

SUPPLEMENTAL DATA

PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES IN THE ENVIRONMENT: TERMINOLOGY, CLASSIFICATION, AND ORIGINS

Robert C. Buck†, James Franklin*‡, Urs Berger§, Jason M. Conder||, Ian T. Cousins§, Pim de Voogt#, Allan Astrup Jensen††, Kurunthachalam Kannan‡‡, Scott A. Mabury§§, and Stefan P. J. van Leeuwen||||

†E.I. du Pont de Nemours & Co. Inc., DuPont Chemicals and Fluoroproducts, 4417 Lancaster Pike, CRP 702-2211B, Wilmington, DE 19880-0702 USA ([REDACTED]@USA.dupont.com)

‡CLF-Chem Consulting SPRL, 3 Clos du Châtaignier, BE-1390 Grez-Doiceau, Belgium ([REDACTED]@skynet.be)

§Department of Applied Environmental Science (ITM), Stockholm University, Svante Arrhenius väg 8, SE-10691 Stockholm, Sweden ([REDACTED]@itm.su.se; [REDACTED]@itm.su.se)

||ENVIRON International Corporation, 18100 Von Karman Avenue, Suite 600, Irvine, CA 92612, USA ([REDACTED]@environcorp.com)

#Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, PO Box 94248, NL-1090 GE Amsterdam, The Netherlands ([REDACTED]@uva.nl)

††Nordic Institute for Product Sustainability, Environmental Chemistry and Toxicology (NIPSECT), 1 Dalgas Boulevard, DK-2000 Frederiksberg, Denmark ([REDACTED]@gmail.com)

‡‡Wadsworth Center, New York State Department of Health, and Department of Environmental Health Sciences, School of Public Health, State University of New York at Albany, Empire State Plaza, P.O. Box 509, Albany, NY 12201-0509, USA ([REDACTED]@wadsworth.org)

§§Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, Ontario M5S 3H6, Canada ([REDACTED]@chem.utoronto.ca)

||||RIKILT - Institute of Food Safety, PO Box 230, 6700 AE Wageningen, The Netherlands ([REDACTED]@WUR.nl)

*To whom correspondence may be addressed: [REDACTED]@skynet.be, Phone/Fax +32-10-24-69-98

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PART 1 – FAMILIES OF SUBSTANCES (NON-POLYMERS)

NAME OF FAMILY	FORMULA	ACRONYM
Perfluoroalkyl substances	Generic name: See main paper	PFASs
Perfluoroalkyl acids	Includes perfluoroalkyl carboxylic, sulfonic, sulfinic, phosphonic and phosphinic acids	PFAAs
Perfluoroalkyl carboxylic acids	$C_nF_{2n+1}COOH$	PFCAs
Perfluoroalkane sulfonic acids	$C_nF_{2n+1}SO_3H$	PFSAs
Perfluoroalkane sulfinic acids	$C_nF_{2n+1}SO_2H$	PFSIAs
Perfluoroalkyl phosphonic acids	$O=P(OH)_2C_nF_{2n+1}$	PFPAs
Perfluoroalkyl phosphinic acids	$O=P(OH)(C_nF_{2n+1})(C_mF_{2m+1})$	PFPIAs

NAME OF FAMILY	FORMULA	ACRONYM
Perfluoroalkyl iodides	$C_nF_{2n+1}I$	PFAIs
(n:2) Fluorotelomer iodides	$C_nF_{2n+1}CH_2CH_2I$	(n:2) FTIs
(n:2) Fluorotelomer olefins	$C_nF_{2n+1}CH=CH_2$	(n:2) FTOs
(n:2) Fluorotelomer alcohols	$C_nF_{2n+1}CH_2CH_2OH$	(n:2) FTOHs
(n:2) Fluorotelomer acrylates	$C_nF_{2n+1}CH_2CH_2OC(O)CH=CH_2$	(n:2) FTACs
(n:2) Fluorotelomer methacrylates	$C_nF_{2n+1}CH_2CH_2OC(O)C(CH_3)=CH_2$	(n:2) FTMACs

Polyfluoroalkyl phosphoric acid esters / Polyfluoroalkyl phosphates / (n:2) Fluorotelomer phosphates	$(\text{O})\text{P}(\text{OH})_{3-x}(\text{OCH}_2\text{CH}_2\text{C}_n\text{F}_{2n+1})_x$	PAPs
Polyfluoroalkyl phosphoric acid monoesters	$(\text{O})\text{P}(\text{OH})_2(\text{OCH}_2\text{CH}_2\text{C}_n\text{F}_{2n+1})$	monoPAPs
Polyfluoroalkyl phosphoric acid diesters	$(\text{O})\text{P}(\text{OH})(\text{OCH}_2\text{CH}_2\text{C}_n\text{F}_{2n+1})(\text{OCH}_2\text{CH}_2\text{C}_m\text{F}_{2m+1})$	diPAPs
Semi-fluorinated <i>n</i> -alkanes	$\text{F}(\text{CF}_2)_n(\text{CH}_2)_m\text{H}$	SFAs
Semi-fluorinated <i>n</i> -alkenes	$\text{F}(\text{CF}_2)_n\text{CH}=\text{CH}(\text{CH}_2)_{m-2}\text{H}$	SFAenes
(n:2) Fluorotelomer (saturated) aldehydes	$\text{C}_n\text{F}_{2n+1}\text{CH}_2\text{CHO}$	(n:2) FTALs
(n:2) Fluorotelomer unsaturated aldehydes	$\text{C}_{n-1}\text{F}_{2n-1}\text{CF}=\text{CHCHO}$	(n:2) FTUALs
Perfluoroalkyl aldehydes	$\text{C}_n\text{F}_{2n+1}\text{CHO}$	PFALs
Perfluoroalkyl aldehyde hydrates	$\text{C}_n\text{F}_{2n+1}\text{CH}(\text{OH})_2$	PFAL.H ₂ O _s
(n:2) Fluorotelomer (saturated) carboxylic acids	$\text{C}_n\text{F}_{2n+1}\text{CH}_2\text{COOH}$	(n:2) FTCAs
(n:2) Fluorotelomer unsaturated carboxylic acids	$\text{C}_{n-1}\text{F}_{2n-1}\text{CF}=\text{CHCOOH}$	(n:2) FTUCAs
[Biotransformation product of (n+1):2 FTOH]	$\text{C}_n\text{F}_{2n+1}\text{CH}_2\text{CH}_2\text{COOH}$	n:3 Acid
[Biotransformation product of (n+1):2 FTOH]	$\text{C}_n\text{F}_{2n+1}\text{CH}=\text{CHCOOH}$	n:3 UAcid
(n:2) Fluorotelomer sulfonic acids	$\text{C}_n\text{F}_{2n+1}\text{CH}_2\text{CH}_2\text{SO}_3\text{H}$	(n:2) FTSA _s

NAME OF FAMILY	FORMULA	ACRONYM
Perfluoroalkane sulfonyl fluorides	$C_nF_{2n+1}SO_2F$	PASFs
Perfluoroalkane sulfonamides	$C_nF_{2n+1}SO_2NH_2$	FASAs
<i>N</i> -Methyl perfluoroalkane sulfonamides	$C_nF_{2n+1}SO_2NH(CH_3)$	MeFASAs
<i>N</i> -Ethyl perfluoroalkane sulfonamides	$C_nF_{2n+1}SO_2NH(C_2H_5)$	EtFASAs
<i>N,N</i> -Dialkyl perfluoroalkane sulfonamides	$C_nF_{2n+1}SO_2N(C_mH_{2m+1})(C_pH_{2p+1})$, with m, p = 1 or 2	Me ₂ FASAs, Et ₂ FASAs, MeEtFASAs
Perfluoroalkane sulfonamidoethanols	$C_nF_{2n+1}SO_2NHCH_2CH_2OH$	FASEs
Perfluoroalkane sulfonamidoacetic acids	$C_nF_{2n+1}SO_2NHCH_2COOH$	FASAAs
<i>N</i> -Methyl perfluoroalkane sulfonamidoethanols	$C_nF_{2n+1}SO_2N(CH_3)CH_2CH_2OH$	MeFASEs
<i>N</i> -Ethyl perfluoroalkane sulfonamidoethanols	$C_nF_{2n+1}SO_2N(C_2H_5)CH_2CH_2OH$	EtFASEs
<i>N</i> -Methyl perfluoroalkane sulfonamidoacetic acids	$C_nF_{2n+1}SO_2N(CH_3)CH_2COOH$	MeFASAAs
<i>N</i> -Ethyl perfluoroalkane sulfonamidoacetic acids	$C_nF_{2n+1}SO_2N(C_2H_5)CH_2COOH$	EtFASAAs
<i>N</i> -Methyl perfluoroalkane sulfonamidoethyl acrylates	$C_nF_{2n+1}SO_2N(CH_3)CH_2CH_2OC(O)CH=CH_2$	MeFASACs
<i>N</i> -Ethyl perfluoroalkane sulfonamidoethyl acrylates	$C_nF_{2n+1}SO_2N(C_2H_5)CH_2CH_2OC(O)CH=CH_2$	EtFASACs
<i>N</i> -Methyl perfluoroalkane sulfonamidoethyl methacrylates	$C_nF_{2n+1}SO_2N(CH_3)CH_2CH_2OC(O)C(CH_3)=CH_2$	MeFASMACs
<i>N</i> -Ethyl perfluoroalkane sulfonamidoethyl methacrylates	$C_nF_{2n+1}SO_2N(C_2H_5)CH_2CH_2OC(O)C(CH_3)=CH_2$	EtFASMACs

