

Common PFAS molecules in the environment

<https://mytapscore.com/blogs/tips-for-taps/the-ultimate-guide-to-pfas>

PFAS TERMINOLOGY

PFAS

"forever chemicals"

PFAS—per- and polyfluoroalkyl substances—are a family of thousands of human-made chemicals valued for their water and oil repellent properties, heat resistance, and durability. They have been used widely in a variety of industries and products since the 1950s, and have been detected in the environment and in people worldwide.

PFAS are persistent in the environment and can bioaccumulate in living organisms, earning them the nickname "forever chemicals." This is especially concerning due to their wide range of potential health effects, including increased risk of cancer, developmental impacts and impacts to the immune system, liver and kidneys.

PFOS

Long-chain PFAS

PFOS—perfluorooctanesulfonic acid—was first manufactured by 3M and used as the key ingredient in Scotchguard. It was used in a variety of consumer products including carpet treatments, upholstery, and waterproof coatings, and in the production of firefighting foams.

PFOA

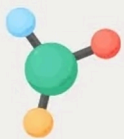
Long-chain PFAS

PFOA—perfluorooctanoic acid—was commonly used in the production of non-stick coatings, such as Teflon, as well as in stain-resistant carpets, upholstery, clothing, sealants and food packaging, as well as in the production of firefighting foams.

GenX

Short-chain PFAS

GenX was developed as an alternative to PFOA. It was thought to be less persistent, but instead earned the moniker "the regrettable substitution" when studies showed it had similar toxicological effects as PFOA.



Long-chain & short-chain

"Long-chain" and "short-chain" PFAS refer to the number of carbon atoms in the individual PFAS compounds. They often have similar toxicological impacts, but short-chain PFAS are more mobile in the environment, just as resistant to degradation and can be more difficult to remove from water depending on the treatment technology used.