

# Guidance for Reporting Per- and Poly-Fluoroalkyl Substances (PFAS) under the Toxics Use Reduction Act (TURA), including Individually Listed PFAS and the Certain PFAS Not Otherwise Listed (NOL) Category

Per- and Poly-Fluoroalkyl Substances (PFAS) are a very large group of chemicals, currently totaling over 10,000, with continually evolving regulatory requirements. Continuing updates to the Toxics Release Inventory (TRI) under the 2020 National Defense Authorization Act (NDAA) affect TURA reporting requirements. Some PFAS are reportable individually and some are reportable under either the TURA C1 - C4 Halogenated Hydrocarbons NOL category or the TURA Certain PFAS NOL category or both:

PFAS are reportable individually under TURA when (a) they are individually listed under TRI (Table 1) and (b) if they were already reportable under TURA (Table 2).

PFAS are reportable as part of a category as part of (a) the C1-C4 NOL category (Table 3), and (b) the new Certain PFAS NOL category (Table 4).

For the 2021 Reporting Year, 172 Individual PFAS were added to the TURA list, after being added to TRI. These individually added PFAS have a reporting threshold of 100 lb each and are listed in [Table 1](#) below. **Note that EPA is CONTINUALLY ADDING to this list, including seventeen already identified PFAS, listed toward the end of [Table 4](#), in gray.** The first eight PFAS in gray at the end of Table 4 have been added to TURA individually for reporting year **2023**. The remaining nine PFAS in gray are awaiting Administrative Council vote. **Report all seventeen as part of the TURA Certain PFAS NOL category for reporting year 2022.**

For the 2022 Reporting Year, the Certain PFAS NOL category will be added under TURA. The Certain PFAS NOL category is defined as those PFAS that contain:

- a perfluoroalkyl moiety<sup>1</sup> with three or more carbons (e.g.,  $-C_nF_{2n}-$ ,  $n \geq 3$ ; or  $CF_3-C_nF_{2n}-$ ,  $n \geq 2$ )
- a perfluoroalkylether moiety with two or more carbons (e.g.,  $-C_nF_{2n}OC_mF_{2m}-$  or  $-C_nF_{2n}OC_mF_m-$ ,  $n$  and  $m \geq 1$ )

wherein for the example structures shown, the dash (–) is not a bond to a hydrogen and may represent a straight or branched structure, and that are not otherwise listed.

Reporting of this Certain PFAS NOL category is at typical TURA thresholds of 25,000 pounds manufactured or processed and 10,000 pounds otherwise used annually. There is a large group of PFAS that meet this definition.

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<sup>1</sup> “In organic chemistry, a **moiety** is a part of a molecule that is given a name because it is identified as a part of other molecules as well. ”Source: Moiety (chemistry) - Wikipedia

All chemicals meeting the above Certain PFAS NOL definition are reportable as part of the category unless they are individually listed under TURA. The lists of PFAS with CAS registry numbers in this guidance are provided to assist filers, but are not exhaustive.

[Table 1](#) below lists PFAS that are individually reportable under TURA at the 100 lb threshold, after TURA adopted the TRI NDAA listings.

[Table 2](#) below lists PFAS that were already individually reportable under TURA. Continue to report them at typical reporting thresholds.

[Table 3](#) lists PFAS that are reportable under the TURA C1-C4 Halogenated Hydrocarbons category. The substances shaded in gray at the bottom are **ALSO** reportable under the new Certain PFAS NOL TURA category. Report **BOTH** C1-C4 Halogenated Hydrocarbons **AND** Certain PFAS NOL for the substances in gray. Only one fee will be due.

[Table 4](#) lists PFAS that are reportable under the Certain PFAS NOL category only. Substances in gray have recently been added by TRI at a 100 lb/year threshold. TURA has adopted these changes for reporting year 2023. Report under TURA as part of Certain PFAS NOL for reporting year 2022.

The lists in Tables 2-4 were generated from PFAS that are known to be in commerce, primarily from the Toxic Substances Control Act (TSCA). Thus, these lists are **NOT** exhaustive. Approximately 1/3 of the PFAS in commerce, as noted by the TSCA Chemical Data Reporting (CDR), are claimed as Confidential Business Information (CBI) and thus will require the supplier to disclose whether the substance meets the definition.

PFAS are often on SDSs without CAS numbers or a full chemical name (i.e., they may be identified as 'fluoropolymer' or some more general language). For that reason, it is important to contact suppliers to find out whether PFAS are in the products used. OTA has developed [a supplier notification letter template](#) for this purpose.

Note that some PFAS are in products at concentrations below the de minimis<sup>2</sup> exemption amount (1% for most PFAS, 0.1% for PFOA as a carcinogen). These quantities do not need to be counted when determining if the reporting threshold has been met.

For fluorinated substances where a chemical structure is not available it should be assumed to be part of the category until more specific information is available.

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<sup>2</sup> In determining the amount or quantity of a toxic substance manufactured, processed, or otherwise used at a facility, the toxics user shall not consider the amount of the toxic substance if it is present in a mixture in concentrations equal to or below the de minimus concentration for that toxic substance set forth in 40 CFR Part 372.38(a); provided, however, that this de minimis exemption shall not apply for any toxic or hazardous substance specified as a chemical of special concern in 40 CFR Part 372.28.

Normal article exemptions<sup>3</sup> apply for PFAS. For example, PTFE pellets being processed, such as in extrusion processes, would be reportable, as would PTFE coating emulsions. Teflon articles, such as Teflon tape or spacers, would likely meet the article exemption.

307-35-7	Perfluorooctylsulfonyl fluoride
307-55-1	Perfluorododecanoic acid
335-66-0	Octanoyl fluoride, pentadecafluoro-
335-67-1	Perfluorooctanoic acid ( <i>carcinogen de minimis = 0.1%</i> )
335-71-7	1-Heptanesulfonyl fluoride, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-
335-76-2	Perfluorodecanoic acid
335-95-5	Sodium perfluorooctanoate
355-46-4	Perfluorohexanesulfonic acid
375-95-1	Perfluorononanoic acid
376-06-7	Perfluorotetradecanoic acid
376-14-7	2-[Ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl methacrylate
376-27-2	Methyl perfluorooctanoate
383-07-3	2-[Butyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl acrylate
423-82-5	2-[Ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl acrylate
678-39-7	1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-
865-86-1	1-Dodecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuoro-
1652-63-7	3-[[[(Heptadecafluorooctyl)sulfonyl]amino]-N,N,N-trimethyl-1-propanaminium iodide
1691-99-2	N-Ethyl-N-(2-hydroxyethyl)perfluorooctanesulfonamide
1763-23-1	Perfluorooctane sulfonic acid
1996-88-9	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester
2043-53-0	Decane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-10-iodo-
2043-54-1	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-
2144-54-9	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
2263-09-4	1-Octanesulfonamide, N-butyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-
2795-39-3	Potassium perfluorooctanesulfonate
2991-51-7	Glycine, N-ethyl-N-[(heptadecafluorooctyl)sulfonyl]-, potassium salt
3107-18-4	Cyclohexanesulfonic acid, undecafluoro-, potassium salt
3825-26-1	Ammonium perfluorooctanoate
3871-99-6	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, potassium salt

<sup>3</sup> Article means a manufactured item, other than an item which is manufactured at the facility: (a) which is formed to a specific shape or design during manufacture; (b) which has end use functions dependent in whole or in part upon its shape or design during end use; and (c) which does not release a toxic substance under normal conditions of processing or use of that item at the facility or establishments

