(dimethyl)[[[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl]amino]propyl]ammonium			x	3
<a href="#">90622-99-4</a>		Amides, C7-19, $\alpha$ - $\omega$ -perfluoro-N,N-bis(hydroxyethyl)	Amides, C7-19, $\alpha$ - $\omega$ -perfluoro-N,Nbis(hydroxyethyl)			x	3
<a href="#">71356-38-2</a>		Piperazinium, 1-(carboxymethyl)-1-(2-hydroxyethyl)-4- (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-nonadecafluoro-1-oxodecyl)-, inner salt	1-(carboxylatomethyl)-1-(2-hydroxyethyl)-4- (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-nonadecafluoro-1-oxodecyl)piperazinium			x	3
<a href="#">85681-64-7</a>		2-Propenoic acid, perfluoro-C8-16-alkyl esters	2-Propenoic acid, perfluoro-C8-16-alkyl esters			x	3
<a href="#">68155-54-4</a>		2H-Pyran, 2,2,3,3,4,4,5,5,6-nonafluorotetrahydro-6- (1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-nonadecafluorononyl)-	2H-Pyran, 2,2,3,3,4,4,5,5,6-nonafluorotetrahydro-6- (nonadecafluorononyl)-			x	3
459415-06-6		2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with butyl 2-propenoate and 2,5-furandione, $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> -alkyl esters, <i>tert</i> -Bu benzenecarboperoxoate-initiated	2-propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with butyl 2-propenoate and 2,5 furandione, $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> -alkyl esters, <i>tert</i> -Bu benzenecarboperoxoate-initiated			x	2

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
464178-90-3		2-Propen-1-ol, reaction products with 1,1,1,2,2-pentafluoro-2-iodoethane-tetrafluoroethylene telomer, dehydroiodinated, reaction products with epichlorohydrin and triethylenetetramine	2-propen-1-ol, reaction products with pentafluoroiodoethane tetrafluoroethylene telomer, dehydroiodinated, reaction products with epichlorohydrin and triethylenetetramine			x	2
1246542-93-7		Alcohols, C <sub>16-20</sub> -branched, reaction products with 1,6-diisocyanatohexane homopolymer, $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)poly(difluoromethylene) and stearyl alc.	Hexane, 1,6-diisocyanato-, homopolymer, reaction products with $\alpha$ -fluoro- $\omega$ -2-hydroxyethyl-poly(difluoro- methylene), C <sub>16-20</sub> -branched alcohols and 1-octadecanol			x	2
<a href="#">93776-00-2</a>		2-Pentadecanol, 1,1'-[oxybis[(1-methyl-2,1-ethanediyl)oxy]]bis[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafuoro-	1,1'-[oxybis[(1-methylethylene)oxy]]bis[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafuoro-ol]			x	3
70887-84-2	8:2 FTUCA	2-Decenoic acid, 3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-hexadecafluoro-				x	5
191852-87-6	9:8 FTCA	n/a				x	5
70887-94-4	10:2 FTUCA	2-Dodecenoic acid, 3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-eicosafuoro-				x	5

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<b>Side-chain fluorinated polymers</b>							
115592-83-1		2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, hexadecyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, octadecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, hexadecyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, octadecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate			x	1,3,4
144031-01-6		2-Propenoic acid, dodecyl ester, polymers with Bu (1-oxo-2-propenyl)carbamate and $\gamma$ - $\omega$ -perfluoro-C <sub>18-14</sub> -alkyl acrylate	2-Propenoic acid, dodecyl ester, polymers with Bu (1-oxo-2-propenyl)carbamate and $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> -alkyl acrylate			x	1,3
<a href="#">65605-58-5</a>		2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]poly(difluoromethylene)	2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene)			x	1,4
<a href="#">65636-35-3</a>		Ethanaminium, N,N-diethyl-N-methyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, methyl sulfate (1:1), polymer with 2-ethylhexyl 2-methyl-2-propenoate, $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]poly(difluoromethylene), 2-hydroxyethyl 2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide	Ethanaminium, N,N-diethyl-N-methyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with 2-ethylhexyl 2-methyl-2-propenoate, $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene), 2-hydroxyethyl 2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide			x	1,4

