

# Multi-phase fluid

Fluid containing more than one [phases](#) at certain [pressure](#) and [temperature](#) conditions.

Each [phase](#) of the [Multiphase Fluid](#) is represented either by a [pure substance](#) or by a [Fluid Mixture](#) (see [Multiphase Fluid vs Fluid Mixture](#)).

This means that some [Multiphase Fluids](#) may consist of one [pure substance](#) and as such are not [Fluid Mixtures](#). A typical example is water-steam equilibrium which is a [pure substance](#) fluid with two [phases](#) (liquid and gaseous).

The most popular multi-phase fluid are:

|                                   |         |
|-----------------------------------|---------|
| <a href="#">oil + gas</a>         | 2-phase |
| <a href="#">oil + water</a>       | 2-phase |
| <a href="#">gas + water</a>       | 2-phase |
| <a href="#">oil + gas + water</a> | 3-phase |

It is important to remember that [multi-phase fluid](#) may collapse to a [single-phase](#) state at certain [pressure](#) and [temperature](#) conditions.

For example, a [2-phase oil + gas](#) fluid may degrade to [single-phase](#) state when pressure goes up above [bubble point](#).

## See also

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[Natural Science / Physics / Thermodynamics / Thermodynamic system / Phase](#)

[ [Multiphase Fluid vs Fluid Mixture](#) ]