PART 2 – SELECTED INDIVIDUAL COMPOUNDS (NON-POLYMERS)

Perfluoroalkyl carboxylic acids (and selected salts)	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Trifluoroacetic acid	CF_3COOH	76-05-1	TFAA
Perfluoropropanoic acid	$\text{C}_2\text{F}_5\text{COOH}$	422-64-0	PFPrA
Perfluorobutanoic acid	$\text{C}_3\text{F}_7\text{COOH}$	375-22-4	PFBA
Ammonium perfluorobutanoate	$\text{NH}_4^+ \text{C}_3\text{F}_7\text{COO}^-$	10495-86-0	NH_4 -PFBA
Sodium perfluorobutanoate	$\text{Na}^+ \text{C}_3\text{F}_7\text{COO}^-$	2218-54-4	Na-PFBA
Perfluoropentanoic acid	$\text{C}_4\text{F}_9\text{COOH}$	2706-90-3	PFPeA
Ammonium perfluoropentanoate	$\text{NH}_4^+ \text{C}_4\text{F}_9\text{COO}^-$	68259-11-0	NH_4 -PFPeA
Perfluorohexanoic acid	$\text{C}_5\text{F}_{11}\text{COOH}$	307-24-4	PFHxA
Ammonium perfluorohexanoate	$\text{NH}_4^+ \text{C}_5\text{F}_{11}\text{COO}^-$	21615-47-4	NH_4 -PFHxA
Sodium perfluorohexanoate	$\text{Na}^+ \text{C}_5\text{F}_{11}\text{COO}^-$	2923-26-4	Na-PFHxA
Perfluoroheptanoic acid	$\text{C}_6\text{F}_{13}\text{COOH}$	375-85-9	PFHpA
Ammonium perfluoroheptanoate	$\text{NH}_4^+ \text{C}_6\text{F}_{13}\text{COO}^-$	6130-43-4	NH_4 -PFHpA
Sodium perfluoroheptanoate	$\text{Na}^+ \text{C}_6\text{F}_{13}\text{COO}^-$	20109-59-5	Na-PFHpA
Perfluorooctanoic acid	$\text{C}_7\text{F}_{15}\text{COOH}$	335-67-1	PFOA
Ammonium perfluorooctanoate	$\text{NH}_4^+ \text{C}_7\text{F}_{15}\text{COO}^-$	3825-26-1	APFO (or NH_4 -PFOA)

Sodium perfluorooctanoate	$^{222}\text{Na}^+ \text{C}_7\text{F}_{15}\text{COO}^-$	335-95-5	Na-PFOA
Potassium perfluorooctanoate	$\text{K}^+ \text{C}_7\text{F}_{15}\text{COO}^-$	2395-00-8	K-PFOA
Perfluorononanoic acid	$\text{C}_8\text{F}_{17}\text{COOH}$	375-95-1	PFNA
Ammonium perfluorononanoate	$\text{NH}_4^+ \text{C}_8\text{F}_{17}\text{COO}^-$	4149-60-4	APFN (or NH_4 -PFNA)
Sodium perfluorononanoate	$\text{Na}^+ \text{C}_8\text{F}_{17}\text{COO}^-$	21049-39-8	Na-PFNA
Perfluorodecanoic acid	$\text{C}_9\text{F}_{19}\text{COOH}$	335-76-2	PFDA
Ammonium perfluorodecanoate	$\text{NH}_4^+ \text{C}_9\text{F}_{19}\text{COO}^-$	3108-42-7	NH_4 -PFDA
Perfluoroundecanoic acid	$\text{C}_{10}\text{F}_{21}\text{COOH}$	2058-94-8	PFUnDA
Ammonium perfluoroundecanoate	$\text{NH}_4^+ \text{C}_{10}\text{F}_{21}\text{COO}^-$	4234-23-5	NH_4 -PFUnDA
Perfluorododecanoic acid	$\text{C}_{11}\text{F}_{23}\text{COOH}$	307-55-1	PFDODA
Perfluorotridecanoic acid	$\text{C}_{12}\text{F}_{25}\text{COOH}$	72629-94-8	PFTTrDA
Perfluorotetradecanoic acid	$\text{C}_{13}\text{F}_{27}\text{COOH}$	376-06-7	PFTeDA
Perfluoropentadecanoic acid	$\text{C}_{14}\text{F}_{29}\text{COOH}$	141074-63-7	PFPeDA
Perfluorohexadecanoic acid	$\text{C}_{15}\text{F}_{31}\text{COOH}$	67905-19-5	PFHxDA
Perfluoroheptadecanoic acid	$\text{C}_{16}\text{F}_{33}\text{COOH}$	57475-95-3	PFHpDA
Perfluorooctadecanoic acid	$\text{C}_{17}\text{F}_{35}\text{COOH}$	16517-11-6	PFODA
Perfluoroalkyl carboxylate anions	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Trifluoroacetate	CF_3COO^-	14477-72-6	TFA

Perfluoropropanoate	$\text{C}_2\text{F}_5\text{COO}^-$	44864-55-3	PFPrA
Perfluorobutanoate	$\text{C}_3\text{F}_7\text{COO}^-$	45048-62-2	PFBA
Perfluoropentanoate	$\text{C}_4\text{F}_9\text{COO}^-$	45167-47-3	PFPeA
Perfluorohexanoate	$\text{C}_5\text{F}_{11}\text{COO}^-$	92612-52-7	PFHxA
Perfluoroheptanoate	$\text{C}_6\text{F}_{13}\text{COO}^-$	120885-29-2	PFHpA
Perfluorooctanoate	$\text{C}_7\text{F}_{15}\text{COO}^-$	45285-51-6	PFOA
Perfluorononanoate	$\text{C}_8\text{F}_{17}\text{COO}^-$	72007-68-2	PFNA
Perfluorodecanoate	$\text{C}_9\text{F}_{19}\text{COO}^-$	73829-36-4	PFDA
Perfluoroundecanoate	$\text{C}_{10}\text{F}_{21}\text{COO}^-$	196859-54-8	PFUnDA
Perfluorododecanoate	$\text{C}_{11}\text{F}_{23}\text{COO}^-$	171978-95-3	PFDoDA
Perfluorotridecanoate	$\text{C}_{12}\text{F}_{25}\text{COO}^-$	862374-87-6	PFTTrDA
Perfluorotetradecanoate	$\text{C}_{13}\text{F}_{27}\text{COO}^-$	365971-87-5	PFTeDA
Perfluoropentadecanoate	$\text{C}_{14}\text{F}_{29}\text{COO}^-$	1214264-29-5	PFPeDA
Perfluorohexadecanoate	$\text{C}_{15}\text{F}_{31}\text{COO}^-$	1214264-30-8	PFHxDA
Perfluoroheptadecanoate	$\text{C}_{16}\text{F}_{33}\text{COO}^-$	None available	PFHpDA
Perfluorooctadecanoate	$\text{C}_{17}\text{F}_{35}\text{COO}^-$	798556-82-8	PFODA

