

IS TOTAL FLUORINE SCREENING ENOUGH?

SAFE SUSTAINABLE SOLUTIONS



WHY CHROMATOGRAPHIC PFAS ANALYSIS IS THE SMARTEST DECISION

Total Fluorine (TF) and **Total Organic Fluorine (TOF)** are increasingly used as **first-level screening tools** in the context of the **EU Packaging and Packaging Waste Regulation (PPWR)**, but **they are not designed to identify or quantify individual PFAS**. For this reason, they rarely answer the most important question companies face: **is the material truly compliant and defensible if asked which PFAS are actually present?**

The Limits of Total Fluorine Screening

PPWR regulates PFAS with a **global limit** (50 mg/kg) and **substance-specific thresholds** (25 µg/kg single, 250 µg/kg total), but:

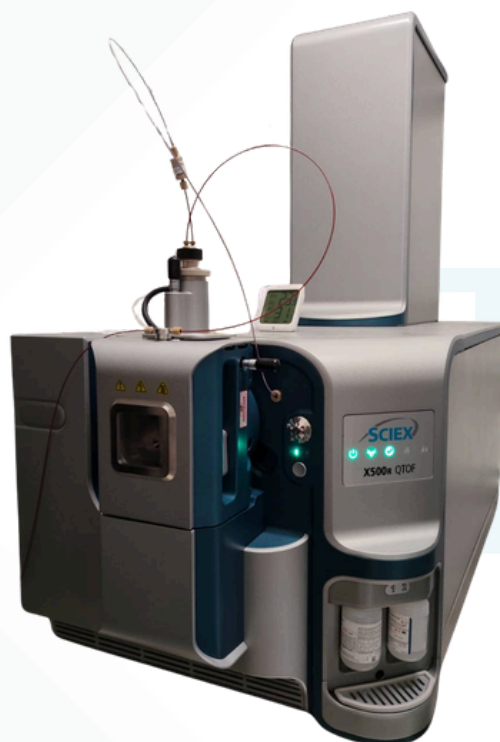
- Some **short-chain or telomeric PFAS** can exceed the limits without significantly affecting total fluorine
- A material can have **low total fluorine** while still containing PFAS above the thresholds
- Total fluorine is useful for **screening and prioritization**, but does **not identify which PFAS are present**

Why Screening Alone can be Risky

Total fluorine measurements do not indicate which PFAS are present or their concentrations. Since some PFAS contribute little to the total fluorine content, a material may pass TF or TOF screening while still containing individual substances above the specific thresholds as shown by [some market studies](#).

Independent testing confirms that materials with low total fluorine can still contain **individual PFAS above 25 µg/kg**. This reflects PFAS chemistry: **short-chain or telomeric compounds** have only a limited impact on total fluorine values.

When PFAS are later identified by customers, NGOs, or independent testing programs, **the lack of substance-specific data can become a technical, commercial, or reputational challenge**.



- demonstrate compliance with substance-specific thresholds;
- support technical documentation and due diligence;
- respond confidently to customer or authority requests.

- Accredited LC-HRMS methods for the quantification of PFAS
- GC-based techniques for additional compound classes
- TOP Assay to evaluate potential PFAS precursors where relevant
- TF and TOF measurements as supporting information within a broader analytical strategy

Unlike non-specific screening parameters, Chromatographic methods generate substance-level evidence that is transparent, robust and defensible.

Total Fluorine
< 50 mg/kg



- ## Laboratory Management