<b>Table 1</b>	
<b>TURA/TRI PFAS Substances to Continue Reporting Individually, if more than 100 lbs/year used</b>	
3872-25-1	1-Pentanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,5-undecafluoro-, potassium salt
4151-50-2	Sulfluramid
4980-53-4	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluorohexadecyl ester
6014-75-1	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl ester
13252-13-6	Hexafluoropropylene oxide dimer acid
16517-11-6	Octadecanoic acid, pentatriacontafluoro-
17202-41-4	1-Nonanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-nonadecafluoro-, ammonium salt
17741-60-5	1,1,2,2-Tetrahydroperfluorododecyl acrylate
21652-58-4	Perfluorooctyl Ethylene
24448-09-7	1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-N-methyl-
25268-77-3	2-[[[(Heptadecafluorooctyl)sulfonyl]methylamino]ethyl acrylate
27619-90-5	1-Decanesulfonyl chloride, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-
27619-91-6	1-Dodecanesulfonyl chloride, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-
27905-45-9	1,1,2,2-Tetrahydroperfluorodecyl acrylate
29081-56-9	1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ammonium salt
29117-08-6	Poly(oxy-1,2-ethanediyl), $\alpha$ -[2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl]- $\omega$ -hydroxy-
29457-72-5	Lithium (perfluorooctane)sulfonate
30046-31-2	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-pentacosafluoro-14-iodo-
31506-32-8	1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-methyl-
34362-49-7	1,1,2,2-Tetrahydroperfluorohexadecyl acrylate
34395-24-9	1,1,2,2-Tetrahydroperfluorotetradecyl acrylate
37338-48-0	Poly[oxy(methyl-1,2-ethanediyl)], $\alpha$ -[2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl]- $\omega$ -hydroxy-
38006-74-5	1-Propanaminium, 3-[[[(heptadecafluorooctyl)sulfonyl]amino]-N,N,N-trimethyl-, chloride
39239-77-5	1-Tetradecanol, 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-pentacosafluoro-
52166-82-2	1-Propanaminium, N,N,N-trimethyl-3-[[[(tridecafluorohexyl)sulfonyl]amino]-, chloride
55910-10-6	Glycine, N-[(heptadecafluorooctyl)sulfonyl]-N-propyl-, potassium salt
56372-23-7	Poly(oxy-1,2-ethanediyl), $\alpha$ -[2-[ethyl[(tridecafluorohexyl)sulfonyl]amino]ethyl]- $\omega$ -hydroxy-
56773-42-3	Ethanaminium, N,N,N-triethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonic acid (1:1)
59071-10-2	2-Propenoic acid, 2-[ethyl[(pentadecafluoroheptyl)sulfonyl]amino]ethyl ester
60270-55-5	1-Heptanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-, potassium salt
60699-51-6	1-Hexadecanol, 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-nonacosafluoro-
61660-12-6	1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-[3-(trimethoxysilyl)propyl]-

<b>Table 1</b>	
<b>TURA/TRI PFAS Substances to Continue Reporting Individually, if more than 100 lbs/year used</b>	
61798-68-3	Pyridinium, 1-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-, salt with 4-methylbenzenesulfonic acid (1:1)
62037-80-3	Hexafluoropropylene oxide dimer acid ammonium salt
65104-65-6	1-Eicosanol, 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-heptatriacontafuoro-
65104-67-8	1-Octadecanol, 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-tritriacontafuoro-
65510-55-6	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-
65530-59-8	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, 2-hydroxy-1,2,3-propanetricarboxylate (3:1)
65530-61-2	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl]-
65530-62-3	Poly(difluoromethylene), $\alpha, \alpha'$ -[phosphinicobis(oxy-2,1-ethanediyl)]bis[ $\omega$ -fluoro-
65530-63-4	Ethanol, 2,2'-iminobis-, compd. with $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl]poly(difluoromethylene) (2:1)
65530-64-5	Ethanol, 2,2'-iminobis-, compd. with $\alpha, \alpha'$ -[phosphinicobis(oxy-2,1-ethanediyl)]bis[ $\omega$ -fluoropoly(difluoromethylene)] (1:1)
65530-65-6	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[(1-oxooctadecyl)oxy]ethyl]-
65530-66-7	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-
65530-69-0	Poly(difluoromethylene), $\alpha$ -[2-[(2-carboxyethyl)thio]ethyl]- $\omega$ -fluoro-, lithium salt
65530-70-3	Poly(difluoromethylene), $\alpha, \alpha'$ -[phosphinicobis(oxy-2,1-ethanediyl)]bis[ $\omega$ -fluoro-, ammonium salt
65530-71-4	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl]-, monoammonium salt
65530-72-5	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl]-, diammonium salt
65530-74-7	Ethanol, 2,2'-iminobis-, compd. with $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl]poly(difluoromethylene) (1:1)
65530-83-8	Poly(difluoromethylene), $\alpha$ -[2-[(2-carboxyethyl)thio]ethyl]- $\omega$ -fluoro-
65545-80-4	Poly(oxy-1,2-ethanediyl), $\alpha$ -hydro- $\omega$ -hydroxy-, ether with $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)poly(difluoromethylene) (1:1)
65605-56-3	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, dihydrogen 2-hydroxy-1,2,3-propanetricarboxylate
65605-57-4	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, hydrogen 2-hydroxy-1,2,3-propanetricarboxylate
65605-58-5	2-Propenoic acid, esters, 2-methyl-, dodecyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]poly(difluoromethylene)
65605-59-6	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
65605-73-4	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[(1-oxo-2-propenyl)oxy]ethyl]-, homopolymer
65636-35-3	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

<b>Table 1</b>	
<b>TURA/TRI PFAS Substances to Continue Reporting Individually, if more than 100 lbs/year used</b>	
67584-42-3	Cyclohexanesulfonic acid, decafluoro(pentafluoroethyl)-, potassium salt
67584-52-5	Glycine, N-ethyl-N-[(undecafluoropentyl)sulfonyl]-, potassium salt
67584-53-6	Glycine, N-ethyl-N-[(tridecafluorohexyl)sulfonyl]-, potassium salt
67584-56-9	2-Propenoic acid, 2-[methyl[(undecafluoropentyl)sulfonyl]amino]ethyl ester
67584-57-0	2-Propenoic acid, 2-[methyl[(tridecafluorohexyl)sulfonyl]amino]ethyl ester
67584-58-1	1-Propanaminium, N,N,N-trimethyl-3-[[pentadecafluoroheptyl)sulfonyl]amino]-, iodide
67584-62-7	Glycine, N-ethyl-N-[(pentadecafluoroheptyl)sulfonyl]-, potassium salt
67905-19-5	Perfluoropalmitic acid
67906-42-7	1-Decanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heneicosafuoro-, ammonium salt
67969-69-1	1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-[2-(phosphonooxy)ethyl]-, diammonium salt
68084-62-8	2-Propenoic acid, 2-[methyl[(pentadecafluoroheptyl)sulfonyl]amino]ethyl ester
68140-18-1	Thiols, C4-10, $\gamma$ - $\omega$ -perfluoro
68140-20-5	Thiols, C6-12, $\gamma$ - $\omega$ -perfluoro
68140-21-6	Thiols, C10-20, $\gamma$ - $\omega$ -perfluoro
68141-02-6	Chromium(III) perfluorooctanoate
68156-01-4	Cyclohexanesulfonic acid, nonafluorobis(trifluoromethyl)-, potassium salt
68156-07-0	Cyclohexanesulfonic acid, decafluoro(trifluoromethyl)-, potassium salt
68187-25-7	Butanoic acid, 4-[[3-(dimethylamino)propyl]amino]-4-oxo-, 2(or 3)-[( $\gamma$ -perfluoro-C6-20-alkyl)thio] derivs.
68187-47-3	1-Propanesulfonic acid, 2-methyl-, 2-[[1-oxo-3-[( $\gamma$ -perfluoro-C4-16-alkyl)thio]propyl]amino] derivs., sodium salts
68188-12-5	Alkyl iodides, C4-20, $\gamma$ - $\omega$ -perfluoro
68227-96-3	2-Propenoic acid, butyl ester, telomer with 2-[[heptadecafluorooctyl)sulfonyl]methylamino]ethyl 2-propenoate, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate, $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,4-butanediyl), $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,4-butanediyl), 2-[methyl[(pentadecafluoroheptyl)sulfonyl]amino]ethyl 2-propenoate, 2-[methyl[(tridecafluorohexyl)sulfonyl]amino]ethyl 2-propenoate, 2-[methyl[(undecafluoropentyl)sulfonyl]amino]ethyl 2-propenoate and 1-octanethiol
68239-43-0	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-propenamides
68259-07-4	1-Heptanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-, ammonium salt
68259-08-5	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, ammonium salt
68259-09-6	1-Pentanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,5-undecafluoro-, ammonium salt
68259-38-1	Poly[oxy(methyl-1,2-ethanediyl)], $\alpha$ -[2-[ethyl[(tridecafluorohexyl)sulfonyl]amino]ethyl]- $\omega$ -hydroxy-
68259-39-2	Poly[oxy(methyl-1,2-ethanediyl)], $\alpha$ -[2-[ethyl[(pentadecafluoroheptyl)sulfonyl]amino]ethyl]- $\omega$ -hydroxy-