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
125328-29-2		2-Propenoic acid, 2-methyl-, C <sub>10-16</sub> -alkyl esters, polymers with 2-hydroxyethyl methacrylate, Me methacrylate and $\alpha$ - $\omega$ -perfluoro-C <sub>8-14</sub> -alkyl acrylate	2-Propenoic acid, 2-methyl-, C <sub>10-16</sub> -alkyl esters, polymers with 2-hydroxyethyl methacrylate, Me methacrylate and perfluoro-C <sub>8-14</sub> -alkyl acrylate			x	1,3
129783-45-5		2-Propenoic acid, 2-methyl-, C <sub>10-16</sub> -alkyl esters, polymers with 2-hydroxyethyl methacrylate, Me methacrylate and $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> -alkyl acrylate	2-Propenoic acid, 2-methyl-, C <sub>10-16</sub> -alkyl esters, polymers with 2-hydroxyethyl methacrylate, Me methacrylate and $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> -alkyl acrylate			x	1,3
<a href="#">34395-24-9</a>		2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl ester	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl ester			x	1
119973-85-2		2-Propenoic acid, 2-methyl-, 3-chloro-2-hydroxypropyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafuorohexadecyl 2-propenoate, octadecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl 2-propenoate	2-Methyl-2-propenoic acid 3-chloro-2-hydroxypropyl ester polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafuorohexadecyl 2-propenoate, octadecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl 2-propenoate)			x	1,4
178233-67-5		2-Propenoic acid, C <sub>12-14</sub> -alkyl esters, polymers with Bu (1-oxo-2-propenyl)carbamate and $\delta$ - $\omega$ -perfluoro-C <sub>6-12</sub> -alkyl acrylate	2-Propenoic acid, C <sub>12-14</sub> -alkyl esters, polymers with Bu (1-oxo-2-propenyl)carbamate and $\delta$ - $\omega$ -perfluoro-C <sub>6-12</sub> -alkyl acrylate			x	1

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">65605-59-6</a>		2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]poly(difluoromethylene) and N-(hydroxymethyl)-2-propenamide	2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene) and N-(hydroxymethyl)-2-propenamide			x	1,4
<a href="#">65605-60-9</a>		2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]poly(difluoromethylene), 2-hydroxyethyl 2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide	2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene), 2-hydroxyethyl 2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide			x	4
<a href="#">68239-43-0</a>		2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]poly(difluoromethylene), 2-hydroxyethyl 2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide	2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene), 2-hydroxyethyl 2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide			x	1,4
<a href="#">150135-57-2</a>		2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymers with Bu acrylate, $\gamma$ - $\omega$ -perfluoro-C8-14-alkyl acrylate and polyethylene glycol monomethacrylate, 2,2'-(1,2-diazenediyl)bis[2,4-dimethylpentanenitrile]-initiated	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymers with Bu acrylate, $\gamma$ - $\omega$ -perfluoro-C8-14-alkyl acrylate and polyethylene glycol monomethacrylate, 2,2'-azobis[2,4-dimethylpentanenitrile]-initiated			x	4
203743-03-7		2-Propenoic acid, 2-methyl-, hexadecyl ester, polymers with 2-hydroxyethyl methacrylate, $\gamma$ - $\omega$ -perfluoro-C10-16-alkyl acrylate and stearyl methacrylate	2-propenoic acid, 2-methyl-, hexadecyl ester, polymers with 2-hydroxyethyl methacrylate, $\gamma$ - $\omega$ -perfluoro-C10-16-alkyl acrylate and stearyl methacrylate			x	2,4
<a href="#">196316-34-4</a>		2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymers with $\gamma$ - $\omega$ -perfluoro-C10-16-alkyl acrylate and vinyl acetate, acetates	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymers with $\gamma$ - $\omega$ -perfluoro-C10-16-alkyl acrylate and vinyl acetate, acetates			x	4



