CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2013 series

0620 CHEMISTRY

0620/51 Paper 5 (Practical), maximum raw mark 40

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1 **(c)** Table of results for Experiments 1–4

mass of solids correctly recorded (1)

initial and maximum temperature boxes correctly completed (1)

temperature differences correct (1)

temperature changes increasing (1) [4]

(d) results for Experiment 5

initial and final temperatures completed (1)

temperature change completed correctly **and** shown as negative (1) [2]

(e) appropriate scale on y-axis which uses at least half of the grid (1)

all points correctly plotted (2), –1 for any incorrect ignore: origin

best fit straight line graph drawn with a ruler (1) [4]

(f) **(i)** value from graph (1) extrapolation shown clearly (1) [2]

(ii) value from graph (1)
shown clearly (1) [2]

(g) endothermic (1) [1]

(h) lower temperature change (1)

greater volume/more acid (1) [2]
note: halved = 2 marks

(i) room temperature / initial temperature from table (1)

reaction finished / owtte (1) [2]

(j) advantage e.g. comparability of results/fair test (1)

ignore: reference to accuracy or reliability

disadvantage e.g. reaction not finished / temperature still changing (1) [2]

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2 tests on liquid A

(a) colourless (1) not: clear
and
smells acidic/vinegar/sour/pungent/bitter/strong not: sweet [1]

red/orange/yellow (1) pH = 3–6 (1) [2]

(b) bubbles/fizzes/effervesces (1)

lighted splint (1)

pops (1) ignore: hydrogen [3]

(c) slow/few (1)
bubbles/effervescence/fizz (1) [2]

(d) blue/green colour (1) not: precipitate [1]

tests on liquid B

(e) **(i)** yellow/orange (1)
turns green (1)
not: blue [2]

(ii) pink/purple (1) turns colourless/decolourises (1)
not: clear [2]

(f) blue/yellow/orange (1)
flame/catches fire/lights (1) [2]

(g) ethanoic acid/vinegar (2) [2]

(h) organic (1) fuel (1) not: flammable

note: ethanol/alcohol = 2 [2]

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