

PERFLUORONATED COMPOUNDS (PFCs)

Introduction: Perfluorinated Compounds (PFCs) and Perfluorooctanoic Acid (PFOA also known as “C8”) are man-made chemicals and do not occur naturally in the environment. PFOA PFCs are persistent organic pollutants (POPs) which means that they last a long time in the environment and can reside in the human body for many years.



What are they used for: PFCs and PFOA belong to a family of chemicals called Fluoropolymers which have many useful properties such as fire resistance and the ability to repel oil, stains, grease and water. This makes PFOA ideal for use in non-stick surfaces for cookware and for protective coatings on clothing. PFOA is used to make Teflon and thousands of other nonstick and stain and water-repellent products including sprays and coatings.

Where they're found: PFCs are present in Teflon and other nonstick or stain and water-repellent coatings as a trace impurity. This means that small amounts of PFCs remain in the product. These coatings are used on cookware, waterproof breathable clothing, furniture, carpets and are used in many industrial applications. PFCs are also sometimes used in cosmetics and personal care products. PFCs can be released when consumer products that contain it breakdown.

Health Effects Summary: Recent studies have shown evidence that PFCs interfere with normal reproduction by adversely affecting fertility. It has also been shown to cause developmental toxicity that results in birth defects. Evidence of PFCs causing cancer has also been found.

How we are exposed: We are exposed to PFCs by inhaling contaminated air, eating contaminated food and drinking contaminated water. Some researchers have found that nonstick pans give off PFOA vapours which then contaminate food.

PFOAs (PFOS, PFHxS and PFNA) have been detected in a major part of the North American population tested in a biomonitoring study (2003-2004). When levels of these compounds are found in the human body it does not mean that they are related to adverse health effects or will cause them. However, this data helps scientists develop guidelines and make associations that lead to further testing.

CHEMICAL *FACTSHEETS*

What you can do to reduce exposure: You can reduce potential exposure by using stainless steel or cast iron cookware. If you use nonstick cookware, be careful not to overheat the pot or pan as this could release PFOA-containing fumes. Also, it is best to throw away old nonstick pots and pans that are scratched as this too can release PFOA.

You can avoid the use of waterproofing products used on shoes, coats and other clothing. Also, you can minimize fast food intake as some of their food containers are coated with perfluorinated compounds (PFCs) to protect the packaging. You can check cosmetics' labels and avoid buying those with the words "fluoro" or "perfluoro" on the ingredients.