				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
1094598-90-9		2-Propenoic acid, 2-methyl-, 3-chloro-2-hydroxypropyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, <i>N</i> -(hydroxymethyl)-2-propenamide, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafuorohexadecyl 2-propenoate, octadecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate	2-Propenoic acid, 2-methyl-, 3-chloro-2-hydroxypropyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, <i>N</i> -(hydroxymethyl)-2-propenamide, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafuorohexadecyl 2-propenoate, octadecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate			x	4
325966-78-7		2-Propenoic acid, 2-methyl-, 3-chloro-2-hydroxypropyl ester, polymers with <i>N</i> -(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl acrylate, $\gamma$ - $\omega$ -perfluoro-C <sub>8-16</sub> -alkyl acrylate, stearyl acrylate and vinyl chloride, 2,2'-azobis[2-methylpropanimidamide] dihydrochloride-initiated	2-Propenoic acid, 2-methyl-, 3-chloro-2-hydroxypropyl ester, polymers with <i>N</i> -(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl acrylate, $\gamma$ - $\omega$ -perfluoro-C <sub>8-16</sub> -alkyl acrylate, octadecyl 2-propenoate and vinyl chloride, 2,2'-azobis[2-methylpropanimidamide] dihydrochloride-initiated			x	4

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
119973-84-1		2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl), 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafuorohexadecyl 2-propenoate, octadecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl 2-propenoate	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl), 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafuorohexadecyl 2-propenoate, octadecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl 2-propenoate			x	4
220713-37-1		2-Propenoic acid, 2-methyl-, 2-aziridinyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene) and phenylmethyl 2-methyl-2-propenoate	2-Propenoic acid, 2-methyl-, 2-aziridinyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene) and phenylmethyl-2-methyl-2-propenoate			x	4
374928-93-5		2-Propenenitrile, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene), $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -methoxypoly(oxy-1,2-ethanediyl) and $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)	2-Propenenitrile, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene), $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -methoxypoly(oxy-1,2-ethanediyl) and $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)			x	4
97136-02-2		2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene)	2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene)			x	4

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
<a href="#">101896-32-6</a>		2-Propenoic acid, 2-methyl-, 3-chloro-2-hydroxypropyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]poly(difluoromethylene)	2-Propenoic acid, 2-methyl-, 3-chloro-2-hydroxypropyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene)			x	4
220713-74-6		2-Propenoic acid, 2-methyl-, 2-aziridinyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[[2-(2-methyl-1-oxo-2-propenyl)oxy]methyl]poly(difluoromethylene) and octadecyl 2-methyl-2-propenoate	2-Propenoic acid, 2-methyl-, 2-aziridinyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[[2-(2-methyl-1-oxo-2-propenyl)oxy]methyl]poly(difluoromethylene) and octadecyl 2-methyl-2-propenoate			x	4
220713-85-9		2-Propenoic acid, 2-methyl-, 2-aziridinyl ester, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate and $\alpha$ -fluoro- $\omega$ -[[2-(2-methyl-1-oxo-2-propenyl)oxy]methyl]poly(difluoromethylene)	2-Propenoic acid, 2-methyl-, 2-aziridinyl ester, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate and $\alpha$ -fluoro- $\omega$ -[[2-(2-methyl-1-oxo-2-propenyl)oxy]methyl]poly(difluoromethylene)			x	4
374928-92-4		2-Butenedioic acid (2Z)-, dioctyl ester, polymer with chloroethene and $\alpha$ -fluoro- $\omega$ -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene)	2-Butenedioic acid (2Z)-, dioctyl ester, polymer with chloroethene and $\alpha$ -fluoro- $\omega$ -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene)			x	4
459415-06-6		2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with butyl 2-propenoate and 2,5-furandione, $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> -alkyl esters, <i>tert</i> -Bu benzenecarboperoxoate-initiated	2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with butyl 2-propenoate and 2,5-furandione, $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> -alkyl esters, <i>tert</i> -Bu benzenecarboperoxoate-initiated			x	4
524729-93-9		2-Propenoic acid, polymer with butyl 2-propenoate and 2,5-furandione, $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> -alkyl esters, potassium salts, <i>tert</i> -Bu benzenecarboperoxoate-initiated	2-Propenoic acid, polymer with butyl 2-propenoate and 2,5-furandione, $\gamma$ - $\omega$ -perfluoro-C <sub>8-14</sub> -alkyl esters, potassium salts, <i>tert</i> -Bu benzenecarboperoxoate-initiated			x	4

