2 The viscosity μ of a fluid can be determined by measuring the terminal velocity v_t of a sphere when it descends in the fluid. The fluid has a density ρ_f while the sphere has a density ρ_s and a diameter d. The viscosity can then be calculated using the equation

$$\mu = \frac{5(\rho_s - \rho_f)}{9v_t} d^2$$

The quantities measured are

v_t = (1.60 ± 0.04) m s^{-1}

ρ_s = (2700 ± 20) kg m^{-3}

ρ_f = (900 ± 10) kg m^{-3}

d = (20.0 ± 0.4) mm

What is the percentage uncertainty in the value of μ?

A 6.2 % **B** 7.1 % **C** 8.2 % **D** 30 %