

## clearance

*in toxicology*

1. Volume of blood or plasma or mass of an organ effectively cleared of a substance by elimination (metabolism and excretion) divided by time of elimination.

Note:

Total clearance is the sum of the clearances of each eliminating organ or tissue for a given substance.

2. (*in pulmonary toxicology*) Volume or mass of lung cleared divided by time of elimination; used qualitatively to describe removal of any inhaled substance which deposits on the lining surface of the lung.
3. (*in renal toxicology*) Quantification of the removal of a substance by the kidneys by the processes of filtration and secretion; clearance is calculated by relating the rate of renal excretion to the plasma concentration.

**See also:** clearance,  $\Delta V/\Delta t$

**Source:**

PAC, 2004, 76, 1033 (*Glossary of terms used in toxicokinetics (IUPAC Recommendations 2003)*) on page 1045