

Rayleigh number = Ra

@wikipedia

Dimensionless quantity characterising the development of Natural Thermal Convection:

$$(1) \quad Ra = Gr \cdot Pr = \frac{g \beta \Delta T L^3}{\nu \cdot a}$$

where

ΔT	Temperature gradient across Natural Thermal Convection	ν	Kinematic viscosity of the fluid
β	Thermal expansion coefficient of the fluid	a	Thermal Diffusivity of the fluid
L	Characteristic length of Natural Thermal Convection	g	Standard gravity constant
$Pr = \frac{\nu}{a}$	Prandtl number	$Gr = \frac{g \beta \Delta T L^3}{\nu^2}$	Grashof number

See also

[Physics / Thermodynamics / Heat Transfer](#)

[[Dimensionless Heat Transfer Numbers](#)] [[Prandtl number](#)] [[Grashof number](#)]