

# Chemicals Added to the Toxics Release Inventory Pursuant to Section 7321 of the National Defense Authorization Act

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (P.L. 116-92) (NDAA) added certain Per- and Polyfluoroalkyl Substances (PFAS) to the TRI list of reportable chemicals. Among these added chemicals are chemicals that met two criteria: (1) they were subject to a significant new use rule at either 40 CFR 721.9582 or 721.10536 on or before December 20, 2019; and (2) they were identified as active in commerce on the Toxic Substances Control Act (TSCA) Inventory that was published in February 2019. Chemicals meeting only one of the two criteria were not added to the TRI list.

The names and CASRN for some of the chemicals listed under 40 CFR 721.9582 and/or 40 CFR 721.10536 are subject to a claim of protection from disclosure. Under Section 7321 of the NDAA, EPA must review any such chemicals before the chemicals are added to the TRI list (NDAA Section 7321(e)). Therefore, the chemicals that are subject to a claim of protection from disclosure will not be added to the EPCRA Section 313 toxic chemical list until EPA completes the process provided by Section 7321(e) of the NDAA.

Via the considerations described above, 158 chemicals were identified. Additionally, the NDAA specifically identified fourteen PFAS for addition to the TRI list. Twelve of these fourteen chemicals were among the chemicals described above; with the addition of the other two, there are a total of 160 PFAS subject to the NDAA.

The chemicals listed in this Excel file have an effective date of January 1, 2020.

| CASRN    | TRI Chemical Name   |
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| 307-35-7 | Perfluorooctylsulfanyl fluoride   |
| 307-55-1 | Perfluorododecanoic acid  |
| 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-eicosafluoro-  |
| 335-66-0 | Octanoyl fluoride, pentadecafluoro-   |
| 335-67-1 | Perfluorooctanoic acid  |
| 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  |
| 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-tritriacontafluoro-16-iodo- |
| 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   |

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| 383-07-3   | 2-[Butyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl acrylate   |
| 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-  |
| 423-82-5   | 2-[Ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl acrylate   |
| 507-63-1   | Octane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-8-iodo-  |
| 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-  |
| 2144-53-8  | 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester  |
| 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  |
| 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-nonacosafuorohexadecyl 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-pentacosafuorotetradecyl ester           |
| 13252-13-6 | Hexafluoropropylene oxide dimer acid   |
| 16517-11-6 | Octadecanoic acid, pentatriacontafuoro-  |
| 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  |

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| 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   |
| 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-eicosafluoro-5,8,11-tris(trifluoromethyl)-                     |
| 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-   |
| 27619-97-2 | 1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-  |
| 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   |
| 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-hentetracontafluoro-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-heptatriacontafluoro-18-iodo-          |
| 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-pentacosafuoro-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-pentacosafuoro-   |
| 52166-82-2 | 1-Propanaminium, N,N,N-trimethyl-3-[[[(tridecafluorohexyl)sulfonyl]amino]-, chloride   |
| 52591-27-2 | 1,1,2,2-Tetrahydroperfluorohexyl acrylate  |
| 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-nonacosafuoro-   |

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| 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]-                                       |
| 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-heptatriacontafluoro-                 |
| 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-tritriacontafluoro-                             |
| 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-  |
| 65545-80-4 | Poly(oxy-1,2-ethanediyl), $\alpha$ -hydro- $\omega$ -hydroxy-, ether with $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)poly(difluoromethylene) (1:1) |
| 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-(phosphonoxy)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)-[( $\gamma$ - $\omega$ -perfluoro-C6-20-alkyl)thio] derivs.                       |

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| 68187-47-3 | 1-Propanesulfonic acid, 2-methyl-, 2-[[1-oxo-3-[( $\gamma$ - $\omega$ -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 |
| 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-  |
| 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-  |

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| 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-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-   |
| 69116-73-0 | Methyl perfluoro[8-(fluoroformyl)-5-methyl-4,7-dioxanonanoate]  |
| 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)   |
| 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, $\gamma$ - $\omega$ -perfluoro, telomers with acrylamide   |
| 70983-59-4 | Poly(oxy-1,2-ethanediyl), $\alpha$ -methyl- $\omega$ -hydroxy-, 2-hydroxy-3-[[ $\gamma$ - $\omega$ -perfluoro-C6-20-alkyl]thio]propyl ethers  |
| 70983-60-7 | 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-, 3-[[ $\gamma$ - $\omega$ -perfluoro-C6-20-alkyl]thio] derivs., chlorides   |

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| 71608-60-1  | Pentanoic acid, 4,4-bis[( $\gamma$ - $\omega$ -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   |
| 78560-44-8  | Silane, trichloro(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-   |
| 79070-11-4  | Poly(difluoromethylene), $\alpha$ -chloro- $\omega$ -(2,2-dichloro-1,1,2-trifluoroethyl)-   |
| 83048-65-1  | Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)trimethoxy-  |
| 97553-95-2  | Thiocyanic acid, $\gamma$ - $\omega$ -perfluoro-C4-20-alkyl esters  |
| 97659-47-7  | Alkenes, C8-14 $\alpha$ -, $\delta$ - $\omega$ -perfluoro   |
| 118400-71-8 | Disulfides, bis( $\gamma$ - $\omega$ -perfluoro-C6-20-alkyl)  |
| 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, $\gamma$ - $\omega$ -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[[( $\gamma$ - $\omega$ -perfluoro-C4-10-alkyl)thio]methyl] derivs., phosphates, ammonium salts   |
| 148240-87-3 | 1,3-Propanediol, 2,2-bis[[( $\gamma$ - $\omega$ -perfluoro-C6-12-alkyl)thio]methyl] derivs., phosphates, ammonium salts   |
| 148240-89-5 | 1,3-Propanediol, 2,2-bis[[( $\gamma$ - $\omega$ -perfluoro-C10-20-alkyl)thio]methyl] derivs., phosphates, ammonium salts  |
| 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  |

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| 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-heptafluorodecyl 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   |