Perfluoroalkane sulfonic acids (and selected anions and salts)	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Trifluoromethane sulfonic (or triflic) acid	$\text{CF}_3\text{SO}_3\text{H}$	1493-13-6	TFMS
Perfluoroethane sulfonic acid	$\text{C}_2\text{F}_5\text{SO}_3\text{H}$	354-88-1	PFEtS
Perfluoropropane sulfonic acid	$\text{C}_3\text{F}_7\text{SO}_3\text{H}$	423-41-6	PFPrS
Perfluorobutane sulfonic acid	$\text{C}_4\text{F}_9\text{SO}_3\text{H}$	375-73-5 or 59933-66-3	PFBS
Perfluorobutane sulfonate anion	$\text{C}_4\text{F}_9\text{SO}_3^-$	45187-15-3	PFBS
Potassium perfluorobutane sulfonate	$\text{K}^+ \text{C}_4\text{F}_9\text{SO}_3^-$	29420-49-3	K-PFBS
Perfluoropentane sulfonic acid	$\text{C}_5\text{F}_{11}\text{SO}_3\text{H}$	2706-91-4	PFPeS
Potassium perfluoropentane sulfonate	$\text{K}^+ \text{C}_5\text{F}_{11}\text{SO}_3^-$	3872-25-1	K-PFPeS
Perfluorohexane sulfonic acid	$\text{C}_6\text{F}_{13}\text{SO}_3\text{H}$	355-46-4	PFHxS
Perfluorohexane sulfonate anion	$\text{C}_6\text{F}_{13}\text{SO}_3^-$	108427-53-8	PFHxS
Potassium perfluorohexane sulfonate	$\text{K}^+ \text{C}_6\text{F}_{13}\text{SO}_3^-$	3871-99-6	K-PFHxS
Perfluoroheptane sulfonic acid	$\text{C}_7\text{F}_{15}\text{SO}_3\text{H}$	375-92-8	PFHpS
Ammonium perfluoroheptane sulfonate	$\text{NH}_4^+ \text{C}_7\text{F}_{15}\text{SO}_3^-$	68259-07-4	NH_4 -PFHpS
Potassium perfluoroheptane sulfonate	$\text{K}^+ \text{C}_7\text{F}_{15}\text{SO}_3^-$	60270-55-5	K-PFHpS
Perfluorooctane sulfonic acid	$\text{C}_8\text{F}_{17}\text{SO}_3\text{H}$	1763-23-1	PFOS
Perfluorooctane sulfonate anion	$\text{C}_8\text{F}_{17}\text{SO}_3^-$	45298-90-6	PFOS

Ammonium perfluorooctane sulfonate	$\text{NH}_4^+ \text{C}_8\text{F}_{17}\text{SO}_3^-$	29081-56-9	NH ₄ -PFOS
Sodium perfluorooctane sulfonate	$\text{Na}^+ \text{C}_8\text{F}_{17}\text{SO}_3^-$	4021-47-0	Na-PFOS
Potassium perfluorooctane sulfonate	$\text{K}^+ \text{C}_8\text{F}_{17}\text{SO}_3^-$	2795-39-3	K-PFOS
Lithium perfluorooctane sulfonate	$\text{Li}^+ \text{C}_8\text{F}_{17}\text{SO}_3^-$	29457-72-5	Li-PFOS
Tetraethylammonium perfluorooctane sulfonate	$\text{N}(\text{C}_2\text{H}_5)_4^+ \text{C}_8\text{F}_{17}\text{SO}_3^-$	56773-42-3	NEt ₄ -PFOS
Diethanolammonium perfluorooctane sulfonate	$\text{NH}_2(\text{CH}_2\text{CH}_2\text{OH})_2^+ \text{C}_8\text{F}_{17}\text{SO}_3^-$	56773-42-3	
Perfluorononane sulfonic acid	$\text{C}_9\text{F}_{19}\text{SO}_3\text{H}$	474511-07-4	PFNS
Ammonium perfluorononane sulfonate	$\text{NH}_4^+ \text{C}_9\text{F}_{19}\text{SO}_3^-$	17202-41-4	NH ₄ -PFNS
Perfluorodecane sulfonic acid	$\text{C}_{10}\text{F}_{21}\text{SO}_3\text{H}$	335-77-3	PFDS
Perfluorodecane sulfonate anion	$\text{C}_{10}\text{F}_{21}\text{SO}_3^-$	126105-34-8	PFDS
Ammonium perfluorodecane sulfonate	$\text{NH}_4^+ \text{C}_{10}\text{F}_{21}\text{SO}_3^-$	67906-42-7	NH ₄ -PFDS
Potassium perfluorodecane sulfonate	$\text{K}^+ \text{C}_{10}\text{F}_{21}\text{SO}_3^-$	2806-16-8	K-PFDS
Perfluoroundecane sulfonic acid	$\text{C}_{11}\text{F}_{23}\text{SO}_3\text{H}$	749786-16-1	PFUnDS
Perfluorododecane sulfonic acid	$\text{C}_{12}\text{F}_{25}\text{SO}_3\text{H}$	79780-39-5	PFD _o DS

Perfluoroalkane sulfinic acids	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Perfluorooctane sulfinic acid	$\text{C}_8\text{F}_{17}\text{SO}_2\text{H}$	647-29-0	PFOSI

Perfluoroalkyl phosphonic acids	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Perfluorohexyl phosphonic acid	$\text{O}=\text{P}(\text{OH})_2\text{C}_6\text{F}_{13}$	40143-76-8	C6-PFPA
Perfluorooctyl phosphonic acid	$\text{O}=\text{P}(\text{OH})_2\text{C}_8\text{F}_{17}$	40143-78-0	C8-PFPA
Perfluorodecyl phosphonic acid	$\text{O}=\text{P}(\text{OH})_2\text{C}_{10}\text{F}_{21}$	52299-26-0	C10-PFPA

Perfluoroalkyl phosphinic acids	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Bis(perfluorohexyl) phosphinic acid	$\text{O}=\text{P}(\text{OH})(\text{C}_6\text{F}_{13})_2$	40143-77-9	C6/C6-PFPIA
Bis(perfluorooctyl) phosphinic acid	$\text{O}=\text{P}(\text{OH})(\text{C}_8\text{F}_{17})_2$	40143-79-1	C8/C8-PFPIA
Perfluoro(hexyloctyl) phosphinic acid	$\text{O}=\text{P}(\text{OH})(\text{C}_6\text{F}_{13})(\text{C}_8\text{F}_{17})$	610800-34-5	C6/C8-PFPIA

Perfluoroalkyl iodides	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Perfluoro (or pentafluoro)ethyl iodide	$\text{C}_2\text{F}_5\text{I}$	354-64-3	PFEI
Perfluorobutyl iodide	$\text{C}_4\text{F}_9\text{I}$	423-39-2	PFBI
Perfluorohexyl iodide	$\text{C}_6\text{F}_{13}\text{I}$	355-43-1	PFHxI
Perfluorooctyl iodide	$\text{C}_8\text{F}_{17}\text{I}$	507-63-1	PFOI
Perfluorodecyl iodide	$\text{C}_{10}\text{F}_{21}\text{I}$	423-62-1	PFDI

Perfluorododecyl iodide	C ₁₂ F ₂₅ I	307-60-8	PFDoDI
Perfluorotetradecyl iodide	C ₁₄ F ₂₉ I	307-63-1	PFTeDI
Perfluorohexadecyl iodide	C ₁₆ F ₃₃ I	355-50-0	PFHxDI
Perfluorooctadecyl iodide	C ₁₈ F ₃₇ I	29809-35-6	PFODI

(n:2) Fluorotelomer iodides	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:2 Fluorotelomer iodide	C ₄ F ₉ CH ₂ CH ₂ I	2043-55-2	4:2 FTI
6:2 Fluorotelomer iodide	C ₆ F ₁₃ CH ₂ CH ₂ I	2043-57-4	6:2 FTI
8:2 Fluorotelomer iodide	C ₈ F ₁₇ CH ₂ CH ₂ I	2043-53-0	8:2 FTI
10:2 Fluorotelomer iodide	C ₁₀ F ₂₁ CH ₂ CH ₂ I	2043-54-1	10:2 FTI
12:2 Fluorotelomer iodide	C ₁₂ F ₂₅ CH ₂ CH ₂ I	30046-31-2	12:2 FTI
14:2 Fluorotelomer iodide	C ₁₄ F ₂₉ CH ₂ CH ₂ I	65510-55-6	14:2 FTI
16:2 Fluorotelomer iodide	C ₁₆ F ₃₃ CH ₂ CH ₂ I	65150-94-9	16:2 FTI
18:2 Fluorotelomer iodide	C ₁₈ F ₃₇ CH ₂ CH ₂ I	65104-63-4	18:2 FTI

(n:2) Fluorotelomer olefins	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:2 Fluorotelomer olefin	C ₄ F ₉ CH=CH ₂	19430-93-4	4:2 FTO
6:2 Fluorotelomer olefin	C ₆ F ₁₃ CH=CH ₂	25291-17-2	6:2 FTO

8:2 Fluorotelomer olefin	$C_8F_{17}CH=CH_2$	21652-58-4	8:2 FTO
10:2 Fluorotelomer olefin	$C_{10}F_{21}CH=CH_2$	30389-25-4	10:2 FTO
12:2 Fluorotelomer olefin	$C_{12}F_{25}CH=CH_2$	67103-05-3	12:2 FTO

