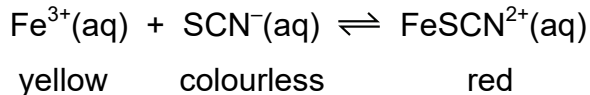


- 16** The reaction between aqueous iron(III) ions,  $\text{Fe}^{3+}$ , and aqueous thiocyanate ions,  $\text{SCN}^-$ , is reversible.

The equation for the reaction is shown.



At equilibrium, the concentrations of  $\text{Fe}^{3+}$  ions,  $\text{SCN}^-$  ions, and  $\text{FeSCN}^{2+}$  ions are identical, and the mixture appears orange.

When a few drops of aqueous thiocyanate ions are added to the mixture, a new equilibrium forms.

How does the colour of the mixture change?

- A** It becomes colourless.
- B** It becomes a lighter orange.
- C** It becomes more yellow.
- D** It becomes more red.