

Analytical Results for PFAS in Domestically Acquired Clams Collected in FY23

Note: Nine domestically acquired clam samples (1 frozen, 4 raw (in-shell), and 4 canned) were collected at retail in the Washington, D.C. metro area and were analyzed for 20 PFAS analytes in FY23. Eight of the nine samples had PFAS detected, with PFOS being the most frequently detected analyte (6 samples). One sample had a PFOA detection of 0.032 ppb.

Measured Concentrations in ng/g (ppb)

Sample	Type	PFBA* MDL = 0.345	PFPeA* MDL = 0.207	PFHxA MDL = 0.048	PFHpA MDL = 0.043	PFOA MDL = 0.024	PFNA MDL = 0.029	PFDA MDL = 0.022	PFUdA MDL = 0.030	PFDoA MDL = 0.016	PFTeDA MDL = 0.068	PFTeDA MDL = 0.030	PFBS MDL = 0.021	PFPeS MDL = 0.028	PFHxS MDL = 0.035	PFHpS MDL = 0.036	PFOS MDL = 0.028	HFPO-DA MDL = 0.034	DONA MDL = 0.025	9CI-PF3ONS MDL = 0.020	11CI-PF3OUdS MDL = 0.017
Clam 1	Frozen	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL
Clam 2	Raw, in-shell	< MDL	< MDL	< MDL	< MDL	0.032	0.044	0.059	0.037	0.038	0.077	0.059	< MDL	< MDL	< MDL	< MDL	0.054	< MDL	< MDL	< MDL	< MDL
Clam 3	Raw, in-shell	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	0.079	0.052	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL
Clam 4	Raw, in-shell	< MDL	< MDL	< MDL	< MDL	< MDL	0.064	< MDL	< MDL	< MDL	0.072	0.041	< MDL	< MDL	< MDL	< MDL	0.049	< MDL	< MDL	< MDL	< MDL
Clam 5	Raw, in-shell	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	0.043	< MDL	< MDL	< MDL	< MDL
Clam 6	Canned	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	0.068	< MDL	< MDL	< MDL	< MDL	< MDL	0.040	< MDL	< MDL	< MDL	< MDL
Clam 7	Canned	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	0.105	< MDL	< MDL	< MDL	< MDL	< MDL	0.055	< MDL	< MDL	< MDL	< MDL
Clam 8	Canned	< MDL	< MDL	< MDL	< MDL	< MDL	0.025	< MDL	< MDL	< MDL	< MDL	0.064	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL
Clam 9	Canned	< MDL	< MDL	< MDL	< MDL	< MDL	0.034	0.036	< MDL	0.031	< MDL	0.056	< MDL	< MDL	< MDL	< MDL	0.052	< MDL	< MDL	< MDL	< MDL

*All PFBA and PFPeA detects were confirmed using High-Resolution Mass Spectrometry (HR-MS).

Legend

Acronym	Name	CAS	Formula	Nominal Mass
PFBA	Perfluorobutanoic acid	375-22-4	C ₄ HF ₇ O ₂	214
PFPeA	Perfluoropentanoic acid	2706-90-3	C ₅ HF ₉ O ₂	264
PFHxA	Perfluorohexanoic acid	307-24-4	C ₆ HF ₁₁ O ₂	314
PFHpA	Perfluoroheptanoic acid	375-85-9	C ₇ HF ₁₃ O ₂	364
PFOA	Perfluorooctanoic acid	335-67-1	C ₈ HF ₁₅ O ₂	414
PFNA	Perfluorononanoic acid	375-95-1	C ₉ HF ₁₇ O ₂	464
PFDA	Perfluorodecanoic acid	335-76-2	C ₁₀ HF ₁₉ O ₂	514
PFUdA	Perfluoroundecanoic acid	2058-94-8	C ₁₁ HF ₂₁ O ₂	564
PFDoA	Perfluorododecanoic acid	206-203-2	C ₁₂ HF ₂₃ O ₂	614
PFTTrDA	Perfluorotridecanoic acid	276-745-2	C ₁₃ HF ₂₅ O ₂	664
PFTeDA	Perfluorotetradecanoic acid	376-06-7	C ₁₄ HF ₂₇ O ₂	714
PFBS	Perfluorobutanesulfonic acid	375-73-5	C ₄ HF ₉ O ₃ S	300
PFPeS	Perfluoropentanesulfonic acid	2706-91-4	C ₅ HF ₁₁ O ₃ S	350
PFHxS	Perfluorohexanesulfonic acid	355-46-4	C ₆ HF ₁₃ O ₃ S	400
PFHpS	Perfluoroheptanesulfonic acid	375-92-8	C ₇ HF ₁₅ O ₃ S	450
PFOS	Perfluorooctanesulfonic acid	1763-23-1	C ₈ HF ₁₇ O ₃ S	500
HFPO-DA	Hexafluoropropylene oxide dimer acid	13252-13-6	C ₆ HF ₁₁ O ₃	330
DONA	4,8-Dioxa-3H-perfluorononanoic acid	919005-14-4	C ₇ H ₂ F ₁₂ O ₄	378
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	756426-58-1	C ₈ ClF ₁₆ O ₄ S	532
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9	C ₁₀ HClF ₂₀ O ₄ S	632

CAS = Chemical Abstract Service Number

MDL = Method Detection Limit. Method Detection Limit is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

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