

Centre Number						Candidate Number				
Surname										
Other Names										
Candidate Signature										

For Examiner's Use Total Task 2



General Certificate of Education
Advanced Level Examination
June 2013

Chemistry

CHM6X/PM2

Unit 6X A2 Externally Marked Practical Assignment

Task Sheet 2

To be completed before the EMPA Written Test

For submission by 15 May 2013

For this paper you must have:

- a ruler
- a calculator.

An investigation of a fungicide

Task 2 Some reactions of Bordeaux mixture

In this task, you will perform a series of tests starting from a sample of Bordeaux mixture. You will record your observations for each test.

Procedure

- **Wear eye protection at all times.**
- **Assume that all solids and solutions are toxic and corrosive.**
- **Design a table on the Candidate Results Sheet for Task 2 in which you can record your observations for Tests 1 to 6.**

Test 1

- Place about 3 cm³ of distilled or deionised water in a boiling tube.
- Add a spatula-load (as demonstrated by your teacher) of Bordeaux mixture.
- Stopper the tube and shake the contents for about 1 minute.
- Record what you observe after shaking.

Test 2

- Use a measuring cylinder to pour about 15 cm³ of dilute nitric acid into a 100 cm³ beaker.
- Add a spatula-load of the Bordeaux mixture to the acid in the beaker.
- Stir the contents of the beaker for about 1 minute.
- Record what you observe after stirring.

Test 3

- Wash out the beaker thoroughly with distilled or deionised water.
- Use a measuring cylinder to pour about 15 cm³ of dilute sulfuric acid into the beaker.
- Add two spatula-loads of the Bordeaux mixture to the acid in the beaker.
- Stir the contents of the beaker for about 1 minute.
- Separate the reaction products by filtering the contents of this beaker into a conical flask.
- Wash the filter paper with a little distilled or deionised water.
- Record the appearance of the filtrate and the solid in the filter paper.
- Do **not** discard this filtrate.

Use separate portions of this filtrate in Tests 4, 5 and 6.

Test 4

- Place about 2 cm³ of the filtrate into a clean test tube.
- Add dilute ammonia solution **dropwise** with shaking until there is no further change.
- Record what you observe.

Test 5

- Place about 2 cm³ of the filtrate into a clean boiling tube.
- Add about 5 cm³ of potassium iodide solution, shake and allow the mixture to stand until you have completed **Test 6**.
- Record what you observe.

Test 6

- Place about 2 cm³ of the filtrate into a clean boiling tube.
- Add about 2 cm³ of solution **X** and about 1 cm³ of solution **Y** and swirl to mix.
- Place the boiling tube in a beaker of water that has just been boiled. Leave for 2 minutes.
- Record what you observe.

You are **not** expected to do any further work in Task 2.
You will use your results in Section A of the Written Test.

Turn over for the Candidate Results Sheet for Task 2

Turn over ►

Candidate Results Sheet for Task 2

Teacher Group

Results

Record your observations in an appropriate table in the space below.

(7 marks)

For Examiner's use only			
R		A	

<hr/> 7
