

16 Hydrogen peroxide solution decomposes very slowly at room temperature to produce oxygen gas. This gas forms a rising foam when liquid detergent is added.

Five test-tubes are half-filled with hydrogen peroxide solution. A drop of liquid detergent is added to each one.

Different metal oxides are added to four of the test-tubes and the height of the foam formed after one minute is measured. The results are shown.

metal oxide	height of foam / cm
no metal oxide added	0.1
aluminium oxide	0.1
calcium oxide	0.2
copper(II) oxide	2.3
manganese(IV) oxide	5.4

Which conclusion can be drawn from these results?

- A** Metal oxides do **not** affect the rate of this reaction.
- B** All metal oxides increase the rate of this reaction and act as catalysts.
- C** Manganese(IV) oxide is the best catalyst of the four metal oxides tested.
- D** Only transition element oxides increase the rate of this reaction.