<b>Table 1</b>	
<b>TURA/TRI PFAS Substances to Continue Reporting Individually, if more than 100 lbs/year used</b>	
68298-62-4	2-Propenoic acid, 2-[butyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl ester, telomer with 2-[butyl[(pentadecafluoroheptyl)sulfonyl]amino]ethyl 2-propenoate, methyloxirane polymer with oxirane di-2-propenoate, methyloxirane polymer with oxirane mono-2-propenoate and 1-octanethiol
68298-80-6	Poly(oxy-1,2-ethanediyl), $\alpha$ -[2-[ethyl[(undecafluoropentyl)sulfonyl]amino]ethyl]- $\omega$ -hydroxy-
68298-81-7	Poly(oxy-1,2-ethanediyl), $\alpha$ -[2-[ethyl[(pentadecafluoroheptyl)sulfonyl]amino]ethyl]- $\omega$ -hydroxy-
68310-17-8	Poly[oxy(methyl-1,2-ethanediyl)], $\alpha$ -[2-[ethyl[(undecafluoropentyl)sulfonyl]amino]ethyl]- $\omega$ -hydroxy-
68391-08-2	Alcohols, C8-14, $\gamma$ - $\omega$ -perfluoro
68412-68-0	Phosphonic acid, perfluoro-C6-12-alkyl derivs.
68412-69-1	Phosphinic acid, bis(perfluoro-C6-12-alkyl) derivs.
68515-62-8	1,4-Benzenedicarboxylic acid, dimethyl ester, reaction products with bis(2-hydroxyethyl)terephthalate, ethylene glycol, $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)poly(difluoromethylene), hexakis(methoxymethyl)melamine and polyethylene glycol
68555-74-8	1-Pentanesulfonamide, 1,1,2,2,3,3,4,4,5,5,5-undecafluoro-N-(2-hydroxyethyl)-N-methyl-
68555-75-9	1-Hexanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N-(2-hydroxyethyl)-N-methyl-
68555-76-0	1-Heptanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-(2-hydroxyethyl)-N-methyl-
68555-81-7	1-Propanaminium, N,N,N-trimethyl-3-[[pentadecafluoroheptyl)sulfonyl]amino]-, chloride
68555-91-9	2-Propenoic acid, 2-methyl-, 2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl ester, polymer with 2-[ethyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-methyl-2-propenoate, 2-[ethyl[(pentadecafluoroheptyl)sulfonyl]amino]ethyl 2-methyl-2-propenoate, 2-[ethyl[(tridecafluorohexyl)sulfonyl]amino]ethyl 2-methyl-2-propenoate, 2-[ethyl[(undecafluoropentyl)sulfonyl]amino]ethyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate
68758-57-6	1-Tetradecanesulfonyl chloride, 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-
68867-60-7	2-Propenoic acid, 2-[[heptadecafluorooctyl)sulfonyl]methylamino]ethyl ester, polymer with 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate, 2-[methyl[(pentadecafluoroheptyl)sulfonyl]amino]ethyl 2-propenoate, 2-[methyl[(tridecafluorohexyl)sulfonyl]amino]ethyl 2-propenoate, 2-[methyl[(undecafluoropentyl)sulfonyl]amino]ethyl 2-propenoate and $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -methoxypoly(oxy-1,2-ethanediyl)
68957-55-1	1-Propanaminium, N,N,N-trimethyl-3-[[undecafluoropentyl)sulfonyl]amino]-, chloride
68957-57-3	1-Propanaminium, N,N,N-trimethyl-3-[[undecafluoropentyl)sulfonyl]amino]-, iodide
68957-58-4	1-Propanaminium, N,N,N-trimethyl-3-[[tridecafluorohexyl)sulfonyl]amino]-, iodide
68957-62-0	1-Heptanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-
68958-60-1	Poly(oxy-1,2-ethanediyl), $\alpha$ -[2-[ethyl[(pentadecafluoroheptyl)sulfonyl]amino]ethyl]- $\omega$ -methoxy-
68958-61-2	Poly(oxy-1,2-ethanediyl), $\alpha$ -[2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl]- $\omega$ -methoxy-
70225-14-8	1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, compd. with 2,2'-iminobis[ethanol] (1:1)

<b>Table 1</b>	
<b>TURA/TRI PFAS Substances to Continue Reporting Individually, if more than 100 lbs/year used</b>	
70225-15-9	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)
70225-16-0	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with 2,2'-iminobis[ethanol] (1:1)
70225-17-1	1-Pentanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,5-undecafluoro-, compd. with 2,2'-iminobis[ethanol] (1:1)
70969-47-0	Thiols, C8-20, γ-ω-perfluoro, telomers with acrylamide
70983-59-4	Poly(oxy-1,2-ethanediyl), α-methyl-ω-hydroxy-, 2-hydroxy-3-[(γ-ω-perfluoro-C6-20-alkyl)thio]propyl ethers
70983-60-7	1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-, 3-[(γ-ω-perfluoro-C6-20-alkyl)thio] derivs., chlorides
71608-60-1	Pentanoic acid, 4,4-bis[(γ-ω-perfluoro-C8-20-alkyl)thio] derivs.
72623-77-9	Fatty acids, C6-18, perfluoro, ammonium salts
72968-38-8	Fatty acids, C7-13, perfluoro, ammonium salts
74499-44-8	Phosphoric acid, γ-ω-perfluoro-C8-16-alkyl esters, compds. with diethanolamine
78560-44-8	Silane, trichloro(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-
80010-37-3	Poly(difluoromethylene), α-fluoro-ω-[2-sulphoethyl]-
83048-65-1	Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)trimethoxy-
95144-12-0	Poly(difluoromethylene), α-fluoro-ω-[2-(phosphonoxy)ethyl]-, ammonium salt
97553-95-2	Thiocyanic acid, γ-ω-perfluoro-C4-20-alkyl esters
97659-47-7	Alkenes, C8-14 α-, δ-ω-perfluoro
118400-71-8	Disulfides, bis(γ-ω-perfluoro-C6-20-alkyl)
123171-68-6	Poly(difluoromethylene), α-[2-(acetyloxy)-3-[(carboxymethyl)dimethylammonio]propyl]-ω-fluoro-, inner salt
125476-71-3	Silicic acid (H <sub>4</sub> SiO <sub>4</sub> ), disodium salt, reaction products with chlorotrimethylsilane and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decanol
135228-60-3	Hexane, 1,6-diisocyanato-, homopolymer, γ-ω-perfluoro-C6-20-alc.-blocked
142636-88-2	2-Propenoic acid, 2-methyl-, octadecyl 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 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
143372-54-7	Siloxanes and Silicones, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)oxy Me, hydroxy Me, Me octyl, ethers with polyethylene glycol mono-Me ether
148240-85-1	1,3-Propanediol, 2,2-bis[[γ-ω-perfluoro-C4-10-alkyl)thio]methyl] derivs., phosphates, ammonium salts
148240-87-3	1,3-Propanediol, 2,2-bis[[γ-ω-perfluoro-C6-12-alkyl)thio]methyl] derivs., phosphates, ammonium salts
148240-89-5	1,3-Propanediol, 2,2-bis[[γ-ω-perfluoro-C10-20-alkyl)thio]methyl] derivs., phosphates, ammonium salts



