



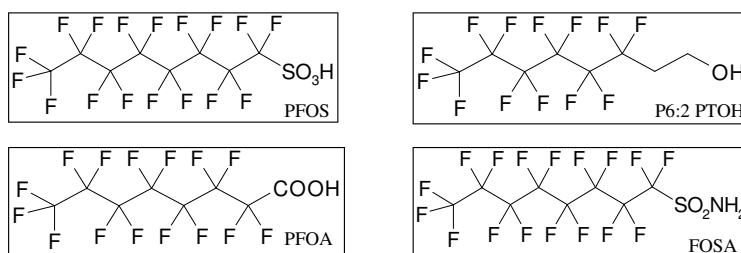
BMF 20 - Perfluorinated Organic Compounds

Perfluorinated Organic Compounds (PFCs) are used in numerous commercial products like fire protection agents, textile protection agents, floor polishers, detergents, paints, paper treatment agents and electronic equipment.

The first PFAs (PFCs = Perfluorinated alkanic acids, alcohols and sulfonic acids) were based on Perfluorooctanesulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA). However, due to environmental reports with warning about the bioaccumulation of these compounds, new and more readily biodegradable substances have been introduced. Typically, these are various telomeric acids, alcohols and sulfonamides.



The biodegradation-route of the commercial telomers is currently under investigation and new metabolites are likely to be found. Chiron now offers a large range of PFCs and its telomeric acid, alcohols and possible metabolites.



PFAs - Perfluorinated alkanic acids and alcohols

PFA Sulfonic acids:	2041.4-50-ME	Perfluorobutane sulfonic acid	PFBS
	2719.4-50-ME	Perfluorobutane sulphonate, potassium salt	PFBS-K
	8581.6-50-ME	Perfluorohexane sulfonic acid, potassium salt	PFHxS-K
	2037.8-50-ME	Perfluorooctane sulfonic acid	PFOS
	2193.8-50-ME	Perfluorooctane sulfonic acid, potassium salt	PFOS-K
	8012.8-100MG	Perfluorooctane sulfonylfluoride	
	2192.8-50-ME	Perfluoro-4-ethylcyclohexane sulfonic acid, potassium salt	
Telomeric PFA Sulfonic acid:	2559.8-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluorooctane sulfonic acid	
PFA Sulfonamides:	2043.8-50-AN	Perfluorooctane sulfonamide	FOSA
PFA Acids:	2190.3-50-ME	Perfluoropropionic acid, sodium salt	PFPrA-Na
	2810.4-50-ME	Perfluorobutyric acid	PFBA
	2189.4-50-ME	Perfluorobutyric acid, sodium salt	PBBA-Na
	2834.5-50-ME	5 <i>H</i> -Perfluoropentanoic acid	5H PFPA
	2819.5-50-ME	<i>n</i> -Perfluoropentanoic acid	PFPA
	2590.6-50-ME	Perfluorohexanoic acid	PFHxA
	2820.7-50-ME	Perfluorocyclohexanoic acid	PF _{Cy} HxA
	2835.7-50-ME	7 <i>H</i> -Perfluoroheptanoic acid	7H PFHPA
	2821.7-50-ME	<i>n</i> -Perfluoroheptanoic acid	PFHpA
	2042.8-50-ME	<i>n</i> -Perfluorooctanoic acid	PFOA
	2822.8-50-ME	<i>n</i> -Perfluorooctanoic acid, ammonium salt	PFOA-NH ₄
	2191.8-50-ME	Perfluorooctanoic acid, sodium salt	PFOA-Na
	2836.9-50-ME	9 <i>H</i> -Perfluorononanoic acid	9H PFNA
	2715.9-50-ME	Perfluorononanoic acid	PFNA
	2823.10-50-ME	<i>n</i> -Perfluorodecanoic acid	PFDA
	2824.10-50-ME	Perfluoro-3,7-dimethyloctanoic acid	PF3,7DiMeOA
	2825.11-50-ME	11 <i>H</i> -Perfluoroundecanoic acid	11H PFUndA
	2874.11-50-ME	Perfluoroundecanoic acid	PFUndA
	2826.12-50-ME	<i>n</i> -Perfluorododecanoic acid	PFDDa
	2827.14-50-ME	Perfluorotetradecanoic acid	PFTeDA
	2828.16-50-ME	Perfluorohexadecanoic acid	PFHxDA
	2829.18-50-ME	Perfluorooctadecanoic acid	PFODa
Telomeric acids :	2830.6-50-ME	2 <i>H</i> ,2 <i>H</i> ,3 <i>H</i> ,3 <i>H</i> -Perfluorohexanoic acid	3:3 FTCA
	2831.9-50-ME	2 <i>H</i> ,2 <i>H</i> ,3 <i>H</i> ,3 <i>H</i> -Perfluorononanoic acid	6:3 FTCA
	2832.9-50-ME	1 <i>H</i> ,1 <i>H</i> -Perfluoro-3,5,5-trimethylhexanoic acid	3,5,5-TriMe 5:1
	8548.10-50-ME	2 <i>H</i> ,2 <i>H</i> -Perfluorodecanoic acid	H2PFDA
	8547.11-50-ME	2 <i>H</i> ,2 <i>H</i> ,3 <i>H</i> ,3 <i>H</i> -Perfluoroundecanoic acid	H4PFUnA