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
500701-62-2		2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene), acetate (salt)	2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene), acetate (salt)			x	4
<a href="#">68891-05-4</a>		Ethene, tetrafluoro-, homopolymer, $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, citrate, reaction products with 1,6-diisocyanatohexane	Ethene, tetrafluoro-, homopolymer, $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, citrate, reaction products with 1,6-diisocyanatohexane			x	4
376364-33-9		Alcohols, C <sub>8-14</sub> , $\gamma$ - $\omega$ -perfluoro, polymers with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene), methanol, stearyl acrylate, stearyl methacrylate, 2,4-TDI and vinyl chloride	Alcohols, C <sub>8-14</sub> , $\gamma$ - $\omega$ -perfluoro, polymers with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene), methanol, stearyl acrylate, stearyl methacrylate, 2,4-TDI and vinyl chloride			x	4
<a href="#">135228-60-3</a>		Hexane, 1,6-diisocyanato-, homopolymer, $\gamma$ - $\omega$ -perfluoro-C6-20-alc.-blocked	Hexane, 1,6-diisocyanato-, homopolymer, $\gamma$ - $\omega$ -perfluoro-C6-20-alc.-blocked			x	4
144468-32-6		1,3-Propanediol, 2,2-bis(bromomethyl)-, reaction products with ethanethiol-tetrafluoroethylene telomer, polymers with 1,6-diisocyanato-2,2,4(or 2,4,4)-trimethylhexane, 2-heptyl-3,4-bis(9-isocyanatononyl)-1-pentylcyclohexane and 2,2'-(methylimino)bis[ethanol]	1,3-Propanediol, 2,2-bis(bromomethyl)-, reaction products with ethanethiol tetrafluoroethylene telomer, polymers with 1,6-diisocyanato-2,2,4(or 2,4,4)-trimethylhexane, 2-heptyl-3,4-bis(9-isocyanatononyl)-1-pentylcyclohexane and 2,2'-(methylimino)bis[ethanol]			x	4
118102-37-7		Alcohols, C <sub>8-14</sub> , $\gamma$ - $\omega$ -perfluoro, reaction products with epichlorohydrin, polyethylene glycol mono-Me ether and N,N',2-tris(6-isocyanatohexyl)imidodicarbonic diamide	Alcohols, C <sub>8-14</sub> , $\gamma$ - $\omega$ -perfluoro, reaction products with epichlorohydrin, polyethylene glycol monomethyl ether and N,N',2-tris(6-isocyanatohexyl)imidodicarbonic diamide			x	1,4

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
332076-28-5		2-Oxepanone, homopolymer, decyl perfluoro-C <sub>8-14</sub> -alkyl esters, reaction products with 1 <i>H</i> -imidazole-1-propanamine, polyethylene-polypropylene glycol and TDI homopolymer	2-Oxepanone, homopolymer, decyl perfluoro-C <sub>8-14</sub> -alkyl esters, reaction products with 1 <i>H</i> -imidazole-1-propanamine, polyethylene-polypropylene glycol and TDI homopolymer			x	1,4
332076-33-2		2-Oxepanone, homopolymer, decyl perfluoro-C <sub>8-14</sub> -alkyl esters, reaction products with 1 <i>H</i> -imidazole-1-propanamine and TDI homopolymer	2-Oxepanone, homopolymer, decyl perfluoro-C <sub>8-14</sub> -alkyl esters, reaction products with 1 <i>H</i> -imidazole-1-propanamine and TDI homopolymer			x	4
332076-34-3		2-Oxepanone, homopolymer, decyl perfluoro-C <sub>8-14</sub> -alkyl esters, reaction products with 1 <i>H</i> -imidazole-1-propanamine, polyethylene glycol and TDI homopolymer	2-Oxepanone, homopolymer, decyl perfluoro-C <sub>8-14</sub> -alkyl esters, reaction products with 1 <i>H</i> -imidazole-1-propanamine, polyethylene-polypropylene glycol and TDI homopolymer			x	4
<a href="#">68990-40-9</a>		Fatty acids, C <sub>18</sub> -unsatd., dimers, diisocyanates, polymers with 2,3-bis( $\gamma$ - $\omega$ -perfluoro-C <sub>4-18</sub> -alkyl)-1,4-butanediol, 1,6-diisocyanato-2,2,4(or 2,4,4)-trimethylhexane and 2,2'-(methylimino)bis[ethanol]	Fatty acids, C <sub>18</sub> -unsaturated, dimers, diisocyanates, polymers with 2,3-bis( $\gamma$ - $\omega$ -perfluoro-C <sub>4-18</sub> -alkyl)-1,4-butanediol, 1,6-diisocyanato-2,2,4(or 2,4,4)-trimethylhexane and 2,2'-(methylimino)bis[ethanol]			x	4
118102-38-8		Alcohols, C <sub>8-14</sub> , $\gamma$ - $\omega$ -perfluoro, reaction products with epichlorohydrin, tetrahydrofuran homopolymer and <i>N,N'</i> ,2-tris(6-isocyanatohexyl)imidodicarbonic diamide	Alcohols, C <sub>8-14</sub> , $\gamma$ - $\omega$ -perfluoro, reaction products with epichlorohydrin, tetrahydrofuran homopolymer and <i>N,N'</i> ,2-tris(6-isocyanatohexyl)imidodicarbonic diamide			x	1,4
253873-70-0		Alcohols, C <sub>8-14</sub> , $\gamma$ - $\omega$ -perfluoro, polymers with 1,6-diisocyanatohexane, ethylene glycol, glycidol and 2,4-TDI	Alcohols, C <sub>8-14</sub> , $\gamma$ - $\omega$ -perfluoro, polymers with 1,6-diisocyanatohexane, ethylene glycol, glycidol and 2,4-TDI			x	4

