

Pure substance

[@wikipedia](#)

A [chemical substance](#) which maintains its [molecular](#) structure and [amount of substance](#) during the chemical and physical processes.

In [petroleum industry](#) the most frequent [pure substances](#) are [Alkanes](#) and [water \(H₂O\)](#).

In state of [Thermodynamic equilibrium](#) the various [phases](#) of a [pure substance](#) are always

A [pure substance](#) in a state of [Thermodynamic equilibrium](#) is always resolved in one of the [state of matter](#): [solid](#), [liquid](#), [gas](#) or [supercritical fluid](#) except phase equilibrium curves on [PT Diagram](#).

This is not the case for [mixtures](#) where various [phases](#) may occupy a continuous area in [PT Diagram](#) (see for example [Vapour Liquid Equilibrium](#)).

See Also

[Natural Science](#) / [Chemistry](#) / [Chemical Substance](#)

[[Mixtures](#)] [[Fluid Mixtures](#)]

[[Thermodynamic equilibrium](#)] [[Vapour Liquid Equilibrium \(VLE\)](#)]