

15 A volume of  $1.5\text{ m}^3$  of water is mixed with  $0.50\text{ m}^3$  of alcohol. The density of water is  $1000\text{ kg m}^{-3}$  and the density of alcohol is  $800\text{ kg m}^{-3}$ .

The volume of the mixture is  $2.0\text{ m}^3$ .

What is the density of the mixture?

A  $850\text{ kg m}^{-3}$

B  $900\text{ kg m}^{-3}$

C  $940\text{ kg m}^{-3}$

D  $950\text{ kg m}^{-3}$