<b>Table 1</b>	
<b>TURA/TRI PFAS Substances to Continue Reporting Individually, if more than 100 lbs/year used</b>	
150135-57-2	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
178094-69-4	1-Octanesulfonamide, N-[3-(dimethyloxidoamino)propyl]-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, potassium salt
178535-23-4	Fatty acids, linseed-oil, $\gamma$ - $\omega$ -perfluoro-C8-14-alkyl esters
180582-79-0	Sulfonic acids, C6-12-alkane, $\gamma$ - $\omega$ -perfluoro, ammonium salts
182176-52-9	Ethaneperoxoic acid, reaction products with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl thiocyanate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl thiocyanate
196316-34-4	2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymers with $\gamma$ - $\omega$ -perfluoro-C10-16-alkyl acrylate and vinyl acetate, acetates
200513-42-4	2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate
238420-68-3	Propanedioic acid, mono( $\gamma$ - $\omega$ -perfluoro-C8-12-alkyl) derivs., di-me esters
238420-80-9	Propanedioic acid, mono( $\gamma$ - $\omega$ -perfluoro-C8-12-alkyl) derivs., bis[4-(ethenyloxy)butyl] esters
1078142-10-5	1,3-Propanediol, 2,2-bis[[ $\gamma$ - $\omega$ -perfluoro-C6-12-alkyl)thio]methyl] derivs., polymers with 2,2-bis[[ $\gamma$ - $\omega$ -perfluoro-C10-20-alkyl)thio]methyl]-1,3-propanediol, 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]
1078712-88-5	Thiols, C4-20, $\gamma$ - $\omega$ -perfluoro, telomers with acrylamide and acrylic acid, sodium salts
1078715-61-3	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-[2-[( $\gamma$ - $\omega$ -perfluoro-C4-20-alkyl)thio]acetyl] derivs., inner salts

The following PFAS in Table 2 were already individually reportable under TURA. Continue to report them at typical TURA reporting thresholds.

<b>Table 2.</b>	
<b>PFAS Substances to continue reporting individually when exceeding normal reporting thresholds</b>	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane
76-15-3	Chloropentafluoroethane
116-14-3	Tetrafluoroethylene
124-73-2	1,2-Dibromotetrafluoroethane
354-25-6	1-chloro-1,1,2,2-tetrafluoroethane
422-56-0	3,3-Dichloro-1,1,1,2,2-pentafluoropropane
507-55-1	1,3-Dichloro-1,1,2,2,3-pentafluoropropane
2837-89-0	2-Chloro-1,1,1,2-tetrafluoroethane

The following PFAS are reportable under the TURA C1-C4 Halogenated Hydrocarbons category. The substances shaded in gray at the bottom are **ALSO** reportable under the new Certain PFAS NOL TURA category. Report the chemicals in gray as **BOTH** C1-C4 Halogenated Hydrocarbons **AND** as Certain PFAS NOL for the substances in gray. Only one fee will be due.

<b>Table 3.</b>	
<b>PFAS Substances reportable under the TURA C1-C4 Halogenated Hydrocarbons category</b>	
76-16-4	Pentafluoroethane
76-17-5	1,2,3-Trichloropentafluoropropane
116-15-4	Hexafluoropropene
335-44-4	2,2,3-Trichloroheptafluorobutane
354-33-6	Pentafluoroethane
354-64-3	pentafluoroiodoethane
359-35-3	1,1,2,2-Tetrafluoroethane
360-89-4	Perfluorobut-2-ene
374-07-2	1,1-Dichlorotetrafluoroethane
382-10-5	1,1-Bis(trifluoromethyl)ethene
421-73-8	1,1,1,2-Tetrafluoro-2-chloropropane
431-31-2	1,1,1,2,3-Pentafluoropropane
431-63-0	1,1,1,2,3,3-Hexafluoropropane
431-89-0	2H-Perfluoropropane
677-69-0	Heptafluoro-2-iodopropane
690-39-1	1,1,1,3,3,3-Hexafluoropropane
754-12-1	2,3,3,3-Tetrafluoropropene
811-97-2	1,1,1,2-Tetrafluoroethane
1320-37-2	Dichlorotetrafluoroethane
2252-83-7	1,2,3,3,3-Pentafluoropropene
18599-20-7	1,4-Dibromo-1,1,2,2-tetrafluorobutane
18599-22-9	2-Vinyl(1-bromoperfluoroethane)
25398-32-7	Ethene, 1,1,2,2-tetrafluoro-, telomer with 1,1,1,2,2-pentafluoro-2-iodoethane
76-19-7	Propane, 1,1,1,2,2,3,3,3-octafluoro-
115-25-3	Cyclobutane, 1,1,2,2,3,3,4,4-octafluoro-
355-25-9	Butane, 1,1,1,2,2,3,3,4,4,4-decafluoro-
423-39-2	Butane, 1,1,1,2,2,3,3,4,4-nonafluoro-4-iodo-
754-34-7	Propane, 1,1,1,2,2,3,3-heptafluoro-3-iodo-

Table 4 is a list of PFAS that **are reported as part of the Certain PFAS NOL category**. Again, this list was generated from PFAS that are known to be in commerce, primarily from the Toxic Substances Control Act (TSCA). This list is **NOT** exhaustive.

Substances in gray TRI has listed for reporting years 2021 and 2022 at a 100 lb/year threshold. TURA has adopted these changes for reporting year 2023. Report under TURA as part of the Certain PFAS NOL category for reporting year 2022. For reporting year 2023 these substances will be individually reportable under TURA at 100 lbs.

306-91-2	Phenanthrene, 1,1,2,2,3,3,4,4,4a,4b,5,5,6,6,7,7,8,8,8a,9,9,10,10,10a-tetracosafuorotetradecahydro-
306-94-5	Naphthalene, 1,1,2,2,3,3,4,4,4a,5,5,6,6,7,7,8,8,8a-octadecafluorodecahydro-
307-24-4	Hexanoic acid, 2,2,3,3,4,4,5,5,6,6,6-undecafluoro-
307-30-2	1-Octanol, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-
307-34-6	Octane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-octadecafluoro-
307-60-8	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-
307-63-1	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-
307-70-0	1-Undecanol, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-eicosafuoro-
307-98-2	2-Propenoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl ester
311-89-7	1-Butanamine, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(1,1,2,2,3,3,4,4,4-nonafluorobutyl)-
355-02-2	Cyclohexane, 1,1,2,2,3,3,4,4,5,5,6-undecafluoro-6-(trifluoromethyl)-
355-38-4	Hexanoyl fluoride, 2,2,3,3,4,4,5,5,6,6,6-undecafluoro-
355-42-0	Hexane, 1,1,1,2,2,3,3,4,4,5,5,6,6,6-tetradecafluoro-
355-43-1	Hexane, 1,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-6-iodo-
355-50-0	Hexadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16-tritriacontafuoro-16-iodo-
355-80-6	1-Pentanol, 2,2,3,3,4,4,5,5-octafluoro-
356-24-1	Butanoic acid, 2,2,3,3,4,4,4-heptafluoro-, methyl ester
356-27-4	Butanoic acid, 2,2,3,3,4,4,4-heptafluoro-, ethyl ester
375-00-8	Butanenitrile, 2,2,3,3,4,4,4-heptafluoro-
375-01-9	1-Butanol, 2,2,3,3,4,4,4-heptafluoro-
375-03-1	Propane, 1,1,1,2,2,3,3-heptafluoro-3-methoxy-
375-16-6	Butanoyl chloride, 2,2,3,3,4,4,4-heptafluoro-
375-22-4	Butanoic acid, 2,2,3,3,4,4,4-heptafluoro-
375-62-2	Pentanoyl fluoride, 2,2,3,3,4,4,5,5-nonafluoro-
375-72-4	1-Butanesulfonyl fluoride, 1,1,2,2,3,3,4,4,4-nonafluoro-
375-73-5	1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-
375-84-8	Heptanoyl fluoride, 2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-
375-85-9	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-
375-88-2	Heptane, 1-bromo-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-
376-73-8	Pentanedioic acid, 2,2,3,3,4,4-hexafluoro-
376-90-9	1,5-Pentanediol, 2,2,3,3,4,4-hexafluoro-
382-28-5	Morpholine, 2,2,3,3,5,5,6,6-octafluoro-4-(trifluoromethyl)-