				(i) <sup>a</sup>	(ii) <sup>a</sup>	(iii) <sup>b</sup>	Ref
CAS No.	Acronym(s)	Designation (CAS <sup>1</sup> or OECD PFAS Database <sup>2</sup> Name)	Designation (as cited in the reference)	Long-chain PFCAs	Long-chain PFCAs salts	Long-chain PFCAs related compounds	
329201-80-1		Imidodicarbonic diamide, <i>N,N',2</i> -tris(6-isocyanatoethyl)-, reaction products with ethylene glycol, $\alpha$ -fluoro- $\omega$ -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene), glycidol and 2,4-TDI	Imidodicarbonic diamide, <i>N,N'2</i> -tris(6-isocyanatoethyl)-, reaction products with ethyleneglycol, $\alpha$ - fluoro-, $\omega$ -[2[(1-oxo- 2-propenyl)oxy]ethyl]poly(difluoromethylene),glycidol and 2,4-TDI			x	4
428842-38-0		Hexane, 1,6-diisocyanato-, homopolymer, $\alpha$ -fluoro- $\omega$ -(hydroxyethyl)poly(difluoromethylene) - and Me Et ketone oxime- and polyethylene glycol mono-Me ether-blocked	Hexane, 1,6-diisocyanato-, homopolymer, $\alpha$ -fluoro- $\omega$ -(hydroxyethyl)poly(difluoromethylene) - and Me Et ketone oxime- and polyethylene glycol mono-Me ether blocked			x	4
<a href="#">178535-23-4</a>		Fatty acids, linseed-oil, $\gamma$ - $\omega$ -perfluoro-C8-14-alkyl esters	Fatty acids, linseed oil, $\gamma$ - $\omega$ -perfluoro-C8-14-alkyl esters			x	1
126927-97-7		Hexane, 1,6-diisocyanato-, homopolymer, reaction products with $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)poly(difluoromethylene)	Hexane, 1,6-diisocyanato-, homopolymer, reaction products with $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)poly (difluoromethylene)			x	1
<a href="#">70969-47-0</a>		Thiols, C8-20, $\gamma$ - $\omega$ -perfluoro, telomers with acrylamide	Thiols, C8-20, $\gamma$ - $\omega$ -perfluoro, telomers with acrylamide			x	4
113089-67-1		Thiols, C4-20, $\gamma$ - $\omega$ -perfluoro, reaction products with methylated formaldehyde-1,3,5-triazine-2,4,6-triamine polymer	Thiols, C4-20, $\gamma$ - $\omega$ -perfluoro, reaction products with methylated formaldehyde-1,3,5-triazine-2,4,6-triamine polymer			x	4
185630-70-0		Alcohols, C8-14, $\gamma$ - $\omega$ -perfluoro, reaction products with epichlorohydrin and propylene oxide, trimethylamine-quaternized	Alcohols, C8-14, $\gamma$ - $\omega$ -perfluoro, reaction products with epichlorohydrin and propylene oxide, trimethylamine-quaternized			x	4
<a href="#">65530-58-7</a>		Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, ester with 2,15-bis(carboxymethyl)-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,2,15,16-tetracarboxylic acid (6:1)	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, ester with 2,15-bis(carboxymethyl)-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,2,15,16-tetracarboxylic acid (6:1)			x	4

Abbreviations: n/a, not applicable; CAS, Chemical Abstracts Service.

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