

AS Level Chemistry B
H033/01 Foundations of chemistry

Question Set 7

Multiple Choice Questions

1 What is correct about hydrogen bromide?

- A It reacts with concentrated sulfuric acid to form Br_2 and H_2S .
- B It forms white fumes with ammonia.
- C Its M_r is 79.9.
- D It does **not** decompose on heating.

Your answer

[1]

2 Which row is correct for the silver halide shown?

	Halide	Colour	Solubility in ammonia
A	silver chloride	white	soluble
B	silver bromide	yellow	insoluble
C	silver iodide	yellow	soluble
D	silver iodide	cream	partially soluble

Your answer

[1]

3 CH_3Cl and CH_3I both react with hydroxide ions. What is correct about these reactions?

- A CH_3Cl reacts faster because the $\text{C}-\text{Cl}$ bond is more polar than the $\text{C}-\text{I}$ bond.
- B CH_3I reacts faster because the $\text{C}-\text{Cl}$ bond is stronger than the $\text{C}-\text{I}$ bond.
- C Both form ethanol.
- D In each case, homolytic bond fission occurs.

Your answer

[1]

4 What is **not** a property of hydrogen iodide?

- A It reacts with ammonia.
- B It is soluble in water.
- C It is stable to heat.
- D It reacts with sodium hydroxide.

Your answer

[1]

5 Which statement about the reactions of solid halides with concentrated sulfuric acid is correct?

- A Chlorides produce HCl as the only gas.
- B Bromides produce HBr , Br_2 and H_2S .
- C Iodides produce HI , I_2 and SO_2 .
- D Astatides would be expected to produce HAt only.

Your answer

[1]

6 What is a property of solid iodine?

- A It is very soluble in water.
- B It is purple in colour.
- C It dissolves in organic solvents.
- D It melts when heated at room pressure.

Your answer

[1]

7 Silver nitrate solution is added to solutions of sodium halides.

Which row is correct?

	Halide	Precipitate formed with silver nitrate
A	chloride	white, insoluble in ammonia
B	iodide	cream, insoluble in ammonia
C	chloride	cream, soluble in ammonia
D	iodide	yellow, insoluble in ammonia

Your answer

[1]

8 What is the action (if any) of concentrated sulfuric acid on HBr?

A No reaction

B Forms SO_2

C Forms H_2S

D Forms sulfur

Your answer

[1]

Total Marks for Question Set 7: 8

OCR

Oxford Cambridge and RSA

Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge