

- B) reagent for the production of fertilizers;
- C) fungicide;
- D) reagent for the production of synthetic detergents;
- E) defoliant.

**35. The composition of the condensed sodium phosphate corresponds to the formula:**

- A)  $\text{NaNH}_4\text{HPO}_4 \cdot 6\text{H}_2\text{O}$ ;
- B)  $\text{NaH}_2\text{PO}_4$ ;
- C)  $\text{Na}_4\text{P}_2\text{O}_7$ ;
- D)  $\text{Na}_2\text{HPO}_4 \cdot 7\text{H}_2\text{O}$ ;
- E)  $\text{Na}_3\text{PO}_4$ .

**36. The main stages of the technology for producing sodium tripolyphosphate:**

- A) mixing, filtering the solution, neutralization, drying;
- B) solution filtration, drying, neutralization, calcination;
- C) drying, calcination, solution filtration, neutralization;
- D) neutralization, solution filtration, drying, calcination;
- E) neutralization, purification, calcination, drying.

**37. The main reaction of the technology for producing sodium pyrophosphate:**

- A)  $\text{NaH}_2\text{PO}_4 = \text{NaPO}_3 + \text{H}_2\text{O}$ ;
- B)  $2\text{Na}_2\text{HPO}_4 = \text{Na}_4\text{P}_2\text{O}_7 + \text{H}_2\text{O}$ ;
- C)  $2\text{H}_3\text{PO}_4 + 4\text{NaCl} = \text{Na}_4\text{P}_2\text{O}_7 + 4\text{HCl} + \text{H}_2\text{O}$ ;
- D)  $\text{H}_3\text{PO}_4 + \text{Na}_2\text{CO}_3 = \text{Na}_2\text{HPO}_4 + \text{CO}_2 + \text{H}_2\text{O}$ ;
- E)  $2\text{Na}_2\text{HPO}_4 + \text{NaH}_2\text{PO}_4 = \text{Na}_5\text{P}_3\text{O}_{10} + \text{H}_2\text{O}$ .

**38. The main stages of obtaining sodium tripolyphosphate:**

- A) neutralization of soda → drying → calcination;
- B) decomposition → filtration → drying → sieving → crushing → packaging → finished product;
- C) neutralization of  $\text{H}_3\text{PO}_4$  with soda ash → filtration → drying → calcination;
- D) decomposition → filtration → washing → drying;
- E) ammonization → carbonization → filtration → drying → calcination → finished product.

**39. Sodium pyrophosphate decahydrate as the main component contains:**

- A)  $\text{Ca}_2\text{B}_6\text{O}_{11} \cdot 10\text{H}_2\text{O}$ ;
- B)  $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$ ;
- C)  $\text{Mg}_2\text{B}_2\text{O}_5 \cdot 10\text{H}_2\text{O}$ ;
- D)  $\text{Na}_4\text{P}_2\text{O}_7 \cdot 10\text{H}_2\text{O}$ ;
- E)  $\text{Ca}_4\text{B}_{10}\text{O}_{19} \cdot 10\text{H}_2\text{O}$ .

**40. The raw materials for the production of sodium pyrophosphate are:**

- A)  $\text{H}_2\text{SO}_4$ ,  $\text{Na}_2\text{CO}_3$ ;
- B)  $\text{H}_3\text{PO}_4$ ,  $\text{K}_2\text{CO}_3$ ;
- C)  $\text{H}_3\text{PO}_4$ ,  $\text{Na}_2\text{CO}_3$ ;
- D)  $\text{H}_3\text{PO}_3$ ,  $\text{Na}_2\text{SO}_4$ ;
- E)  $\text{HNO}_3$ ,  $\text{Na}_2\text{CO}_3$ .

**41. In the technologies of baking, artificial yeast, cheese and sausage production, in the cement industry and drilling equipment, in the production of synthetic rubber as raw materials are used:**

- A) potassium hydroxide;