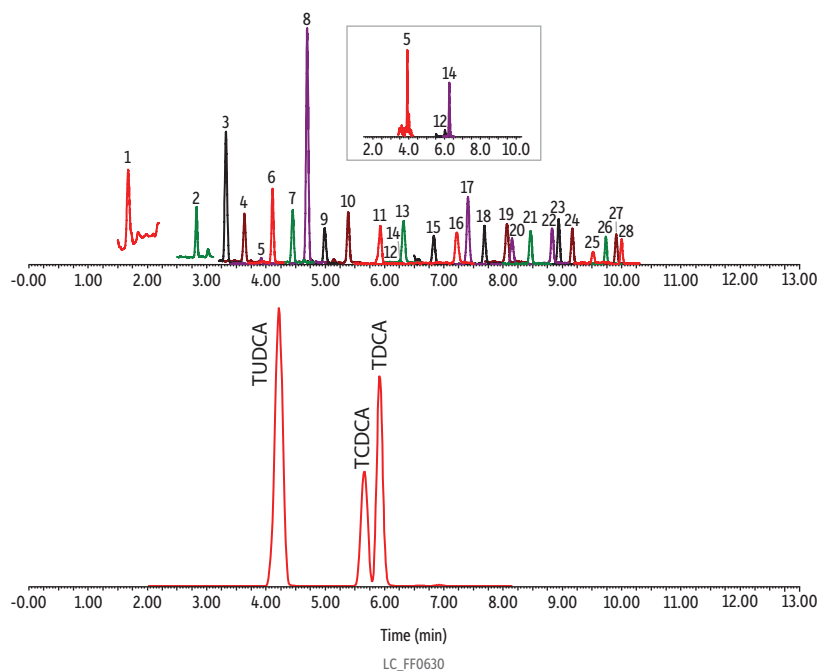


PFAS in Milk Fortified at 0.01 µg/kg on Force C18 by LC-MS/MS



Peaks	Precursor Ion 1	Product Ion	Column	Force C18 (cat.# 9634352)
1. Perfluorobutanoic acid (PFBA)	212.94	168.89	Dimensions:	50 mm x 2.1 mm ID
2. Perfluoropentanoic acid (PFPeA)	262.93	218.89	Particle Size:	3 µm
3. Perfluorobutane sulfonic acid (PFBS)	298.96	79.97	Pore Size:	100 Å
4. Perfluorohexanoic acid (PFHxA)	313.09	119.03	Guard Column:	Force EXP C18 guard cartridge 5 mm, 2.1 mm ID (cat.# 963450252)
5. Hexafluoropropylene oxide dimer acid (HFPO-DA)	284.86	168.88	Temp.:	50 °C
6. Perfluoropentane sulfonic acid (PFPeS)	349.10	79.98	Standard/Sample	PFAS 28 calibration standard (cat.# 30734) Other standards obtained externally.
7. Perfluoroheptanoic acid (PFHpA)	363.15	169.06	Diluent:	Methanol:water (60:40)
8. Ammonium 4,8-dioxa-3H-perfluorononanoate (ADONA)	376.90	84.97	Conc.:	Analytes spiked at 0.01 µg/kg in milk
9. Perfluorohexane sulfonic acid (PFHxS)	398.80	79.82	Inj. Vol.:	5 µL
10. Perfluorooctanoic acid (PFOA)	413.09	168.90	Mobile Phase	
11. Perfluoroheptane sulfonic acid (PFHpS)	448.78	79.82	A:	Water, 5 mM ammonium acetate
12. 1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[[[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)sulfonyl]amino]-, hydroxide (Capstone B)	568.81	548.85	B:	Methanol:acetonitrile (50:50)
13. Perfluorononanoic acid (PFNA)	463.09	219.01		
14. 1-Propanaminium, N,N-dimethyl-N-oxide-3-[[[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)sulfonyl]amino]-, hydroxide (Capstone A)	526.90	180.96		
15. Perfluorooctane sulfonic acid (PFOS)	498.78	79.89		
16. Perfluorodecanoic acid (PFDA)	513.16	219.06		
17. 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	530.77	350.85		
18. Perfluorononane sulfonic acid (PFNS)	548.65	79.89	Max Pressure:	360 bar
19. Perfluoroundecanoic acid (PFUnA)	562.78	268.82	Detector	Waters Xevo TQ Absolute
20. Perfluorooctane sulfonic acid (FOSA)	497.75	77.87	Ion Mode:	ESI-
21. Perfluorodecane sulfonic acid (PFDS)	598.78	98.82	Mode:	MRM
22. Perfluorododecanoic acid (PFDoA)	612.52	318.90	Instrument	Waters ACQUITY Premier
23. 11-Chloroicosadecanoic acid (11Cl-PF30UDS)	630.71	450.81	Sample Preparation	Ten grams of milk were weighed into a 50 mL centrifuge tube (cat.# 25846) and fortified at 0.01 µg/kg. Isotopically labeled internal standards (50 µL) were spiked into the sample and briefly vortexed. Acetonitrile (10 mL); formic acid (150 µL); and a Q-sep QuEChERS extraction salt packet (cat.# 25847) were added to the sample and vortexed for ~30 seconds. The samples were transferred to a shaker table and shaken for 10 minutes. The samples were then centrifuged for 5 minutes at 4200 rpm. The supernatant was aliquoted into a Q-sep QuEChERS dSPE 15 mL centrifuge tube containing 900 mg MgSO ₄ ; 300 mg PSA; and 150 mg GCB (cat.# 26126) and then vortexed for ~30 seconds followed by centrifuging for 5 minutes at 4200 rpm. The supernatant was aliquoted (6 mL) into a clean 15 mL centrifuge tube and dried down at 35 °C for 90 minutes using a Biotage TurboVap. The samples were reconstituted in methanol:water 60:40 (400 µL); vortexed for ~30 seconds; and centrifuged for 5 minutes at 4200 rpm. The supernatant was aliquoted into a polypropylene vial (cat.# 23243) and capped with a polyethylene screw cap (cat.# 23244) and 5 µL was injected for analysis.
24. Perfluoroundecane sulfonic acid (PFUnDS)	648.65	79.88		
25. Perfluorotridecanoic acid (PFTrDA)	662.78	168.87		
26. Perfluorododecane sulfonic acid (PFDoS)	698.71	79.89		
27. Perfluorotetradecanoic acid (PFTeDA)	712.78	168.87		
28. Perfluorotridecane sulfonic acid (PFTrDS)	748.59	79.88		

Notes: A PFAS delay column (cat.# 27854) was installed before the injector.