**Table 4**  
**PFAS Substances Known to be in Commerce that are Reported as part of the**  
**Certain PFAS NOL Category**

423-62-1	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-
425-38-7	Propanoyl fluoride, 2,2,3,3-tetrafluoro-3-(trifluoromethoxy)-
428-59-1	Trifluoro(trifluoromethyl)oxirane
507-63-1	Octane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-8-iodo-
559-40-0	Cyclopentene, 1,2,3,3,4,4,5,5-octafluoro-
647-42-7	1-Octanol, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-
678-26-2	Pentane, 1,1,1,2,2,3,3,4,4,5,5,5-dodecafluoro-
756-12-7	2-Butanone, 1,1,1,3,4,4,4-heptafluoro-3-(trifluoromethyl)-
756-13-8	3-Pentanone, 1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-
773-14-8	Furan, 2,2,3,3,4,4,5,5-octafluorotetrahydro-
813-44-5	Bis(perfluoroisopropyl)ketone
813-45-6	3-Hexanone, 1,1,1,2,4,4,5,5,6,6,6-undecafluoro-2-(trifluoromethyl)-
1547-26-8	1-Pentene, 2,3,3,4,4,5,5-heptafluoro-
1623-05-8	Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]-
1682-78-6	Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-(1,1,2,2,2-pentafluoroethoxy)-
1805-22-7	Perfluoromethylcyclopentane
1892-03-1	Cyclopentene, 1,3,3,4,4,5,5-heptafluoro-
2043-47-2	1-Hexanol, 3,3,4,4,5,5,6,6,6-nonafluoro-
2043-55-2	Hexane, 1,1,1,2,2,3,3,4,4-nonafluoro-6-iodo-
2043-57-4	Octane, 1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-8-iodo-
2062-98-8	Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-
2144-53-8	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester
2218-54-4	Butanoic acid, 2,2,3,3,4,4,4-heptafluoro-, sodium salt (1:1)
2641-34-1	Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propoxy]-
2706-90-3	Pentanoic acid, 2,2,3,3,4,4,5,5,5-nonafluoro-
2927-83-5	2,3,3,3-Tetrafluoro-2-(trifluoromethoxy)propionyl fluoride
2994-71-0	Cyclobutane, 1,1,2,2,3,4-hexafluoro-3,4-bis(trifluoromethyl)-
3330-14-1	Propane, 1-[1-[difluoro(1,2,2,2-tetrafluoroethoxy)methyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2,3,3,3-heptafluoro-
3330-15-2	Perfluoro-3-(1H-perfluoroethoxy)propane
3330-16-3	2H-Perfluoro(5,8-dimethyl-3,6,9-trioxadodecane)
3794-64-7	Butanoic acid, 2,2,3,3,4,4,4-heptafluoro-, silver(1+) salt (1:1)
3934-23-4	2-Propenoic acid, 2-methyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl ester
4089-58-1	Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-[1,1,2,2-tetrafluoro-2-(fluorosulfonyl)ethoxy]propoxy]-
6130-43-4	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-, ammonium salt (1:1)
6588-63-2	Cyclohexanecarbonyl fluoride, 1,2,2,3,3,4,4,5,5,6,6-undecafluoro-
9002-84-0	Polytetrafluoroethylene
9011-17-0	Poly(vinylidene fluoride-co-hexafluoropropylene)
10493-43-3	Ethene, 1,1,2-trifluoro-2-(1,1,2,2,2-pentafluoroethoxy)-
13221-71-1	Hexafluoro-1,3-bis(trifluoromethyl)cyclobutane
13429-24-8	1-Propene, 1,1,2,3,3,3-hexafluoro-, dimer
13695-31-3	2-Propenoic acid, 2-methyl-, 2,2,3,3,4,4,4-heptafluorobutyl ester
15290-77-4	Cyclopentane, 1,1,2,2,3,3,4-heptafluoro-

**Table 4**  
**PFAS Substances Known to be in Commerce that are Reported as part of the**  
**Certain PFAS NOL Category**

16090-14-5	Ethanesulfonyl fluoride, 2-[1-[difluoro[(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-
17527-29-6	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester
17631-68-4	Europium, tris(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionato- $\beta$ O <sub>3</sub> , $\beta$ O <sub>5</sub> )-
17978-77-7	Praseodymium, tris(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionato- $\beta$ O <sub>3</sub> , $\beta$ O <sub>5</sub> )-
19430-93-4	1-Hexene, 3,3,4,4,5,5,6,6,6-nonafluoro-
20006-68-2	Dichloro-3-(perfluoro-2-propoxy)propylmethylsilane
21615-47-4	Hexanoic acid, 2,2,3,3,4,4,5,5,6,6,6-undecafluoro-, ammonium salt (1:1)
24520-19-2	Pentafluoro(1,2,2-trifluoro-2-((trifluorovinyl)oxy)-1-(trifluoromethyl)ethoxy)benzene
25038-02-2	Fomblin Y 04
25038-71-5	poly(1,1,2,2-tetrafluorobutane-1,4-diyl)
25067-11-2	1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1,2,2-tetrafluoroethene
25190-89-0	1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1-difluoroethene and 1,1,2,2-tetrafluoroethene
25291-17-2	1-Octene, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-
25684-76-8	Ethene, 1,1,2,2-tetrafluoro-, polymer with 1,1-difluoroethene
26425-79-6	Ethene, 1,1,2,2-tetrafluoro-, polymer with 1,2,2-trifluoro-2-(trifluoromethoxy)ethene
26650-09-9	Thiocyanic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester
26654-97-7	Ethanesulfonyl fluoride, 2-[1-[difluoro[(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-, polymer with 1,1,2,2-tetrafluoroethene
26655-00-5	Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]-, polymer with 1,1,2,2-tetrafluoroethene
26655-00-5	Perfluoroalkoxy alkanes (PFA)
26658-70-8	Benzene, pentafluoro[1,2,2-trifluoro-2-((trifluoroethenyl)oxy)-1-(trifluoromethyl)ethoxy]-, polymer with tetrafluoroethene and trifluoro(trifluoromethoxy)ethene
26738-51-2	3,6,9,12-Tetraoxapentadecane, 1,1,1,2,4,4,5,7,7,8,10,10,11,13,13,14,14,15,15,15-eicosafuoro-5,8,11-tris(trifluoromethyl)-
26779-98-6	Propanoic acid, ethenyl ester, polymer with 1,1-difluoroethene and 1,1,2,2-tetrafluoroethene
27029-05-6	1-Propene, polymer with 1,1,2,2-tetrafluoroethene
27619-88-1	1-Hexanesulfonyl chloride, 3,3,4,4,5,5,6,6,6-nonafluoro-
27619-89-2	1-Octanesulfonyl chloride, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-
27619-97-2	1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-
29420-49-3	1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, potassium salt (1:1)
29809-34-5	Eicosane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,19,19,20,20-hentetracontafuoro-20-iodo-
29809-35-6	Octadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18-heptatriacontafuoro-18-iodo-
31175-20-9	Ethanesulfonic acid, 2-[1-[difluoro[(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-, polymer with 1,1,2,2-tetrafluoroethene
34454-97-2	1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methyl-
34455-29-3	1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[[[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)sulfonyl]amino]-, inner salt

