Checking a Reusable Catalyst After Rinsing

Scoring guide · one credit per question · review written work against each rubric

Checking a Reusable Catalyst After Rinsing

Question 1

Compare the clean catalyst and no catalyst. At 30 s the clean catalyst gives 24 mL compared with 4 mL, but both finish at 40 mL. The reaction proceeds faster early on and reaches the same final amount.

Question 2

Choice (3)

The used catalyst gives 10 mL by 30 s before rinsing and 22 mL after rinsing. This directly compares the two conditions of the used material.

Question 3

The ratio is 2 mol H_2O_2 to 1 mol O_2. Therefore 0.015 mol O_2 × (2 mol H_2O_2 / 1 mol O_2) = 0.030 mol H_2O_2.

Question 4

Handle both used portions the same way and rinse only one. Compare oxygen volume after the same early interval using equal starting conditions. This holds handling fixed and varies rinsing.