

CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the October/November 2014 series

0620 CHEMISTRY

0620/53

Paper 5 (Practical), maximum raw mark 40

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- 1 (d) table of results
 initial temperature boxes completed correctly (1)
 final temperature boxes correctly completed (1)
 differences correct (1) include minus signs
 comparable to supervisors (1) [4]
- (e) bubbles / fizzing / effervescence (1)
 blue precipitate (1) [2]
- (f) all bars at correct levels (2),
 suitable scale (1)
 labels (1) [4]
- (g) (i) experiment 2 (1) [1]
 (ii) experiments 2 and 3 (1) temperature decreased (1) [2]
- (h) (i) half temperature change / half value in table (1) [1]
 (ii) half temperature change / half value in table (1) [1]
 (iii) half amount of solid used (1) [1]
- (i) room temperature / value from table (1)
 finished dissolving / reacting (1) [2]
- (j) carbonate (1) carbon dioxide (1) acid (1)
 Cu^{2+} (1) max [2]

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2 tests on solution M

- (a) colourless see test (e) ignore clear
pH 1–3 (1) [1]
- (b) bubbles (1) lighted splint goes out (1) [2]
- (c) fizz / bubbles etc. (1)
lighted splint (1) pops (1) [3]
- (d) white (1) precipitate (1) [2]
- (e) appearance colourless (1) must have (a) correct as well
pH 11–14 (1) [1]
[1]
- (f) colourless / no change (1)
with excess white (1) precipitate (1) [3]
- (g) litmus paper turns blue (1) pungent smell (1)
do not allow: strong [2]
- (h) (i) hydrogen (1) [1]
(ii) ammonia (1) [1]
- (i) hydrochloric acid (2) [2]
note: acid / chloride only (1)
- (j) (sodium / potassium) hydroxide (1) [1]