

Fluid Capacitance

[@wikipedia](#)

[Relative Dielectric Permittivity](#) of the [fluid](#).

The unit value corresponds to [vacuum permittivity](#).

The term is misnomer as it actually does not mean the true [capacitance](#) in conventional physical terms.

Math Symbol	ϵ_f		
Model	Fluid Capacitance @model		
Units	SI	Oil Metric	Oil Field
	frac	frac	frac

Typical values of [relative dielectric permittivity](#) for [petroleum fluids](#) at [SPE STP](#) are:

Water	Oil	Gas
80	20	5.6

See also

[Natural Science / Physics / State of matter / Fluid](#)

[Petroleum Industry / Upstream / Subsurface E&P Disciplines / Fluid Analysis](#)

[[Fluid Conductivity](#)]