

Supplementary Table 2. Overview of widely studied PFAS compounds

PFAS compound	Carbon chain length	Molecular structure	Common applications
Carboxylic acids			
Perfluorodecanoic acid (PFDA)	10 (long-chain)	C <sub>9</sub> F <sub>19</sub> COOH	Industrial surfactants, lubricants
Perfluorononanoic acid (PFNA)	9 (long-chain)	C <sub>8</sub> F <sub>17</sub> COOH	Food packaging, industrial surfactants
Perfluorooctanoic acid (PFOA)	8 (long-chain)	C <sub>7</sub> F <sub>15</sub> COOH	Nonstick cookware, water-repellent materials
Perfluorohexanoic acid (PFHxA)	6 (short-chain)	C <sub>6</sub> F <sub>13</sub> COOH	Textile treatments, firefighting foam formulations
Perfluorobutanoic acid (PFBA)	4 (short-chain)	C <sub>4</sub> F <sub>9</sub> COOH	Food packaging, textiles
Sulfonic acids			
Perfluorooctanesulfonic acid (PFOS)	8 (long-chain)	C <sub>8</sub> F <sub>17</sub> SO <sub>3</sub> H	Firefighting foams, stain-resistant fabrics
Perfluorohexanesulfonic acid (PFHxS)	6 (short-chain)	C <sub>6</sub> F <sub>16</sub> SO <sub>3</sub> H	Firefighting foams, stain-resistant products
Perfluorobutanesulfonic acid (PFBS)	4 (short-chain)	C <sub>4</sub> F <sub>9</sub> SO <sub>3</sub> H	Firefighting foams (alternative), stain-resistant products (alternative)

PFAS, per- and polyfluoroalkyl substances.