



SGS NORTH AMERICA PFAS COMPOUNDS FREQUENTLY ASKED QUESTIONS

What is PFAS?

PFAS compounds are a large group of over 3,000 man-made fluorine-containing chemicals with unique properties that make materials to which they are applied stain and stick resistant. PFAS chemicals are used to repel oil and water from clothing, carpeting, and furniture, in food packaging and on non-stick cookware surfaces. These chemicals are very resistant to breakdown or transform to very persistent compounds. They also migrate easily and concentrate in the food chain. As a result, they may be found throughout the environment in groundwater, surface water, soil, and air, as well as in food.

Why is PFAS such a large concern?

Due to their persistence in the environment, PFAS concentrations have been found in human blood samples worldwide. Human exposure to PFAS is mainly by ingestion of contaminated food or water. Some of these compounds are not metabolized, bind to proteins, and are detected in blood, liver and kidneys.

Some studies have shown possible health effects including: an increase in cholesterol; an increase in uric acid; thyroid disease; testicular and kidney cancer; pregnancy complications, including hypertension, diabetes and a decrease in birth weight; effects on the immune system; and more.

Why so many different names?

Scientists and experts in the field refer to the same chemicals by different names. PFCs is an older description referring to a group of toxic chemicals that include PFOA and PFOS, and other per-fluoroalkyl substances. EPA is now trying to use "per- and polyfluoroalkyl substances (PFASs)" rather than "perfluorinated chemicals (PFCs)" consistently to collectively describe PFOA, PFOS and the other chemicals in this group. PFCAs (perfluorocarboxylate acids) describe compounds, such as PFOA, with perfluorinated carbon chains and carboxylate groups. PFSA (perfluorosulfonic acids) describe compounds with perfluorinated chains and carboxylate groups. Precursors are PFAS compounds which can degrade or transform to PFCAs and PFASAs.



When should sampling of PFAS be considered?

PFAS sampling should be considered at locations where certain activities have occurred or where related wastes have been disposed. These include facilities where PFAS has been manufactured or used as an additive in further manufacturing (i.e. textile, carpet manufacturers); landfills where leaching of PFAS from disposal of products that contain PFAS; former or current DoD and aviation civilian sites where there has been use of AFFF; airport hangers and other facilities that store firefighting foams; firefighting training areas; crash sites (including aircraft and motor vehicle sites); metal coating and plating facilities; water treatment systems; and receiving water bodies and large rail yards.

Are there any federal drinking water standards established for PFOA and PFOS?

Though there is no federal drinking water standards established for PFOA and PFOS. In 2016, the EPA released Drinking Water Health Advisories of 70 parts per trillion for the sum of PFOS and PFOA to protect Americans from adverse health effects caused by a lifetime of exposure to PFOA and PFOS in drinking water. Some states have issued state guidelines for specific PFAS compounds in both water and soil.

What is the Total Oxidizable Precursors (TOP) screening process?

The TOP screening process transforms PFAS precursors in a sample to a measurable and identifiable perfluorinated carboxylic acid. This procedure allows for measuring PFAS compounds that could be converted to terminal PFCAs and PFSAAs over time. This will provide a better understanding in exposing potential contamination sources.

How can I learn more?

If you have any additional questions please contact your sales person, PM or email us at PFAS.Expert@sgs.com for more information.



If no comment/approve, please X here:

___ SG

___ CG – just two edits/ please remove the line highlighted in red per HB

___ KH

___ KM

___ RM

___ JU several questoins

___ Cherie G

___ Kevin G.