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**Certain PFAS NOL Category**

34788-82-4	Europium, tris[3-[2,2,3,3,4,4,4-heptafluoro-1-(oxo-βO)butyl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-onato-βO]-
35397-13-8	Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(1,2-trifluoroethenyl)oxy]-, polymer with 1-chloro-1,2,2-trifluoroethene and ethene
35560-16-8	1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with ethene and 1,1,2,2-tetrafluoroethene
37486-69-4	3,6,9,12,15-Pentaoxaoctadecane, 1,1,1,2,4,4,5,7,7,8,10,10,11,13,13,14,16,16,17,17,18,18,18-tricosafuoro-5,8,11,14-tetrakis(trifluoromethyl)-
37626-13-4	Poly[4,5-difluoro-2,2-bis(trifluoromethyl)-1,3-dioxole-co-tetrafluoroethylene]
38565-52-5	Oxirane, 2-(2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoroheptyl)-
42532-60-5	2,3,3,3-Tetrafluoro-2-(trifluoromethyl)propanenitrile
51798-33-5	Poly[oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)], α-(1-carboxy-1,2,2,2-tetrafluoroethyl)-ω-[tetrafluoro(trifluoromethyl)ethoxy]-
51851-37-7	Silane, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-
52591-27-2	2-Propenoic acid, 3,3,4,4,5,5,6,6,6-nonafluorohexyl ester
53518-00-6	1-Propanaminium, N,N,N-trimethyl-3-[[[(1,1,2,2,3,3,4,4,4-nonafluorobutyl)sulfonyl]amino]-, chloride (1:1)
54302-04-4	Chlorotrifluoro ethylene, ethylene, hexafluoroisobutylene terpolymer
54950-05-9	Butanedioic acid, 2-sulfo-, 1,4-bis(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) ester, sodium salt (1:1)
55716-11-5	Morpholine, 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,2,2,2-pentafluoroethyl)-
56357-87-0	Ethene, 1,1,2,2-tetrafluoro-, polymer with 1,1-difluoroethene and 1,1,2-trifluoro-2-(trifluoromethoxy)ethene
56467-05-1	Poly(oxy-1,2-ethanediyl), α-(tridecafluorohexyl)-ω-hydroxy-
57570-64-6	1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1-difluoroethene, 1,1,2,2-tetrafluoroethene and 1,1,2-trifluoro-2-(trifluoromethoxy)ethene
58194-00-6	Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,2,3,3-hexafluoro-3-(trifluoromethoxy)propoxy]-
60164-51-4	Poly[oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)], α-(1,1,2,2,2-pentafluoroethyl)-ω-[tetrafluoro(trifluoromethyl)ethoxy]-
63654-41-1	1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]propane and 1,1,2,2-tetrafluoroethene
63863-43-4	Propanoic acid, 3-[1-[difluoro[(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-2,2,3,3-tetrafluoro-, methyl ester
63863-44-5	Propanoic acid, 3-[1-[difluoro[(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-2,2,3,3-tetrafluoro-, methyl ester, polymer with 1,1,2,2-tetrafluoroethene
65059-79-2	1-Butene, 4-bromo-3,3,4,4-tetrafluoro-, polymer with 1,1-difluoroethene, 1,1,2,2-tetrafluoroethene and 1,1,2-trifluoro-2-(trifluoromethoxy)ethene
65104-45-2	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

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65208-35-7	Poly[oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)], .alpha.-[1,2,2,2-tetrafluoro-1-(fluorocarbonyl)ethyl]-.omega.-[tetrafluoro(trifluoromethyl)ethoxy]-
65530-82-7	Poly(difluoromethylene), alpha,omega-difluoro-
65530-85-0	Poly(difluoromethylene), .alpha.-(cyclohexylmethyl)-.omega.-hydro-
67584-51-4	Glycine, N-ethyl-N-[(1,1,2,2,3,3,4,4,4-nonafluorobutyl)sulfonyl]-, potassium salt (1:1)
67584-55-8	2-Propenoic acid, 2-[methyl[(1,1,2,2,3,3,4,4,4-nonafluorobutyl)sulfonyl]amino]ethyl ester
67584-59-2	2-Propenoic acid, 2-methyl-, 2-[methyl[(1,1,2,2,3,3,4,4,4-nonafluorobutyl)sulfonyl]amino]ethyl ester
67939-95-1	1-Propanaminium, N,N,N-trimethyl-3-[[[(1,1,2,2,3,3,4,4,4-nonafluorobutyl)sulfonyl]amino]-, iodide (1:1)
68182-34-3	1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1-difluoroethene, 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]propane and 1,1,2,2-tetrafluoroethene
68258-85-5	1-Hexene, 3,3,4,4,5,5,6,6-nonafluoro-, polymer with ethene and 1,1,2,2-tetrafluoroethene
68259-10-9	1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, ammonium salt (1:1)
68259-11-0	Pentanoic acid, 2,2,3,3,4,4,5,5,5-nonafluoro-, ammonium salt (1:1)
68298-12-4	1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-methyl-
68298-79-3	Poly(oxy-1,2-ethanediyl), α-[2-[ethyl[(1,1,2,2,3,3,4,4,4-nonafluorobutyl)sulfonyl]amino]ethyl]-ω-hydroxy-
68310-18-9	Poly[oxy(methyl-1,2-ethanediyl)], α-[2-[ethyl[(1,1,2,2,3,3,4,4,4-nonafluorobutyl)sulfonyl]amino]ethyl]-ω-hydroxy-
68555-77-1	1-Butanesulfonamide, N-[3-(dimethylamino)propyl]-1,1,2,2,3,3,4,4,4-nonafluoro-
68891-05-4	Ethene, tetrafluoro-, homopolymer, α-fluoro-ω-(2-hydroxyethyl)-, citrate, reaction products with 1,6-diisocyanatohexane
69087-47-4	Propanoic acid, 3-[1-[difluoro[(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-2,2,3,3-tetrafluoro-, polymer with 1,1,2,2-tetrafluoroethene
69116-73-0	Propanoic acid, 3-[1-[difluoro[1,2,2,2-tetrafluoro-1-(fluorocarbonyl)ethoxy]methyl]-1,2,2,2-tetrafluoroethoxy]-2,2,3,3-tetrafluoro-, methyl ester
69804-19-9	Perfluoro(3-(1-(ethenyloxy)propan-2-yloxy)propanenitrile)
69991-61-3	Ethene, 1,1,2,2-tetrafluoro-, oxidized, polymd.
69991-62-4	Ethene, 1,1,2,2-tetrafluoro-, oxidized, polymd., reduced
69991-67-9	1-Propene, 1,1,2,3,3,3-hexafluoro-, oxidized, polymd.
70225-18-2	1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, compd. with 2,2'-iminobis[ethanol] (1:1)
71832-66-1	Propanenitrile, 3-[1-[difluoro[(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-2,2,3,3-tetrafluoro-, polymer with 1,1,2,2-tetrafluoroethene and 1,1,2-trifluoro-2-(trifluoromethoxy)ethene
74398-72-4	1-Butene, 4-bromo-3,3,4,4-tetrafluoro-, polymer with 1,1-difluoroethene, 1,1,2,3,3,3-hexafluoro-1-propene and 1,1,2,2-tetrafluoroethene
74499-71-1	1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with ethene, 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]propane and 1,1,2,2-tetrafluoroethene
79070-11-4	Poly(difluoromethylene), α-chloro-ω-(2,2-dichloro-1,1,2-trifluoroethyl)-
86508-42-1	Perfluoro compounds, C5-18
88645-29-8	Ethene, 1,1,2,2-tetrafluoro-, oxidized, polymd., reduced, Me esters, reduced
101316-90-9	Ethene, 1,1,2,2-tetrafluoro-, oxidized, polymd., reduced, Me esters, reduced, acrylates
125061-94-1	Naphthalene, [difluoro(1,2,2,3,3,4,4,5,5,6,6-undecafluorocyclohexyl)methyl]heptafluorodecahydro-