(n:2) Fluorotelomer alcohols	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:2-Fluorotelomer alcohol	$C_4F_9CH_2CH_2OH$	2043-47-2	4:2 FTOH
6:2-Fluorotelomer alcohol	$C_6F_{13}CH_2CH_2OH$	647-42-7	6:2 FTOH
8:2-Fluorotelomer alcohol	$C_8F_{17}CH_2CH_2OH$	678-39-7	8:2 FTOH
10:2-Fluorotelomer alcohol	$C_{10}F_{21}CH_2CH_2OH$	865-86-1	10:2 FTOH
12:2 Fluorotelomer alcohol	$C_{12}F_{25}CH_2CH_2OH$	39239-77-5	12:2 FTOH
14:2 Fluorotelomer alcohol	$C_{14}F_{29}CH_2CH_2OH$	60699-51-6	14:2 FTOH
16:2 Fluorotelomer alcohol	$C_{16}F_{33}CH_2CH_2OH$	65104-67-8	16:2 FTOH
18:2 Fluorotelomer alcohol	$C_{18}F_{37}CH_2CH_2OH$	65104-65-6	18:2 FTOH

(n:2) Fluorotelomer acrylates	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:2 Fluorotelomer acrylate	$C_4F_9CH_2CH_2OC(O)CH=CH_2$	52591-27-2	4:2 FTAC
6:2 Fluorotelomer acrylate	$C_6F_{13}CH_2CH_2OC(O)CH=CH_2$	17527-29-6	6:2 FTAC
8:2 Fluorotelomer acrylate	$C_8F_{17}CH_2CH_2OC(O)CH=CH_2$	27905-45-9	8:2 FTAC

10:2 Fluorotelomer acrylate	$C_{10}F_{21}CH_2CH_2OC(O)CH=CH_2$	17741-60-5	10:2 FTAC
12:2 Fluorotelomer acrylate	$C_{12}F_{25}CH_2CH_2OC(O)CH=CH_2$	34395-24-9	12:2 FTAC
14:2 Fluorotelomer acrylate	$C_{14}F_{29}CH_2CH_2OC(O)CH=CH_2$	34362-49-7	14:2 FTAC
16:2 Fluorotelomer acrylate	$C_{16}F_{33}CH_2CH_2OC(O)CH=CH_2$	65150-93-8	16:2 FTAC
18:2 Fluorotelomer acrylate	$C_{18}F_{37}CH_2CH_2OC(O)CH=CH_2$	65104-64-5	18:2 FTAC

(n:2) Fluorotelomer methacrylates	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:2 Fluorotelomer methacrylate	$C_4F_9CH_2CH_2OC(O)C(CH_3)=CH_2$	1799-84-4	4:2 FTMAC
6:2 Fluorotelomer methacrylate	$C_6F_{13}CH_2CH_2OC(O)C(CH_3)=CH_2$	2144-53-8	6:2 FTMAC
8:2 Fluorotelomer methacrylate	$C_8F_{17}CH_2CH_2OC(O)C(CH_3)=CH_2$	1996-88-9	8:2 FTMAC
10:2 Fluorotelomer methacrylate	$C_{10}F_{21}CH_2CH_2OC(O)C(CH_3)=CH_2$	2144-54-9	10:2 FTMAC
12:2 Fluorotelomer methacrylate	$C_{12}F_{25}CH_2CH_2OC(O)C(CH_3)=CH_2$	6014-75-1	12:2 FTMAC
14:2 Fluorotelomer methacrylate	$C_{14}F_{29}CH_2CH_2OC(O)C(CH_3)=CH_2$	4980-53-4	14:2 FTMAC
16:2 Fluorotelomer methacrylate	$C_{16}F_{33}CH_2CH_2OC(O)C(CH_3)=CH_2$	59778-97-1	16:2 FTMAC
18:2 Fluorotelomer methacrylate	$C_{18}F_{37}CH_2CH_2OC(O)C(CH_3)=CH_2$	65104-66-7	18:2 FTMAC

Polyfluoroalkyl phosphoric acid monoesters (= fluorotelomer phosphate monoesters)	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:2 Fluorotelomer phosphate monoester	$(\text{O})\text{P}(\text{OH})_2(\text{OCH}_2\text{CH}_2\text{C}_4\text{F}_9)$	150065-76-2	4:2 monoPAP
6:2 Fluorotelomer phosphate monoester	$(\text{O})\text{P}(\text{OH})_2(\text{OCH}_2\text{CH}_2\text{C}_6\text{F}_{13})$	57678-01-0	6:2 monoPAP
8:2 Fluorotelomer phosphate monoester	$(\text{O})\text{P}(\text{OH})_2(\text{OCH}_2\text{CH}_2\text{C}_8\text{F}_{17})$	57678-03-2	8:2 monoPAP
10:2 Fluorotelomer phosphate monoester	$(\text{O})\text{P}(\text{OH})_2(\text{OCH}_2\text{CH}_2\text{C}_{10}\text{F}_{21})$	57678-05-4	10:2 monoPAP
12:2 Fluorotelomer phosphate monoester	$(\text{O})\text{P}(\text{OH})_2(\text{OCH}_2\text{CH}_2\text{C}_{12}\text{F}_{25})$	57678-07-6	12:2 monoPAP
Polyfluoroalkyl phosphoric acid diesters (= fluorotelomer phosphate diesters)	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:2 Fluorotelomer phosphate diester	$(\text{O})\text{P}(\text{OH})(\text{OCH}_2\text{CH}_2\text{C}_4\text{F}_9)_2$	135098-69-0	4:2 diPAP
4:2/6:2 Fluorotelomer phosphate diester	$(\text{O})\text{P}(\text{OH})(\text{OCH}_2\text{CH}_2\text{C}_4\text{F}_9)(\text{OCH}_2\text{CH}_2\text{C}_6\text{F}_{13})$	1158182-59-2	4:2/6:2 diPAP
6:2 Fluorotelomer phosphate diester	$(\text{O})\text{P}(\text{OH})(\text{OCH}_2\text{CH}_2\text{C}_6\text{F}_{13})_2$	57677-95-9	6:2 diPAP
6:2/8:2 Fluorotelomer phosphate diester	$(\text{O})\text{P}(\text{OH})(\text{OCH}_2\text{CH}_2\text{C}_6\text{F}_{13})(\text{OCH}_2\text{CH}_2\text{C}_8\text{F}_{17})$	943913-15-3	6:2/8:2 diPAP
8:2 Fluorotelomer phosphate diester	$(\text{O})\text{P}(\text{OH})(\text{OCH}_2\text{CH}_2\text{C}_8\text{F}_{17})_2$	678-41-1	8:2 diPAP
8:2/10:2 Fluorotelomer phosphate diester	$(\text{O})\text{P}(\text{OH})(\text{OCH}_2\text{CH}_2\text{C}_8\text{F}_{17})(\text{OCH}_2\text{CH}_2\text{C}_{10}\text{F}_{21})$	1158182-60-5	8:2/10:2 diPAP
10:2 Fluorotelomer phosphate diester	$(\text{O})\text{P}(\text{OH})(\text{OCH}_2\text{CH}_2\text{C}_{10}\text{F}_{21})_2$	1895-26-7	10:2 diPAP
10:2/12:2 Fluorotel. phosphate diester	$(\text{O})\text{P}(\text{OH})(\text{OCH}_2\text{CH}_2\text{C}_{10}\text{F}_{21})(\text{OCH}_2\text{CH}_2\text{C}_{12}\text{F}_{25})$	1158182-61-6	10:2/12:2 diPAP
12:2 Fluorotelomer phosphate diester	$(\text{O})\text{P}(\text{OH})(\text{OCH}_2\text{CH}_2\text{C}_{12}\text{F}_{25})_2$	57677-99-3	12:2 diPAP

Semifluorinated <i>n</i>-alkanes	FORMULA	CAS REGISTRY NUMBER	ACRONYM
(Perfluorooctyl)ethane	$F(CF_2)_8(CH_2)_2H$	77117-48-7	F_8H_2
(Perfluorohexyl)octane	$F(CF_2)_6(CH_2)_8H$	133331-77-8	F_6H_8
(Perfluorohexyl)hexadecane	$F(CF_2)_6(CH_2)_{16}H$	133310-71-1	F_6H_{16}
(Perfluorooctyl)hexadecane	$F(CF_2)_8(CH_2)_{16}H$	117146-18-6	F_8H_{16}
(Perfluorohexadecyl)hexadecane	$F(CF_2)_{16}(CH_2)_{16}H$	137338-42-2	$F_{16}H_{16}$

Semifluorinated <i>n</i>-alkenes	FORMULA	CAS REGISTRY NUMBER	ACRONYM
(Perfluorohexyl)hexadecene	$F(CF_2)_6CH=CH(CH_2)_{14}H$	1244062-15-4	$F_6H_{16}ene$
(Perfluorooctyl)hexadecene	$F(CF_2)_8CH=CH(CH_2)_{14}H$	1244062-16-5	$F_8H_{16}ene$
(Perfluorohexadecyl)hexadecene	$F(CF_2)_{16}CH=CH(CH_2)_{14}H$	1244062-14-3	$F_{16}H_{16}ene$

