

TECHNICAL SERVICES DOCUMENT

PFAS and PPE

What it means to the end user

(Revision 03/2023)

PFAS defined

PFAS are a group of over 9,000 chemicals, per- and polyfluoroalkyl substances. PFAS are found in a variety of materials from carpets to cosmetics. Because of their widespread use and their persistency, PFAS can be found in the blood of people and animals all over the world and can be present at low levels in some food products as well as the environment. Research has shown a sharp decline in certain PFAS levels over the past 20 years, but that does not mean the potential dangers have passed.

PFAS in PPE

PFAS also are commonly used in firefighting turnout gear because of their ability to dissipate heat and their water resistance properties. Ongoing research is being completed by the CDC as well as other agencies to evaluate the long-term health effects of these chemicals versus other potential toxins that are encountered on a regular basis by these responders. At the time of this publication, the ACGIH has determined Threshold Limit Values for only 3 of the 9,000 chemicals in this family.

Kappler Products

Here at Kappler we are committed to bringing the best products to our customers. Although PFAS are present in the outer layer of our gas tight visor system as well as our Durachem® 200, neither material contains PFOA or PFOS. This specificity is important, as these are two PFAS compounds of greatest concern. An important note is that these products do not have sustained contact with the wearer's skin.

While research and development are ongoing for PFAS compounds and their future uses, every effort must be made to compare risk versus reward. Studies demonstrate the work being done to reduce exposures has paid off. Kappler will continue to monitor research on PFAS chemistry and update this standard as more information becomes available.

Temporal Trends:
Long Alkyl Chain PFAS

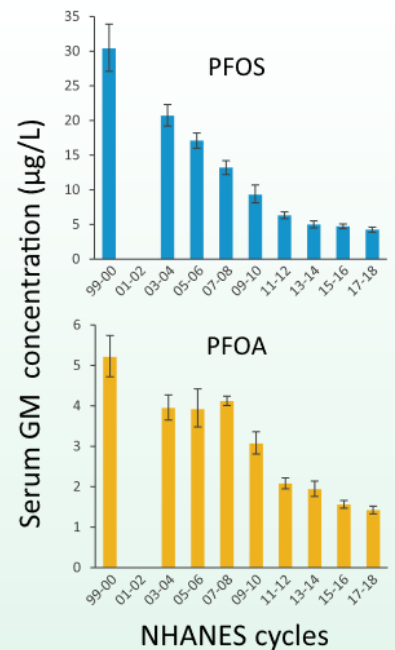


Figure 1: Trend of human blood serum geometric mean PFAS levels for various years. Graphic courtesy of NHANES.

Warning

The information contained herein is based on technical data that Kappler believes to be reliable. It is subject to revision as additional knowledge and experience are gained. Please visit our website at www.Kappler.com ("Kappler Website") for the most up to date product information and specifications. All pamphlets, brochures or other literature or printed material may contain information that is not as current as the information on Kappler's website. Additionally, there are uses, environments and chemicals for which Kappler products, garments and/or fabrics are unsuitable. The user has the responsibility to review all available data and verify the product, garment and/or fabric is appropriate for the intended use and meets all specified government and/or industry standards for such use. The user should review all available information on the Kappler Website, product labels and QR codes to understand the appropriate uses and limitations of Kappler products, garments and fabrics.

CAUTION: Do not use for fire protection. Avoid open flame or intense heat.

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