

# Number of PFOS, PFOA, and PCB 153 Molecules in the Blood of an Average Person

**Number of Molecules of PCB 153 in Ave. U.S. Adult  $\approx$  13,000,000,000,000,000**

- A Lipid-adjusted Serum Concentration (2009-2010)
- B Average Body Weight (U.S. Adult)
- C Average Percent Body Fat (U.S. Adult)
- D Conversion Factor
- E Conversion Factor
- F Molecular Weight
- G Avogadro's Number

1.37812E+16 Exact No. Molecules

**VALUE UNITS**

- 0.59 nanogram/gram (ng/g)
- 70.00 kilogram (kg)
- 0.20 Percent Factor
- 1000.00 gram/kilogram (g/kg)
- 1.00E-09 gram/nanogram (g/ng)
- 361.00 gram/mole (g/mole)
- 6.02E+23 molecules/mole

Equation:  $A*B*C*D*E*(1/F)*G$

**Number of Molecules of PFOA in Ave. U.S. Adult 2009  $\approx$  47,000,000,000,000,000**

- A Serum Concentration (2011-2014)
- B Average Body Weight (U.S. Adult)
- C Volume of Distribution
- D Conversion Factor
- E Molecular Weight
- G Avogadro's Number

4.68E+16 Exact No. Molecules

**VALUE UNITS**

- 2.00 microgram/liter (ug/L)
- 70.00 kilogram (kg)
- 0.23 liter/kilogram (body weight) (L/kg)
- 1.00E-06 gram/microgram (g/ug)
- 414.00 gram/mole (g/mole)
- 6.02E+23 molecules/mole

Equation:  $A*B*C*D*(1/E)*G$

**Number of Molecules of PFOS in Ave. U.S. Adult 2009  $\approx$  97,000,000,000,000,000**

- A Serum Concentration (2013-2014)
- B Average Body Weight (U.S. Adult)
- C Volume of Distribution
- D Conversion Factor
- E Molecular Weight
- G Avogadro's Number

9.70E+16 Exact No. Molecules

**VALUE UNITS**

- 5.00 microgram/liter (ug/L)
- 70.00 kilogram (kg)
- 0.23 liter/kilogram (body weight) (L/kg)
- 1.00E-06 gram/microgram (g/ug)
- 500.00 gram/mole (g/mole)
- 6.02E+23 molecules/mole

Equation:  $A*B*C*D*(1/E)*G$