

After a while, the following equilibrium is established inside Chamber 1:

$$2 \text{ NO}_2(g) \rightleftharpoons \text{N}_2\text{O}_4(g) + 58 \text{ kJ mol}^{-1}$$
reddish colourless
brown

24. More N<sub>2</sub>O<sub>4</sub>(g) is added to Chamber 1. What observations would be made about the colour of the gas mixture and its temperature after a new equilibrium is established?

	Gas mixture colour	Temperature	
(a)	darker brown	higher	
(b)	darker brown	lower	
(c)	paler brown	higher	
(d)	paler brown	lower	