(n:2) Fluorotelomer (saturated) aldehydes	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:2 Fluorotelomer aldehyde	$C_4F_9CH_2CHO$	135984-67-7	4:2 FTAL
6:2 Fluorotelomer aldehyde	$C_6F_{13}CH_2CHO$	56734-81-7	6:2 FTAL
8:2 Fluorotelomer aldehyde	$C_8F_{17}CH_2CHO$	135984-68-8	8:2 FTAL
10:2 Fluorotelomer aldehyde	$C_{10}F_{21}CH_2CHO$	864551-38-2	10:2 FTAL
12:2 Fluorotelomer aldehyde	$C_{12}F_{25}CH_2CHO$	None available	12:2 FTAL

(n:2) Fluorotelomer unsaturated aldehydes	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:2 Fluorotelomer unsaturated aldehyde	$C_3F_7CF=CHCHO$	864551-39-3	4:2 FTUAL
6:2 Fluorotelomer unsaturated aldehyde	$C_5F_{11}CF=CHCHO$	69534-12-9	6:2 FTUAL
8:2 Fluorotelomer unsaturated aldehyde	$C_7F_{15}CF=CHCHO$	58544-13-1	8:2 FTUAL
10:2 Fluorotelomer unsaturated aldehyde	$C_9F_{19}CF=CHCHO$	864551-40-6	10:2 FTUAL
12:2 Fluorotelomer unsaturated aldehyde	$C_{11}F_{23}CF=CHCHO$	None available	12:2 FTUAL

Perfluoroalkyl aldehydes	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Perfluoropentanal	C_4F_9CHO	375-53-1	PFPeAL
Perfluoroheptanal	$C_6F_{13}CHO$	63967-41-9	PFHpAL
Perfluorooctanal	$C_7F_{15}CHO$	335-60-4	PFOAL
Perfluorononanal	$C_8F_{17}CHO$	63967-40-8	PFNAL
Perfluoroundecanal	$C_{10}F_{21}CHO$	63967-42-0	PFUnDAL

Perfluoroalkyl aldehyde hydrates	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Perfluoropentanal hydrate	$C_4F_9CH(OH)_2$	355-30-6	PFPeAL.H ₂ O
Perfluoroheptanal hydrate	$C_6F_{13}CH(OH)_2$	64739-16-8	PFHpAL.H ₂ O
Perfluorononanal hydrate	$C_8F_{17}CH(OH)_2$	191528-99-1	PFNAL.H ₂ O
Perfluoroundecanal hydrate	$C_{10}F_{21}CH(OH)_2$	None Available	PFUnDAL.H ₂ O

(n:2) Fluorotelomer (saturated) carboxylic acids	FORMULA	CAS REGISTRY NUMBER	ACRONYM
6:2 Fluorotelomer carboxylic acid	$C_6F_{13}CH_2COOH$	53826-12-3	6:2 FTCA
8:2 Fluorotelomer carboxylic acid	$C_8F_{17}CH_2COOH$	27854-31-5	8:2 FTCA
10:2 Fluorotelomer carboxylic acid	$C_{10}F_{21}CH_2COOH$	53826-13-4	10:2 FTCA
12:2 Fluorotelomer carboxylic acid	$C_{12}F_{25}CH_2COOH$	70887-93-3	12:2 FTCA

(n:2) Fluorotelomer unsaturated carboxylic acids	FORMULA	CAS REGISTRY NUMBER	ACRONYM
6:2 Fluorotelomer unsaturated carboxylic acid	$C_5F_{11}CF=CHCOOH$	70887-88-6	6:2 FTUCA
8:2 Fluorotelomer unsaturated carboxylic acid	$C_7F_{15}CF=CHCOOH$	70887-84-2	8:2 FTUCA
10:2 Fluorotelomer unsaturated carboxylic acid	$C_9F_{19}CF=CHCOOH$	70887-94-4	10:2 FTUCA
12:2 Fluorotelomer unsaturated carboxylic acid	$C_{11}F_{23}CF=CHCOOH$	70887-95-5	12:2 FTUCA

Other biotransformation products of n:2 FTOHs	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:3 Acid	$C_4F_9(CH_2)_2COOH$	80705-13-1	4:3 Acid
5:3 Acid	$C_5F_{11}(CH_2)_2COOH$	914637-49-3	5:3 Acid
6:3 Acid	$C_6F_{13}(CH_2)_2COOH$	27854-30-4	6:3 Acid
7:3 Acid	$C_7F_{15}(CH_2)_2COOH$	812-70-4	7:3 Acid
5:3 Unsaturated carboxylic acid	$C_5F_{11}CH=CHCOOH$	1869-04-1 875878-70-9 (E)	5:3 UAcid
7:3 Unsaturated carboxylic acid	$C_7F_{15}CH=CHCOOH$	755-03-3 56017-63-1 (E) 173441-56-0 (Z)	7:3 UAcid

(n:2) Fluorotelomer sulfonic acids	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:2 Fluorotelomer sulfonic acid	$C_4F_9CH_2CH_2SO_3H$	757124-72-4	4:2 FTSA
6:2 Fluorotelomer sulfonic acid	$C_6F_{13}CH_2CH_2SO_3H$	27619-97-2	6:2 FTSA
8:2 Fluorotelomer sulfonic acid	$C_8F_{17}CH_2CH_2SO_3H$	39108-34-4	8:2 FTSA
10:2 Fluorotelomer sulfonic acid	$C_{10}F_{21}CH_2CH_2SO_3H$	120226-60-0	10:2 FTSA

(n:2) Fluorotelomer sulfonate anions	FORMULA	CAS REGISTRY NUMBER	ACRONYM
4:2 Fluorotelomer sulfonate anion	$C_4F_9CH_2CH_2SO_3^-$	414911-30-1	4:2 FTSA
6:2 Fluorotelomer sulfonate anion	$C_6F_{13}CH_2CH_2SO_3^-$	425670-75-3	6:2 FTSA
8:2 Fluorotelomer sulfonate anion	$C_8F_{17}CH_2CH_2SO_3^-$	481071-78-7	8:2 FTSA
10:2 Fluorotelomer sulfonate anion	$C_{10}F_{21}CH_2CH_2SO_3^-$	None available	10:2 FTSA

Perfluoroalkane sulfonyl fluorides	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Perfluorobutane sulfonyl fluoride	$C_4F_9SO_2F$	375-72-4	PBSF
Perfluoropentane sulfonyl fluoride	$C_5F_{11}SO_2F$	375-81-5	PPeSF
Perfluorohexane sulfonyl fluoride	$C_6F_{13}SO_2F$	423-50-7	PHxSF
Perfluoroheptane sulfonyl fluoride	$C_7F_{15}SO_2F$	335-71-7	PHpSF
Perfluorooctane sulfonyl fluoride	$C_8F_{17}SO_2F$	307-35-7	POSF
Perfluorononane sulfonyl fluoride	$C_9F_{19}SO_2F$	68259-06-3	PNSF
Perfluorodecane sulfonyl fluoride	$C_{10}F_{21}SO_2F$	307-51-7	PDSF

Perfluoroalkane sulfonamides	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Perfluorobutane sulfonamide	C ₄ F ₉ SO ₂ NH ₂	30334-69-1	FBSA
Perfluoropentane sulfonamide	C ₅ F ₁₁ SO ₂ NH ₂	82765-76-2	FPeSA
Perfluorohexane sulfonamide	C ₆ F ₁₃ SO ₂ NH ₂	41997-13-1	FHxSA
Perfluoroheptane sulfonamide	C ₇ F ₁₅ SO ₂ NH ₂	82765-77-3	FHpSA
Perfluorooctane sulfonamide	C ₈ F ₁₇ SO ₂ NH ₂	754-91-6	FOSA
<i>N</i>-Methyl perfluoroalkane sulfonamides	FORMULA	CAS REGISTRY NUMBER	ACRONYM
<i>N</i> -Methyl perfluorobutane sulfonamide	C ₄ F ₉ SO ₂ NH(CH ₃)	68298-12-4	MeFBSA
<i>N</i> -Methyl perfluoropentane sulfonamide	C ₅ F ₁₁ SO ₂ NH(CH ₃)	68298-13-5	MeFPeSA
<i>N</i> -Methyl perfluorohexane sulfonamide	C ₆ F ₁₃ SO ₂ NH(CH ₃)	68259-15-4	MeFHxSA
<i>N</i> -Methyl perfluoroheptane sulfonamide	C ₇ F ₁₅ SO ₂ NH(CH ₃)	68259-14-3	MeFHpSA
<i>N</i> -Methyl perfluorooctane sulfonamide	C ₈ F ₁₇ SO ₂ NH(CH ₃)	31506-32-8	MeFOSA
<i>N</i>-Ethyl perfluoroalkane sulfonamides	FORMULA	CAS REGISTRY NUMBER	ACRONYM
<i>N</i> -Ethyl perfluorobutane sulfonamide	C ₄ F ₉ SO ₂ NH(C ₂ H ₅)	40630-67-9	EtFBSA
<i>N</i> -Ethyl perfluoropentane sulfonamide	C ₅ F ₁₁ SO ₂ NH(C ₂ H ₅)	162682-16-8	EtFPeSA
<i>N</i> -Ethyl perfluorohexane sulfonamide	C ₆ F ₁₃ SO ₂ NH(C ₂ H ₅)	87988-56-5	EtFHxSA

