

Difference between adsorption and absorption - FAQ

Although these two terms sound similar, they are actually quite distinct and should not be confused.

- **Adsorption** is the adhesion of a substance to a surface. This process creates a film of the adsorbate on the surface. In HPLC, an example might be the adsorption of water molecules on the surface of a hydrophilic stationary phase.

- **Absorption** is a process in which a substance is dissolved by a liquid or solid, called the *absorbent*. An example of absorption might be when doing an aqueous-organic extraction and a particular analyte enters the organic phase. The analyte is said to have been absorbed into the organic phase.

To put this in layman's terms and as a rule of thumb, with adsorption you can regain the molecule with elution, with absorption, the molecules are not recoverable. Sunlight is absorbed by skin and water is adsorbed by a paper towel.

Printed from the Chrom Resource Center

Copyright 2025, All Rights Apply

MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

Tel: (732) 380-8900

Fax: (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com