

Absorption vs Adsorption (vsdiff.com)

Absorption	Feature	Adsorption
Substance penetrates and spreads throughout the bulk of another material.	Definition	Substance adheres only to the surface of a material.
A bulk phenomenon affecting the volume of the material.	Nature	A surface phenomenon affecting only the material's outer layer.
Examples: Sponge soaking water, gases absorbed by liquids.	Examples	Examples: Activated carbon filtering, dye molecules sticking to clay.
Penetration occurs throughout the material volume.	Penetration	Occurs only at the surface of the material.
Takes more time as the substance spreads inside the bulk.	Speed	Typically faster as it occurs on the surface.
Can affect the entire volume of the material.	Scope	Limited to the surface layer.
Measured using concentration changes within the bulk.	Measurement	Measured using surface coverage and adsorption isotherms.

Source: <https://vsdiff.com/absorption-vs-adsorption/>