

PFAS testing and certification services for plastics

In today’s world, toxic-free plastics are playing a big role in enhancing sustainability and human health. In particular, perfluoroalkyl and polyfluoroalkyl substances (PFAS) have emerged as a critical focus due to their widespread use and enduring impact on both ecosystems and human health. PFAS, also known as forever chemicals, are the subject of increased attention from governments and technical committees.

PFAS regulations

PFAS are used to make fluoropolymer coatings and products that resist water, dirt, oil, heat, stains and grease. They can be found in many products, including textiles, food packaging, cookware, cosmetics, paint, pesticides and electronics.

The broad usage of PFAS, and the health impacts increasingly associated with long-term contact, make it important to reduce the exposure of humans and the environment to these toxic substances. Within the last several years, new global and regional chemical regulations have been introduced to control and eliminate the use of PFAS for specific applications.

PFAS-free regulations are being implemented, especially in the U.S. and in the European Union.

Non-Fluorine and Non-PFAS Certification

Keeping track of which regulation applies where, while at the same time offering customers transparency and compliant products is a complex challenge. As a result of this constant demand from the market to evaluate and showcase non-PFAS materials, UL Standards & Engagement is pleased to announce the publication of **UL746G – Outline of Investigation for Non-Fluorine and Non-PFAS Containing Materials**.

This outline defines the requirements for an optional Non-Fluorine or Non-PFAS rating for plastic materials. Materials that are found to comply with these requirements will be searchable and have the rating published on their individual Recognition cards (Yellow Cards) under QMFZ2 (Certification for Plastics - Component).

- Non-fluorine materials: Plastic materials recognized as non-fluorine contain <50 ppm of fluorine.



Component - Plastics
Guide Information
A Plastic Co
333 Pflingsten Rd, Northbrook, IL 60062
Grade 100
Polypropylene (PP), furnished as pellets

Color	Min. Thk (mm)	Flame Class	HWI	HAI	RTI Elec (°C)	RTI Imp (°C)	RTI Str (°C)
ALL	1.5	V-0	-	-	65	65	65
	3.0	V-0	-	-	65	65	65

Comparative Tracking Index (CTI): -
Dielectric Strength (kV/mm): -
High-Voltage Arc Tracking Rate (HVTR): -
Dimensional Change (%): -

Inclined Plane Tracking (IPT) kV: -
Volume Resistivity (10⁸ ohm-cm): -
Surface Resistivity (10⁸ ohms/square): -
High Volt, Low Current Arc Resis (D495): -

UL 746G Non-PFAS (color: ALL) [view certificate](#)

ANSI/UL 94 small scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

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UL
ALSO CERTIFIED TO IEC REQUIREMENTS

- Non-PFAS materials: Plastic materials recognized as non-PFAS contain <50 ppm of fluorine and <25 ppb of specific PFAS content (listed in Table 8.2 of UL746G) and <250 ppb of total specific PFAS content.

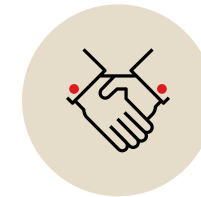


- Non-PFAS w/ total fluorine >50 mg/kg not due to polymeric PFAS: Plastic materials recognized as Non-PFAS w/ total fluorine >50 mg/kg not due to polymeric PFAS contains <25 ppb of specific PFAS content (listed in Table 8.2 of UL746G) and <250 ppb or total specific PFAS content, but has >50 ppm fluorine not due to polymeric PFAS. (Note: A thorough and complete material formulation review is required to verify that the fluorine in the materials is not due to PFAS.)

Materials that are found to comply with the requirements mentioned above will be searchable and have the rating published on their individual Recognition cards. The Recognition card substantiates that a material has been assessed to meet the requirements and helps provide confidence that you are using a tested and certified material that will be monitored at regular intervals by an independent test laboratory.

Non-PFAS Certification benefits:

- An easy means for specifiers and other purchasers to find plastics that meet non-PFAS requirements
- Elimination of repetitive lot testing or repeated declarations
- Evaluation through globally recognized standards and test methods
- Ability to communicate compliance clearly and credibly on Product iQ and Prospector
- Streamlined safety evaluation with non-PFAS evaluation to reduce time to market
- Inclusion of PFAS as a part of Follow-Up Services (FUS) involves regular sample testing that provides confidence that products continue to meet safety and performance requirements.



PFAS-free regulations are being implemented around the world. Does your material contain PFAS?



Do you want to check with us? PFAS testing @ UL Solutions



Do you want to change formulation or qualify a new product? UL746A can guide with certification



Do you want to claim non-PFAS and market non-PFAS material? UL746G can guide with Non-Fluorine or Non-PFAS rating