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126066-30-6	Poly[oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)], α-[1,2,2,2-tetrafluoro-1-(hydroxymethyl)ethyl]-ω-[tetrafluoro(trifluoromethyl)ethoxy]-
132182-92-4	Pentane, 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-(trifluoromethyl)-
134035-61-3	Poly[oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)], α-[1,2,2,2-tetrafluoro-1-(methoxycarbonyl)ethyl]-ω-[tetrafluoro(trifluoromethyl)ethoxy]-
147545-41-3	1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methyl-, phosphate (ester)
149935-01-3	1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1-difluoroethene, ethene, 1,1,2,2-tetrafluoroethene and 1,1,2-trifluoro-2-(trifluoromethoxy)ethene
156559-18-1	2-Oxiranemethanol, polymers with reduced Me esters of reduced polymd. oxidized tetrafluoroethylene
161075-12-3	Ethene, tetrafluoro-, oxidized, polymd., reduced, Me esters
162492-15-1	Ethene, 1,1,2,2-tetrafluoro-, oxidized, polymd., reduced, Me esters, reduced, ethoxylated
163702-05-4	Butane, 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluoro-
163702-06-5	Propane, 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoro-
163702-07-6	Butane, 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-
163702-08-7	Propane, 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoro-
165178-32-5	Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]-, polymer with 1,1,2,2-tetrafluoroethene and 1,1,2-trifluoro-2-(trifluoromethoxy)ethene
177484-43-4	Propanenitrile, 2,3,3,3-tetrafluoro-2-[1,1,2,2,3,3-hexafluoro-3-[(1,2,2-trifluoroethenyl)oxy]propoxy]-, polymer with 1,1,2,2-tetrafluoroethene and 1,1,2-trifluoro-2-(trifluoromethoxy)ethene
185701-88-6	Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propoxy]-, polymer with 2,2,3-trifluoro-3-(trifluoromethyl)oxirane, reaction products with 3-(ethenyldimethylsilyl)-N-methylbenzenamine
200013-65-6	Diphosphoric acid, polymers with ethoxylated reduced Me esters of reduced polymd. oxidized tetrafluoroethylene
212335-64-3	2-Propenoic acid, reaction products with N-[3-(dimethylamino)propyl]-1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonamide
220075-01-4	Propanedioic acid, 2-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-, 1,3-dimethyl ester
220182-27-4	1-Propene, 1,1,2,3,3,3-hexafluoro-, telomer with chlorotrifluoroethene, oxidized, reduced, Et ester, hydrolyzed
220459-70-1	Glycine, N,N-bis[2-hydroxy-3-(2-propen-1-yloxy)propyl]-, sodium salt (1:1), reaction products with ammonium hydroxide and 1,1,1,2,2-pentafluoro-2-iodoethane-tetrafluoroethylene telomer
220689-12-3	Phosphonium, tetrabutyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonate (1:1)
226409-30-9	Propanedioic acid, 2-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-, 1,3-bis[4-(ethenyloxy)butyl] ester
274917-93-0	Ethene, tetrafluoro-, oxidized, polymd., reduced, decarboxylated, C3 fraction
274917-94-1	Ethene, tetrafluoro-, oxidized, polymd., reduced, decarboxylated, C4 fraction
274917-95-2	Ethene, tetrafluoro-, oxidized, polymd., reduced, decarboxylated, C5 fraction
274917-96-3	Ethene, tetrafluoro-, oxidized, polymd., reduced, decarboxylated, C6 fraction
274917-97-4	Ethene, tetrafluoro-, oxidized, polymd., reduced, decarboxylated, C7 fraction
274918-01-3	Ethene, tetrafluoro-, oxidized, polymd., reduced, decarboxylated, C8 fraction
274918-02-4	Ethene, tetrafluoro-, oxidized, polymd., reduced, decarboxylated, C9 fraction
274918-03-5	Ethene, tetrafluoro-, oxidized, polymd., reduced, decarboxylated, C10 fraction



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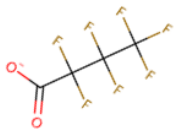
274918-09-1	Ethene, tetrafluoro-, oxidized, polymd., reduced, decarboxylated, C11 fraction
274918-10-4	Ethene, tetrafluoro-, oxidized, polymd., reduced, decarboxylated, C12 fraction
274918-12-6	Ethene, tetrafluoro-, oxidized, polymd., reduced, decarboxylated, C13 fraction
297730-93-9	Hexane, 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl)-
328389-90-8	1,2-Propanediol, 3-(diethylamino)-, polymers with 5-isocyanato-1
332350-90-0	Phosphonium, tributyl(2-methoxypropyl)-, salt with 1,1,2,2,3,3,4,4,4-nonafluoro-N-methyl-1-butanefulfonamide (1:1)
332350-93-3	Phosphonium, triphenyl(phenylmethyl)-, salt with 1,1,2,2,3,3,4,4,4-nonafluoro-N-methyl-1-butanefulfonamide (1:1)
421595-49-5	2-Propenoic acid, 2-hydroxyethyl ester, adduct with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (1:1), reaction products with ethoxylated reduced Me esters of reduced polymd. oxidized tetrafluoroethylene
452080-67-0	Boron, trifluoro(tetrahydrofuran)-, (T-4)-, polymer with 3-methyl
475678-78-5	Oxetane, 3-methyl-3-[[3,3,4,4,5,5,6,6,6-nonafluorohexyl]oxy]methyl]-
484024-67-1	1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-, ammonium salt (1:1)
502164-17-2	Ethene, 1,1,2,2-tetrafluoro-, oxidized, polymd., reduced, Et esters
753501-40-5	Boron, trifluoro(tetrahydrofuran)-, (T-4)-, polymer with 3-methyl-3-[[
753501-43-8	Boron, trifluoro(tetrahydrofuran)-, (T-4)-, polymer with .alpha.-hy
864910-70-3	Boron, trifluoro(tetrahydrofuran)-, (T-4)-, polymer with 2-methy
878545-84-7	1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1,2,2-tetrafluoroethene, 1,1,2-trifluoro-2-(1,1,2,2,2-pentafluoroethoxy)ethene and 1,1,2-trifluoro-2-(trifluoromethoxy)ethene
957209-18-6	Furan, 2,3,3,4,4-pentafluorotetrahydro-5-methoxy-2,5-bis[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-
1224429-82-6	Phosphoric acid, mixed esters with polyethylene glycol and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-1-octanol, ammonium salts
1370442-66-2	Iodonium, diphenyl-, 4,4'-di-C10-13-alkyl derivs., (OC-6-11)-hexafluoroantimonates(1-)
1092822-31-5	2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2-hyd
1269217-82-4	Thieno[3,4-b]thiophene, homopolymer, 2-[1-[difluoro[(1,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethanesulfonic acid-tetrafluoroethylene polymer-doped
1279108-20-1	Hexane, 1,6-diisocyanato-, homopolymer, $\alpha$ -[1-[[[3-[[3-(dimethylamino)propyl]amino]propyl]amino]carbonyl]-1,2,2,2-tetrafluoroethyl]- $\omega$ -(1,1,2,2,3,3,3-heptafluoropropoxy)poly[oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)]-blocked
1029089-63-1	Boron, trifluoro(tetrahydrofuran)-, (T-4)-, polymer with 3-methyl-3-((2,2,3,3,3-pentafluoropropoxy)methyl)oxetane, ether with 2,2-dimethyl-1,3-propanediol (2:1), polymer with alpha-hydro-omega-hydroxypoly(oxy-1,2-ethanediyl) and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane
1033385-42-0	Poly[oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)], $\alpha$ -[1,2,2,2-tetrafluoro-1-[[[2-hydroxyethyl]amino]carbonyl]ethyl]- $\omega$ -[tetrafluoro(trifluoromethyl)ethoxy]-, ether with $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) (2:1)
1214752-87-0	Borate(1-), tetrahydro-, sodium (1:1), reaction products with reduced polymd. oxidized tetrafluoroethylene, hydrolyzed, diallyl ethers, polymers with 2,4,6,8-