Unsaturated telomeric acid:	2833.6-50-ME	2 <i>H</i> ,3 <i>H</i> -Perfluorohex-2-enoic acid	3:3 FTUCA	
PFA Acid Internal standards:	2834.5-50-ME	5 <i>H</i> -Perfluoropentanoic acid	5 <i>H</i> PFBA	
	2835.7-50-ME	7 <i>H</i> -Perfluoroheptanoic acid	7 <i>H</i> PFHPA	
	2836.9-50-ME	9 <i>H</i> -Perfluorononanoic acid	9 <i>H</i> PFNA	
	2825.11-50-ME	11 <i>H</i> -Perfluoroundecanoic acid	11 <i>H</i> PFUnDA	
PFA amides:	2837.4-50-ME	Perfluorobutyramide		
	2838.8-50-ME	Perfluorooctanamide		
		PFA alcohols		
Telomeric alcohols:	2839.4-50-ME	3,3,4,4,4-Perfluorobutan-1-ol	2:2 FTOH	
	2860.5-50-ME	1 <i>H</i> ,1 <i>H</i> ,5 <i>H</i> -Perfluoropentan-1-ol	5 <i>H</i> 4:1 FTOH	
	8802.6-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluorohexan-1-ol (2-Perfluorobutyl ethanol)	4:2 FTOH	
	2841.6-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> ,3 <i>H</i> ,3 <i>H</i> -Perfluorohexan-1-ol	3:3 FTOH	
	2842.6-50-ME	1 <i>H</i> ,1 <i>H</i> -Perfluorohexan-1-ol	5:1 FTOH	
	2861.7-50-ME	1 <i>H</i> ,1 <i>H</i> ,7 <i>H</i> -Perfluoroheptan-1-ol	7 <i>H</i> 6:1 FTOH	
	2843.7-50-ME	1 <i>H</i> ,1 <i>H</i> -Perfluoroheptan-1-ol	6:1 FTOH	
	2147.8-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluorooctan-1-ol	6:2 FTOH	
	2146.8-50-ME	1 <i>H</i> ,1 <i>H</i> ,8 <i>H</i> -Perfluorooctane-1-ol	8 <i>H</i> 7:1 FTOH	
	2145.8-50-ME	1 <i>H</i> ,1 <i>H</i> -Perfluorooctane-1-ol	7:1 FTOH	
	2844.9-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> ,3 <i>H</i> ,3 <i>H</i> -Perfluorononan-1-ol	6:3 FTOH	
	2847.9-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluoro-7-methyloctan-1-ol	7Me 6:1 FTOH	
	2846.9-50-ME	1 <i>H</i> ,1 <i>H</i> ,9 <i>H</i> -Perfluorononan-1-ol	9 <i>H</i> 8:1 FTOH	
	2845.9-50-ME	1 <i>H</i> ,1 <i>H</i> -Perfluorononan-1-ol	8:1 FTOH	
	2851.10-50-ME	1 <i>H</i> ,1 <i>H</i> ,10 <i>H</i> ,10 <i>H</i> -Perfluoro-1,10-decanediol	1:8:1 FTdiOH	
	2849.10-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluorodecan-1-ol	8:2 FTOH	
	2848.10-50-ME	1 <i>H</i> ,1 <i>H</i> -Perfluorodecan-1-ol	9:1 FTOH	
	2850.10-50-ME	1 <i>H</i> ,1 <i>H</i> -Perfluoro-3,7-dimethyloctan-1-ol	3,7-DiMe 7:1 FTOH	
	2854.11-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluoro-9-methyldecan-1-ol	9Me 8:2 FTOH	
	2853.11-50-ME	1 <i>H</i> ,1 <i>H</i> ,11 <i>H</i> -Perfluoroundecan-1-ol	11 <i>H</i> 10:1 FTOH	
	2852.11-50-ME	1 <i>H</i> ,1 <i>H</i> -Perfluoroundecan-1-ol	10:1 FTOH	
	2767.12-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluorododecan-1-ol	10:2 FTOH	
	3821.13-50-ME	1 <i>H</i> ,1 <i>H</i> ,13 <i>H</i> -Perfluorotridecan-1-ol	13 <i>H</i> 12:1 FTOH	
