

# Gas Mobility

A property characterising agility of the [gas](#) under [pressure](#) gradient with account of [reservoir permeability](#) and [dynamic fluid viscosity](#):

$$(1) \quad M_g = \frac{k_g}{\mu_g} = k_{air} \cdot M_{rg}$$

where

|                                 |  |
|---------------------------------|--|
| $k_g$                           | formation permeability to <a href="#">gas</a>          |
| $\mu_g$                         | dynamic viscosity of <a href="#">gas</a>               |
| $k_{air}$                       | absolute permeability to <a href="#">air</a>           |
| $k_{rg}$                        | relative formation permeability to <a href="#">gas</a> |
| $M_{rg} = \frac{k_{rg}}{\mu_g}$ | relative gas mobility                                  |

## See also

---

[Physics](#) / [Fluid Dynamics](#) / [Percolation](#)

[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Reservoir Flow Simulation](#)

[ [Field Study & Modelling](#) ] [ [Phase Mobility](#) ] [ [Relative Phase mobilities](#) ]