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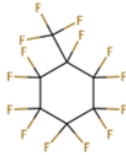
	tetramethylcyclotetrasiloxane, Si-(8,13-dioxo-4,7,12-trioxa-9-azapentadec-14-en-1-yl) derivs.
1378928-76-7	Ethanesulfonyl fluoride, 2-[1-[difluoro][(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-, polymer with 1,1,2,2-tetrafluoroethene, hydrolyzed, potassium salts
1378930-04-1	Ethanesulfonyl fluoride, 2-[1-[difluoro][(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-, polymer with 1,1,2,2-tetrafluoroethene, hydrolyzed
1378930-30-3	Propanoic acid, 3-[1-[difluoro][(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-2,2,3,3-tetrafluoro-, methyl ester, polymer with 1,1,2,2-tetrafluoroethene, hydrolyzed, potassium salts
1564254-27-8	Ethene, 1,1,2,2-tetrafluoro-, oxidized, polymd., reduced, Me esters, reduced, N-(3-isocyanatomethylphenyl)carbmates
1627515-87-0	Hexanedioic acid, polymers with 1,3-butanediol, 1,4-butanediol, di-Et malonate, 1,6-diisocyanatohexane, ethoxylated reduced Me esters of reduced polymd. oxidized tetrafluoroethylene, 1,6-hexanediol, 1,1'-methylenebis[isocyanatobenzene], propylene glycol a
1687740-67-5	Ethanesulfonyl fluoride, 1,1,2,2-tetrafluoro-2-[(1,2,2-trifluoroethenyl)oxy]-, polymer with 1,1,2,2-tetrafluoroethene, hydrolyzed, lithium salts
1708962-18-8	Methanol, reaction products with 1,1,1,2,2,3,4,5,5,6,6,7,7,7-tetradecafluoro-3-heptene
1708962-19-9	Methanol, reaction products with 1,1,1,2,3,4,4,5,5,6,6,7,7,7-tetradecafluoro-2-heptene
1807944-82-6	1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-, barium salt (2:1)
NA	EFEP ethylene-tetrafluoroethylene-hexafluoropropylene terpolymer
335-93-3	Silver(I) perfluorooctanoate reportable under TRI as of 1/1/21
507-63-1	Perfluorooctyl iodide (reportable under TRI as of 1/1/21)
2395-00-8	Potassium perfluorooctanoate (reportable under TRI as of 1/1/21)
65104-45-2	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 (reportable under TRI as of 1/1/21)
375-73-5	Perfluorobutane sulfonic acid (PFBS) (reportable under TRI as of 1/1/22)
29420-49-3	Potassium perfluorobutane sulfonate (reportable under TRI as of 1/1/22)
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 (reportable under TRI as of 1/1/22)
45187-15-3	Perfluorobutanesulfonate (reportable under TRI as of 1/1/22)
375-22-4	PFBA (reportable under TRI as of 1/1/23)
45048-62-2	Perfluorobutanoate (reportable under TRI as of 1/1/23)
10495-86-0	Ammonium perfluorobutanoate (reportable under TRI as of 1/1/23)
2966-54-3	Potassium perfluorobutanoate (reportable under TRI as of 1/1/23)
2218-54-4	Sodium perfluorobutanoate (reportable under TRI as of 1/1/23)
2728655-42-1	Alcohols, C8-16, γ-ω-perfluoro, reaction products with 1,6-diisocyanatohexane, glycidol and stearyl alc. (reportable under TRI as of 1/1/23)
2738952-61-7	Acetamide, N-[3-(dimethylamino)propyl]-, 2-[(γ-ω-perfluoro-C4-20-alkyl)thio] derivs. (reportable under TRI as of 1/1/23)

**Table 4**  
**PFAS Substances Known to be in Commerce that are Reported as part of the**  
**Certain PFAS NOL Category**

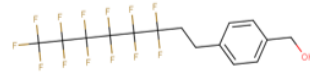
2744262-09-5	Acetic acid, 2-[(γ-ω-perfluoro-C4-20-alkyl)thio] derivs., 2-hydroxypropyl esters (reportable under TRI as of 1/1/23)
2742694-36-4	Acetamide, N-(2-aminoethyl)-, 2-[(γ-ω-perfluoro-C4-20-alkyl)thio] derivs., polymers with N1,N1-dimethyl-1,3-propanediamine, epichlorohydrin and ethylenediamine, oxidized (reportable under TRI as of 1/1/23)



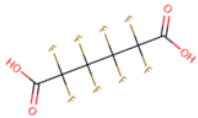
PFBA [375-22-4] three contiguous perfluorinated carbons



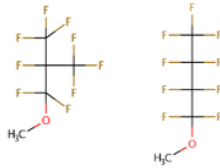
Perfluoromethylcyclohexane [355-02-2] cyclic perfluorinated ring



4-((Perfluorohexyl)ethyl)phenylmethanol [356055-76-0] six perfluorinated carbon alkyl chain with benzene ring as functional group

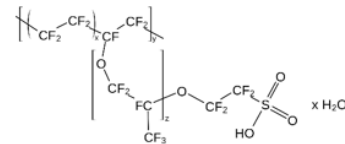


Perfluorohexanedioic acid [336-08-3] four perfluorinated carbon alkyl chain

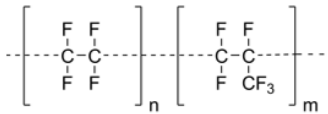


HFE (hydrofluoroether) 7100 [mixture of 163702-08-7 & 163702-07-6] each component has ≥ 3 perfluorinated carbon alkyl chain

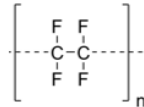
**Examples of PFAS included in TURA Certain PFAS NOL Category**



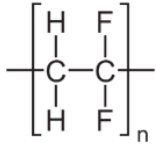
Nafion [31175-20-9] tetrafluoroethylene copolymer with sulfonic acid side chains - ≥ 3 contiguous perfluorinated carbons



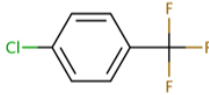
FEP Fluorinated ethylene propylene polymer [25067-11-2] polymer with repeating units that include 3 contiguous perfluorinated carbons



PTFE [9002-84-0] polymer - perfluorinated carbon repeating chain

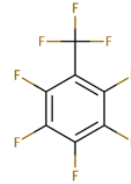


PVDF [24937-79-9]  
 polyvinylidene fluoride -  
 alternating perfluorinated and  
 non-fluorinated carbons, <3  
 contiguous perfluorinated  
 carbons in polymer chain

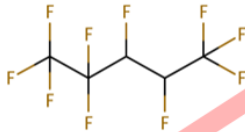


PCBTf [98-56-6]  
 Parachlorobenzotrifluoride -  
 only one perfluorinated carbon

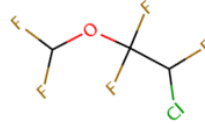
**Examples of PFAS NOT  
 included in TURA Certain  
 PFAS NOL Category**



Octafluorotoluene [434-64-0]  
 only one perfluorinated carbon  
 in alkyl chain. Fluorinated  
 phenyl rings are not alkyl



HFC 4310mee [138495-42-8]  
 2H,3H-Decafluoropentane  
 has 3 perfluorinated carbons  
 but not contiguous



Enflurane [13838-16-9] 2-chloro-1,1,2-  
 trifluoroethyl difluoromethyl ether – is a  
 fluorinated ether, but carbon on left of O is  
 not perfluorinated (H bonded to C)