

Chemical Separation Techniques

Chemistry · Practice Test · 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