<i>N</i> -Ethyl perfluoroheptane sulfonamide	$C_7F_{15}SO_2NH(C_2H_5)$	68957-62-0	EtFHpSA
<i>N</i> -Ethyl perfluorooctane sulfonamide	$C_8F_{17}SO_2NH(C_2H_5)$ (sulfluramid)	4151-50-2	EtFOSA
<i>N,N</i>-Dialkyl perfluoroalkane sulfonamides	FORMULA	CAS REGISTRY NUMBER	ACRONYM
<i>N,N</i> -Dimethyl perfluorooctane sulfonamide	$C_8F_{17}SO_2N(CH_3)_2$	213181-78-3	Me ₂ FOSA
<i>N,N</i> -Diethyl perfluorooctane sulfonamide	$C_8F_{17}SO_2N(C_2H_5)_2$	87988-61-2	Et ₂ FOSA

Perfluoroalkane sulfonamido ethanols	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Perfluorobutane sulfonamidoethanol	$C_4F_9SO_2NHCH_2CH_2OH$	34454-99-4	FBSE
Perfluoropentane sulfonamidoethanol	$C_5F_{11}SO_2NHCH_2CH_2OH$	None available	FPeSE
Perfluorohexane sulfonamidoethanol	$C_6F_{13}SO_2NHCH_2CH_2OH$	106443-63-4	FHxSE
Perfluoroheptane sulfonamidoethanol	$C_7F_{15}SO_2NHCH_2CH_2OH$	167398-54-1	FHpSE
Perfluorooctane sulfonamidoethanol	$C_8F_{17}SO_2NHCH_2CH_2OH$	10116-92-4	FOSE

Perfluoroalkane sulfonamidoacetic acids	FORMULA	CAS REGISTRY NUMBER	ACRONYM
Perfluorobutane sulfonamidoacetic acid	$C_4F_9SO_2NHCH_2COOH$	347872-22-4	FBSAA
Perfluoropentane sulfonamidoacetic acid	$C_5F_{11}SO_2NHCH_2COOH$	647-43-8	FPeSAA
Perfluorohexane sulfonamidoacetic acid	$C_6F_{2n+1}SO_2NHCH_2COOH$	1003193-99-4	FHxSAA
Perfluoroheptane sulfonamidoacetic acid	$C_7F_{15}SO_2NHCH_2COOH$	1003194-00-0	FHpSAA
Perfluorooctane sulfonamidoacetic acid	$C_8F_{17}SO_2NHCH_2COOH$	2806-24-8	FOSAA

<i>N</i>-Methyl perfluoroalkane sulfonamidoethanols	FORMULA	CAS REGISTRY NUMBER	ACRONYM
<i>N</i> -Methyl perfluorobutane sulfonamidoethanol	$C_4F_9SO_2N(CH_3)CH_2CH_2OH$	34454-97-2	MeFBSE
<i>N</i> -Methyl perfluoropentane sulfonamidoethanol	$C_5F_{11}SO_2N(CH_3)CH_2CH_2OH$	68555-74-8	MeFPeSE
<i>N</i> -Methyl perfluorohexane sulfonamidoethanol	$C_6F_{13}SO_2N(CH_3)CH_2CH_2OH$	68555-75-9	MeFHxSE
<i>N</i> -Methyl perfluoroheptane sulfonamidoethanol	$C_7F_{15}SO_2N(CH_3)CH_2CH_2OH$	68555-76-0	MeFHpSE
<i>N</i> -Methyl perfluorooctane sulfonamidoethanol	$C_8F_{17}SO_2N(CH_3)CH_2CH_2OH$	24448-09-7	MeFOSE

<i>N</i>-Ethyl perfluoroalkane sulfonamidoethanols	FORMULA	CAS REGISTRY NUMBER	ACRONYM
<i>N</i> -Ethyl perfluorobutane sulfonamidoethanol	C ₄ F ₉ SO ₂ N(C ₂ H ₅)CH ₂ CH ₂ OH	34449-89-3	EtFBSE
<i>N</i> -Ethyl perfluoropentane sulfonamidoethanol	C ₅ F ₁₁ SO ₂ N(C ₂ H ₅)CH ₂ CH ₂ OH	68555-72-6	EtFPeSE
<i>N</i> -Ethyl perfluorohexane sulfonamidoethanol	C ₆ F ₁₃ SO ₂ N(C ₂ H ₅)CH ₂ CH ₂ OH	34455-03-3	EtFHxSE
<i>N</i> -Ethyl perfluoroheptane sulfonamidoethanol	C ₇ F ₁₅ SO ₂ N(C ₂ H ₅)CH ₂ CH ₂ OH	68555-73-7	EtFHpSE
<i>N</i> -Ethyl perfluorooctane sulfonamidoethanol	C ₈ F ₁₇ SO ₂ N(C ₂ H ₅)CH ₂ CH ₂ OH	1691-99-2	EtFOSE

<i>N</i>-Methyl perfluoroalkane sulfonamidoacetic acids and salts	FORMULA	CAS REGISTRY NUMBER	ACRONYM
<i>N</i> -Methyl perfluorobutane sulfonamidoacetic acid	C ₄ F ₉ SO ₂ N(CH ₃)CH ₂ COOH	159381-10-9	MeFBSAA
<i>N</i> -Methyl perfluorohexane sulfonamidoacetic acid	C ₆ F ₁₃ SO ₂ N(CH ₃)CH ₂ COOH	715646-50-7	MeFHxSAA
<i>N</i> -Methyl perfluorooctane sulfonamidoacetic acid	C ₈ F ₁₇ SO ₂ N(CH ₃)CH ₂ COOH	2355-31-9	MeFOSAA
Potassium <i>N</i> -methyl perfluorooctane sulfonamidoacetate	K ⁺ C ₈ F ₁₇ SO ₂ N(CH ₃)CH ₂ COO ⁻	70281-93-5	K-MeFOSAA

<i>N</i>-Ethyl perfluoroalkane sulfonamidoacetic acids and salts	FORMULA	CAS REGISTRY NUMBER	ACRONYM
<i>N</i> -Ethyl perfluorobutane sulfonamidoacetic acid	$C_4F_9SO_2N(C_2H_5)CH_2COOH$	68957-33-5	EtFBSAA
<i>N</i> -Ethyl perfluoropentane sulfonamidoacetic acid	$C_5F_{11}SO_2N(C_2H_5)CH_2COOH$	68957-31-3	EtFPeSAA
<i>N</i> -Ethyl perfluorohexane sulfonamidoacetic acid	$C_6F_{13}SO_2N(C_2H_5)CH_2COOH$	68957-32-4	EtFHxSAA
<i>N</i> -Ethyl perfluoroheptane sulfonamidoacetic acid	$C_7F_{15}SO_2N(C_2H_5)CH_2COOH$	68957-63-1	EtFHpSAA
<i>N</i> -Ethyl perfluorooctane sulfonamidoacetic acid	$C_8F_{17}SO_2N(C_2H_5)CH_2COOH$	2991-50-6	EtFOSAA
Potassium <i>N</i> -ethyl perfluorooctane sulfonamidoacetate	$K^+ C_8F_{17}SO_2N(C_2H_5)CH_2COO^-$	2991-51-7	K-EtFOSAA

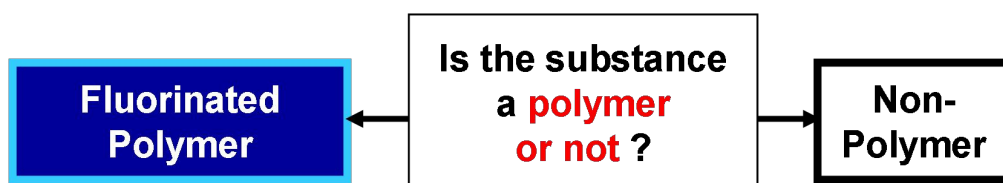
<i>N</i>-Methyl perfluoroalkane sulfonamidoethyl acrylates	FORMULA	CAS REGISTRY NUMBER	ACRONYM
<i>N</i> -Methyl perfluorobutane sulfonamidoethyl acrylate	$C_4F_9SO_2N(CH_3)CH_2CH_2OC(O)CH=CH_2$	67584-55-8	MeFBSAC
<i>N</i> -Methyl perfluoropentane sulfonamidoethyl acrylate	$C_5F_{11}SO_2N(CH_3)CH_2CH_2OC(O)CH=CH_2$	67584-56-9	MeFPeSAC
<i>N</i> -Methyl perfluorohexane sulfonamidoethyl acrylate	$C_6F_{13}SO_2N(CH_3)CH_2CH_2OC(O)CH=CH_2$	67584-57-0	MeFHxSAC

<i>N</i> -Methyl perfluoroheptane sulfonamidoethyl acrylate	$C_7F_{15}SO_2N(CH_3)CH_2CH_2OC(O)CH=CH_2$	68084-62-8	MeFHpSAC
<i>N</i> -Methyl perfluorooctane sulfonamidoethyl acrylate	$C_8F_{17}SO_2N(CH_3)CH_2CH_2OC(O)CH=CH_2$	25268-77-3	MeFOSAC
<i>N</i>-Ethyl perfluoroalkane sulfonamidoethyl acrylates	FORMULA	CAS REGISTRY NUMBER	ACRONYM
<i>N</i> -Ethyl perfluorobutane sulfonamidoethyl acrylate	$C_4F_9SO_2N(C_2H_5)CH_2CH_2OC(O)CH=CH_2$	17329-79-2	EtFBSAC
<i>N</i> -Ethyl perfluoropentane sulfonamidoethyl acrylate	$C_5F_{11}SO_2N(C_2H_5)CH_2CH_2OC(O)CH=CH_2$	68298-06-6	EtFPeSAC
<i>N</i> -Ethyl perfluorohexane sulfonamidoethyl acrylate	$C_6F_{13}SO_2N(C_2H_5)CH_2CH_2OC(O)CH=CH_2$	1893-52-3	EtFHxSAC
<i>N</i> -Ethyl perfluoroheptane sulfonamidoethyl acrylate	$C_7F_{15}SO_2N(C_2H_5)CH_2CH_2OC(O)CH=CH_2$	59071-10-2	EtFHpSAC
<i>N</i> -Ethyl perfluorooctane sulfonamidoethyl acrylate	$C_8F_{17}SO_2N(C_2H_5)CH_2CH_2OC(O)CH=CH_2$	423-82-5	EtFOSAC
<i>N</i>-Methyl perfluoroalkane sulfonamidoethyl methacrylates	FORMULA	CAS REGISTRY NUMBER	ACRONYM
<i>N</i> -Methyl perfluorobutane sulfonamidoethyl methacrylate	$C_4F_9SO_2N(CH_3)CH_2CH_2OC(O)C(CH_3)=CH_2$	67584-59-2	MeFBSMAC
<i>N</i> -Methyl perfluoropentane sulfonamidoethyl methacrylate	$C_5F_{11}SO_2N(CH_3)CH_2CH_2OC(O)C(CH_3)=CH_2$	67584-60-5	MeFPeSMAC
<i>N</i> -Methyl perfluorohexane sulfonamidoethyl methacrylate	$C_6F_{13}SO_2N(CH_3)CH_2CH_2OC(O)C(CH_3)=CH_2$	67584-61-6	MeFHxSMAC

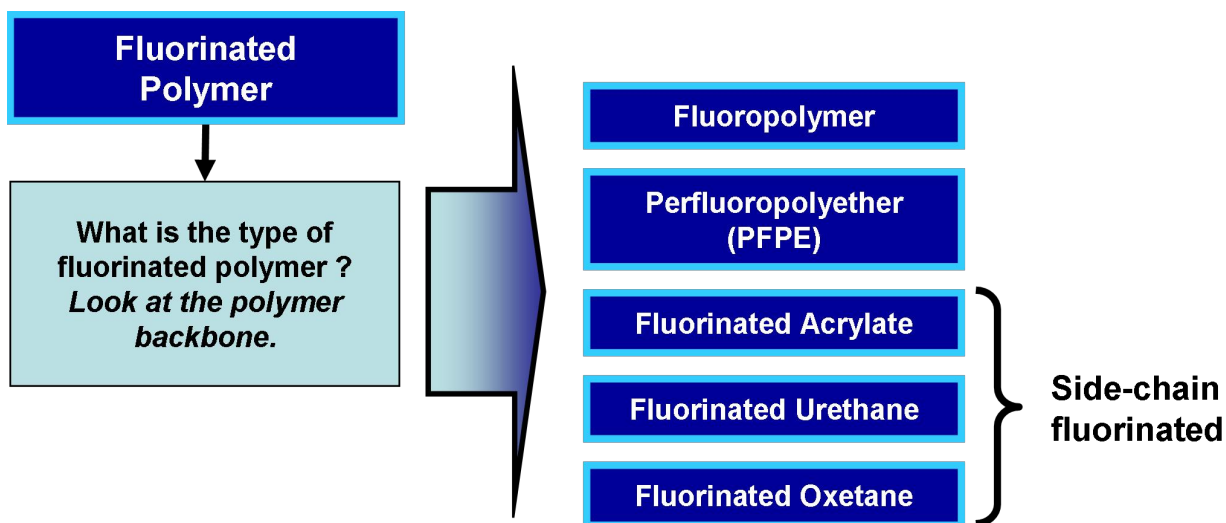
<i>N</i> -Methyl perfluoroheptane sulfonamidoethyl methacrylate	$C_7F_{15}SO_2N(CH_3)CH_2CH_2OC(O)C(CH_3)=CH_2$	67939-96-2	MeFHpSMAC
<i>N</i> -Methyl perfluorooctane sulfonamidoethyl methacrylate	$C_8F_{17}SO_2N(CH_3)CH_2CH_2OC(O)C(CH_3)=CH_2$	14650-24-9	MeFOSMAC
<i>N</i>-Ethyl perfluoroalkane sulfonamidoethyl methacrylates	FORMULA	CAS REGISTRY NUMBER	ACRONYM
<i>N</i> -Ethyl perfluorobutane sulfonamidoethyl methacrylate	$C_4F_9SO_2N(C_2H_5)CH_2CH_2OC(O)C(CH_3)=CH_2$	67939-33-7	EtFBSMAC
<i>N</i> -Ethyl perfluoropentane sulfonamidoethyl methacrylate	$C_5F_{11}SO_2N(C_2H_5)CH_2CH_2OC(O)C(CH_3)=CH_2$	67906-73-4	EtFPeSMAC
<i>N</i> -Ethyl perfluorohexane sulfonamidoethyl methacrylate	$C_6F_{13}SO_2N(C_2H_5)CH_2CH_2OC(O)C(CH_3)=CH_2$	67906-70-1	EtFHxSMAC
<i>N</i> -Ethyl perfluoroheptane sulfonamidoethyl methacrylate	$C_7F_{15}SO_2N(C_2H_5)CH_2CH_2OC(O)C(CH_3)=CH_2$	67939-36-0	EtFHpSMAC
<i>N</i> -Ethyl perfluorooctane sulfonamidoethyl methacrylate	$C_8F_{17}SO_2N(C_2H_5)CH_2CH_2OC(O)C(CH_3)=CH_2$	376-14-7	EtFOSMAC

