

## **CHAPTER 9 – POLYMERIZATION**

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### **Multiple Choice Questions**

1. Which of the following is a common monomer for polymerization?
- a.  Dispersed
  - b.  Crossed
  - c.  Branched
- ANSWER: b  
EXPLANATION: A crosslinked polymer is a polymer that has branched chains.
2. Which of the following is a dispersing medium when the monomer dissolves uniformly?
- a.  Branched
  - b.  Dispersed
  - c.  Crossed
- ANSWER: b  
EXPLANATION: A dispersed polymer is a polymer that has branched chains.
3. Radiation can be used to initiate which of the following reactions?
- a.  Condensation
  - b.  Polymerization
  - c.  Crosslinking
- ANSWER: b  
EXPLANATION: Radiation can be used to initiate polymerization reactions.
4. Which of the following is a soluble monomer?
- a.  Dispersed
  - b.  Branched
  - c.  Crossed
- ANSWER: b  
EXPLANATION: A dispersed polymer is a polymer that has branched chains.
5. Which of the following elements is not directly associated with early studies of polymerization?
- a.  Dispersed
  - b.  Branched
  - c.  Crossed
- ANSWER: b  
EXPLANATION: Early studies of polymerization were concerned with branched polymers.
6. Which of the following rules does not commonly apply to actions of polymerization?
- a.   $\text{A} + \text{B} \rightarrow \text{AB}$
  - b.   $\text{A} + \text{B} \rightarrow \text{A}$
- ANSWER: b  
EXPLANATION:  $\text{A} + \text{B} \rightarrow \text{A}$  is not a rule of polymerization.
7. Which of the following terms or features concern(s) positively charged particles?
- a.   $\text{A}^+$
  - b.   $\text{A}^-$
  - c.   $\text{A}^{\pm}$
- ANSWER: a  
EXPLANATION:  $\text{A}^+$  is a term of positive charge.
8. Which of the following terms or features concern(s) negatively charged particles?
- a.   $\text{A}^+$
  - b.   $\text{A}^-$
  - c.   $\text{A}^{\pm}$
- ANSWER: b  
EXPLANATION:  $\text{A}^-$  is a term of negative charge.