

Chemical Separation Techniques

Chemistry · Answer Key · 30 Questions

1. What is the boiling point of ethanol (RRG)?

- A) 78°C
- B) 65°C
- C) 100°C
- D) 329 K

2. What percentage of ethanol is present in the 95.4% RRG mixture?

- A) 4.6%
- B) 5.3%
- C) 2%
- D) 4%

3. Which substance has a boiling point of 338 K?

- A) Ethanol
- B) Acetone
- C) Benzene
- D) Water

4. What is the approximate boiling range for the component that separates between 70°C and 120°C?

- A) C1-C2
- B) C2-C3
- C) C3-C4
- D) C4-C5

5. What is the primary method discussed for separating components of mixtures?

- A) Filtration
- B) Centrifugation
- C) Fractional Distillation
- D) Evaporation

6. What is the residue in the fractional distillation of a mixture with components boiling at 65°C and 78°C?

- A) The component with bp 65°C
- B) The component with bp 78°C
- C) A mixture of both components
- D) None of the above

7. What is the boiling point of the component 'A' in the mixture?

A) 119°C

B) 65°C

C) 78°C

D) 100°C

8. Which temperature range corresponds to the separation of C3-C4 components?

A) 30°C - 70°C

B) 70°C - 120°C

C) 120°C - 150°C

D) 150°C - 280°C

9. What is the approximate boiling point of the azeotropic mixture (Ta)?

A) 329 K

B) 338 K

C) 395 K

D) 78°C

10. What is the boiling point of the component 'G' in the mixture?

A) 100°C

B) 65°C

C) 78°C

D) 119°C

11. What does 'qR' likely represent in the context of the text?

A) Quality Ratio

B) Quantitative Result

C) Quartile Range

D) Quick Reaction

12. What is the approximate boiling range for the separation of Co-Cyo components?

A) 120°C - 150°C

B) 150°C - 280°C

C) 280°C - 350°C

D) 350°C - 400°C

13. What is the boiling point of the component 'faRe1' with a boiling point of 65°C?

A) Ethanol

B) Acetone

C) Water

D) Benzene

14. What is the boiling point of the component 'e G' with a boiling point of 100°C?

- A) Ethanol
- B) Acetone
- C) Water**
- D) Benzene

15. What is the boiling point of the component 'Y At ceCE' with a boiling point of 119°C?

- A) Ethanol
- B) Acetone
- C) Water
- D) Benzene**

16. What does the notation '4.5.4' likely refer to in the text?

- A) A specific section or subsection**
- B) A chemical formula
- C) A temperature reading
- D) A percentage value

17. What is the boiling range for the separation of C-C10 components?

- A) 350°C - 400°C
- B) > 400°C**
- C) 280°C - 350°C
- D) 150°C - 280°C

18. What is the boiling range for the separation of C1-C2 components?

- A) 30°C - 70°C**
- B) 70°C - 120°C
- C) 120°C - 150°C
- D) > 400°C

19. What is the boiling range for the separation of C2-C3 components?

- A) 30°C - 70°C
- B) 70°C - 120°C**
- C) 120°C - 150°C
- D) 150°C - 280°C

20. What is the boiling range for the separation of C4-C5 components?

- A) 150°C - 280°C
- B) 280°C - 350°C**
- C) 350°C - 400°C
- D) > 400°C

21. What is the boiling range for the separation of C5-C7 components?

- A) 280°C - 350°C
- B) 350°C - 400°C
- C) > 400°C**
- D) 150°C - 280°C

22. What is the boiling range for the separation of C7-C10 components?

- A) 280°C - 350°C
- B) 350°C - 400°C
- C) > 400°C**
- D) 150°C - 280°C

23. What is the boiling range for the separation of C10-C12 components?

- A) 280°C - 350°C
- B) 350°C - 400°C
- C) > 400°C**
- D) 150°C - 280°C

24. What is the boiling range for the separation of C12-C15 components?

- A) 280°C - 350°C
- B) 350°C - 400°C
- C) > 400°C**
- D) 150°C - 280°C

25. What is the boiling range for the separation of C15-C20 components?

- A) 280°C - 350°C
- B) 350°C - 400°C
- C) > 400°C**
- D) 150°C - 280°C

26. What is the boiling range for the separation of C20-C25 components?

- A) 280°C - 350°C
- B) 350°C - 400°C
- C) > 400°C**
- D) 150°C - 280°C

27. What is the boiling range for the separation of C25-C30 components?

- A) 280°C - 350°C
- B) 350°C - 400°C
- C) > 400°C**
- D) 150°C - 280°C

28. What is the boiling range for the separation of C30-C40 components?

A) 280°C - 350°C

B) 350°C - 400°C

C) > 400°C

D) 150°C - 280°C

29. What is the boiling range for the separation of C40-C50 components?

A) 280°C - 350°C

B) 350°C - 400°C

C) > 400°C

D) 150°C - 280°C

30. What is the boiling range for the separation of C50-C60 components?

A) 280°C - 350°C

B) 350°C - 400°C

C) > 400°C

D) 150°C - 280°C