	2855.14-50-ME	1 <i>H</i> ,1 <i>H</i> -Perfluorotetradecan-1-ol	13:1 FTOH	
	2856.16-50-ME	1 <i>H</i> ,1 <i>H</i> -Perfluorohexadecan-1-ol	15:1 FTOH	
	2857.18-50-ME	1 <i>H</i> ,1 <i>H</i> -Perfluorooctadecan-1-ol	17:1 FTOH	
	Allylic alcohols:	2858.6-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,3 <i>H</i> -Perfluorohex-2-en-1-ol	Allylic 3:3 FTOH
		2859.9-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,3 <i>H</i> -Perfluoronon-2-en-1-ol	Allylic 6:3 FTOH
	Internal Standards:	2860.5-50-ME	1 <i>H</i> ,1 <i>H</i> ,5 <i>H</i> -Perfluoropentan-1-ol	5 <i>H</i> 4:1 FTOH
		2861.7-50-ME	1 <i>H</i> ,1 <i>H</i> ,7 <i>H</i> -Perfluoroheptan-1-ol	7 <i>H</i> 6:1 FTOH
		2146.8-50-ME	1 <i>H</i> ,1 <i>H</i> ,8 <i>H</i> -Perfluorooctane-1-ol	8 <i>H</i> 7:1 FTOH
		9825.10-10MG	1 <i>D</i> ,1 <i>D</i> ,2 <i>H</i> ,2 <i>H</i> -1-Hydroxyperfluorodecan	
	PFA aldehydes:	2862.7-50-ME	7 <i>H</i> -Perfluoroheptanal	
	PFA esters:	9228.13-50-ME	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluorodecyl acrylate	8:2 FTO acrylic acid, Repellion 120 C1
9520.13-50-ME		1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluorodecyl acrylate-d3	8:2 FTO acrylic acid-d3	
9519.14-50-ME		1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluorodecyl methacrylate	8:2 FTO methacrylic acid	
9521.14-50-ME		1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluorodecyl methacrylate-d5	8:2 FTO methacrylic acid-d5	
Fluoroalkanes:	8400.6-1ML	Perfluoro- <i>n</i> -hexane		
	8401.7-1ML	Perfluoroheptane, isomer mixture		
	8402.8-1ML	Perfluoro- <i>n</i> -octane		
	8403.9-1ML	Perfluoro- <i>n</i> -nonane		
	8404.10-100MG	Perfluoro- <i>n</i> -decane		
	8405.11-1G	1 <i>H</i> -Perfluoro- <i>n</i> -undecane		
	8406.12-100MG	Perfluoro- <i>n</i> -dodecane		
	8407.13-1G	Perfluoro- <i>n</i> -tridecane		
	8408.14-100MG	Perfluoro- <i>n</i> -tetradecane		
	8409.15-100MG	Perfluoro- <i>n</i> -pentadecane		
	8410.16-100MG	Perfluoro- <i>n</i> -hexadecane		
	8414.20-100MG	Perfluoro- <i>n</i> -eicosane		
	Cyclic fluoroalkanes/PAHs:	8416.10-10G	Perfluorodecalin (mix <i>E/Z</i>)	
8417.14-10G		Perfluoro(ethyl)dimethyldecalin)		
8418.14-10G		Perfluoroperhydrophenanthrene		
8029.10-10G		Perfluoronaphthalene		
Chlorinated fatty acids:	3746.18-100-ME	9-Chloro- /10-Chlorooctadecanoic acid		
	3745.16-100-ME	7,8-Dichlorohexadecanoic acid		
	3622.18-100-ME	9,10-Dichlorooctadecanoic acid		
	3747.18-100-ME	9,10- <i>l</i> , 9,13- <i>l</i> , 10,12- <i>l</i> , 10,13-		
	3748.18-100-ME	9,10,12,13-Tetrachlorooctadecanoic acid		

