

Grunberg-Nissan viscosity blending equation

$$(1) \quad \ln \mu_{12} = x_1 \cdot \ln \mu_1 + x_2 \cdot \ln \mu_2 + \epsilon x_1 x_2$$

where

μ_{12}	dynamic viscosity of fluid mixture	μ_1	dynamic viscosity of the 1 st fluid component	μ_2	dynamic viscosity of the 2 nd fluid component
ϵ	empirical model parameters	x_1	mole fraction of the 1 st fluid component	x_2	mole fraction of the 2 nd fluid component

The empirical parameter ϵ can be fitted to lab data.

See also

[Physics / Fluid Dynamics / Fluid Mixing Rules / Mixing Rules for Viscosity](#)

Reference

L. Grunberg, A.H. Nissan, The energies o vaporization, viscosity and cohesion and the structure o liquids. Trans.Farada y Soc. 45 (1949) 125-137 cc.