Figure S1. Terminology Decision Flowcharts

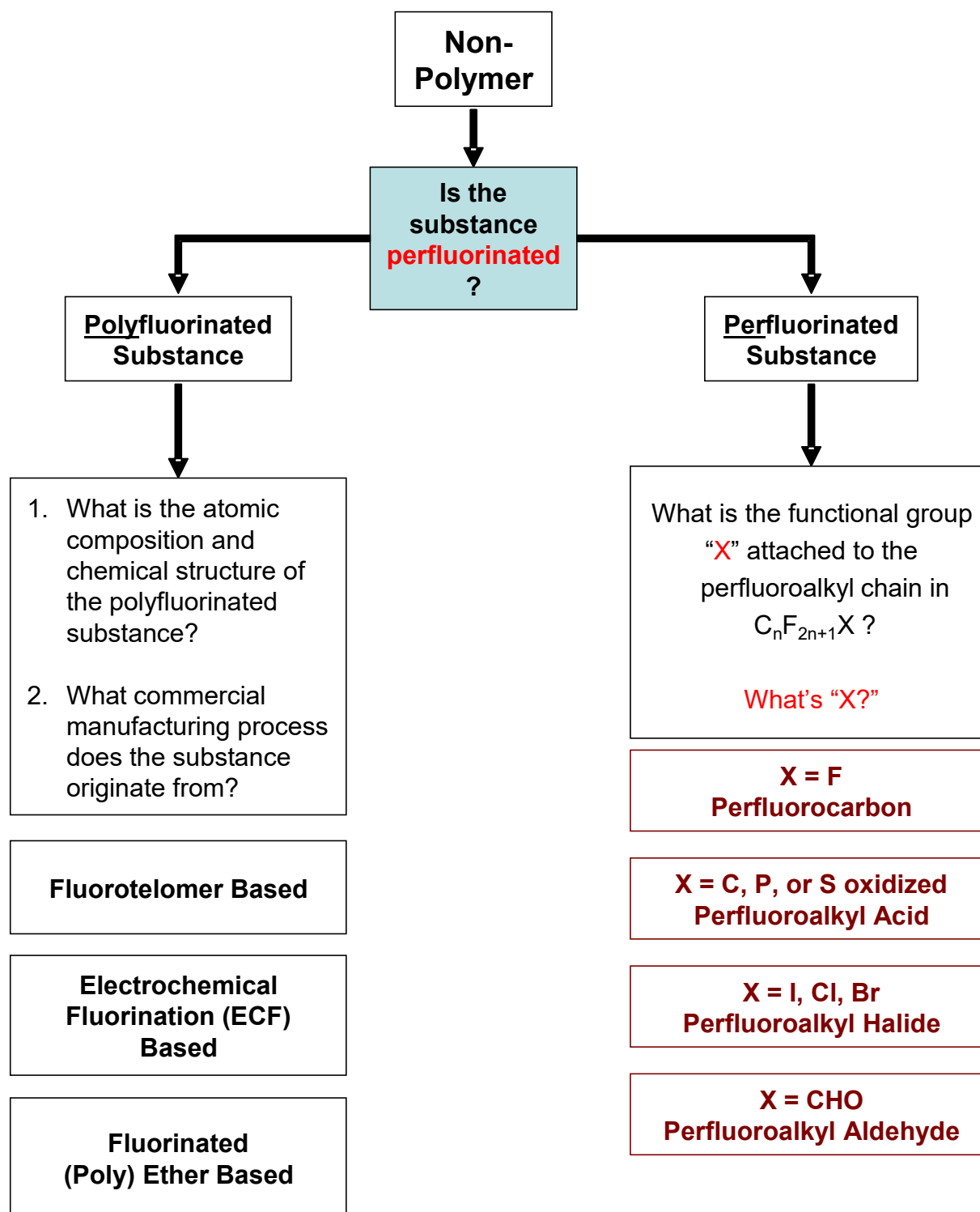
How to determine nomenclature – **an Overview**



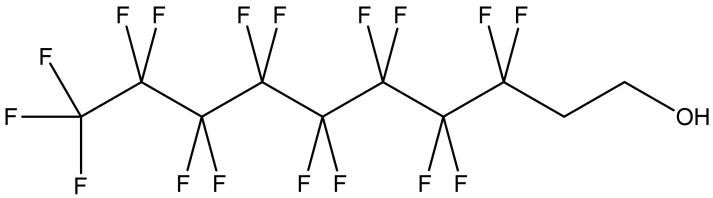
Fluorinated Polymer Decision



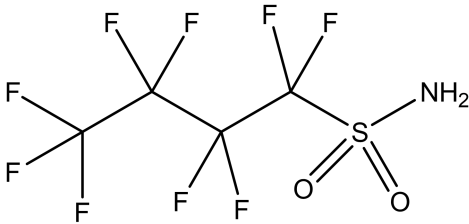
Non-Polymer Decision Tree



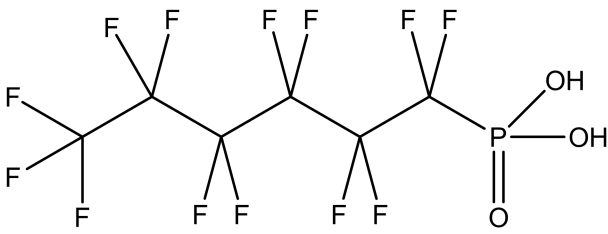
Example #1 8:2 Fluorotelomer alcohol

Substance Chemical Structure	Question	Conclusion
$\text{F}(\text{CF}_2)_8\text{CH}_2\text{CH}_2\text{OH}$ 	Polymer or Non-Polymer?	Non-Polymer
$\text{F}(\text{CF}_2)_8\text{CH}_2\text{CH}_2\text{OH}$	Perfluorinated? <i>No. The substance has a perfluoroalkyl chain, $\text{F}(\text{CF}_2)_8$-, but all hydrogen on carbons are not replaced with fluorine</i>	Poly-fluorinated
$\text{F}(\text{CF}_2)_8\text{CH}_2\text{CH}_2\text{OH}$	Process Origin? <i>Perfluoroalkyl chain with an ethylene spacer ($-\text{CH}_2\text{CH}_2-$). Fluorotelomer origin</i>	Fluoro-telomer origin
$\text{F}(\text{CF}_2)_8\text{CH}_2\text{CH}_2\text{OH}$	Functionality <i>Alcohol</i>	Fluoro-telomer Alcohol (FTOH)
$\text{F}(\text{CF}_2)_8\text{CH}_2\text{CH}_2\text{OH}$	<i>Eight fluorinated carbons, two non-fluorinated carbons, therefore 8:2</i>	8:2 Fluoro-telomer Alcohol (8:2 FTOH)

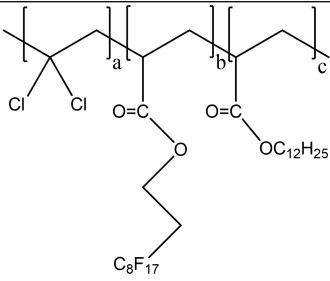
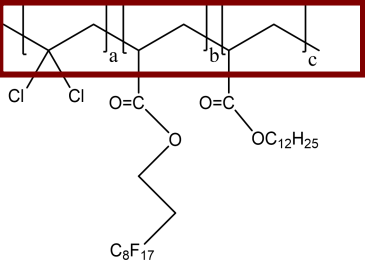
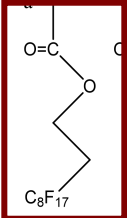
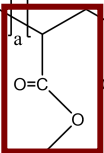
Example #2 Perfluorobutane sulfonamide

Substance Chemical Structure	Question	Conclusion
$\text{F}(\text{CF}_2)_4\text{SO}_2\text{NH}_2$ 	Polymer or Non-Polymer?	Non-Polymer
$\text{F}(\text{CF}_2)_4\text{SO}_2\text{NH}_2$	Perfluorinated? <i>Yes. All hydrogens on all four carbons are replaced with fluorine. Perfluorobutyl</i>	Perfluorinated
$\text{F}(\text{CF}_2)_4\text{SO}_2\text{NH}_2$	Perfluoroalkyl Acid? <i>No. Has no acid functionality</i>	
$\text{F}(\text{CF}_2)_4\text{SO}_2\text{NH}_2$	Process Origin? <i>Perfluoroalkyl chain with a sulfone, -SO₂-, spacer. Electrochemical fluorination (ECF) origin</i>	ECF origin
$\text{F}(\text{CF}_2)_4\text{SO}_2\text{NH}_2$	Functionality <i>Sulfonamide</i>	Perfluorobutane-sulfonamide (FBSA)

Example #3 Perfluorohexyl phosphonic acid

Substance Chemical Structure	Question	Conclusion
$\text{F}(\text{CF}_2)_6\text{P}(=\text{O})(\text{OH})_2$ 	Polymer or Non-Polymer?	Non-Polymer
$\text{F}(\text{CF}_2)_6\text{P}(=\text{O})(\text{OH})_2$	Perfluorinated? <i>Yes. All hydrogens on all six carbons are replaced with fluorine. Perfluorohexyl</i>	Perfluorinated
$\text{F}(\text{CF}_2)_6\text{P}(=\text{O})(\text{OH})_2$	Perfluoroalkyl Acid? <i>Yes. Phosphonic, -P(=O)(OH)₂, acid</i>	Perfluoroalkyl acid
$\text{F}(\text{CF}_2)_6\text{P}(=\text{O})(\text{OH})_2$		Perfluorohexyl phosphonic acid (C6-PFPA)

Example #4 Side-chain Fluorinated Acrylate Polymer (Fluorotelomer origin)

Substance Chemical Structure	Question	Conclusion
	Polymer or Non-Polymer?	Polymer
	Fluoropolymer? <i>No. The polymer backbone contains no fluorine bound to carbon.</i>	
	Side-chain fluorinated? Yes	Side-chain fluorinated polymer
	Polymer Type? <i>Acrylate</i>	Side-chain fluorinated acrylate polymer