

TEST TASKS

1. The main modifications of phosphorus are:

- A) grey, white, brown;
- B) blue, red;
- C) yellow, orange;
- D) blue, yellow;
- E) white, red, black.

2. Modification of phosphorus, which is obtained by electric distillation of natural phosphates, is:

- A) red;
- B) black;
- C) white;
- D) green;
- E) purple.

3. The main product produced by the combustion of phosphorus is:

- A) sulphurous anhydride;
- B) phosphoreum;
- C) sulfuric anhydride;
- D) phosphoric anhydride;
- E) metaphosphoric acid.

4. Phosphorus-containing substance that is used in the match industry:

- A) white phosphorus;
- B) phosphorus chloride;
- C) a sulfide of phosphorus;
- D) black phosphorus;
- E) blue phosphorus.

5. What properties does white phosphorus have:

- A) soluble in water;
- B) melts at room temperature;
- C) glow in the dark, has a peculiar smell;
- D) freezes at low temperature;
- E) does not ignite in air.

6. Basic reaction of phosphorus sublimation:

- A) $\text{Ca}_5(\text{PO}_4)_3\text{F} + 10\text{HNO}_3 = 3\text{H}_3\text{PO}_4 + 5\text{Ca}(\text{NO}_3)_2 + \text{HF}$;
- B) $\text{H}_3\text{PO}_4 + \text{Na}_2\text{CO}_3 = \text{Na}_2\text{HPO}_4 + \text{H}_2\text{O} + \text{CO}_2$;
- C) $\text{Ca}_3(\text{PO}_4)_2 + 5\text{C} + 2\text{SiO}_2 \rightarrow \text{P}_2 + 5\text{CO} + \text{Ca}_3\text{Si}_2\text{O}_7 - \text{Q}$;
- D) $\text{Ca}_5(\text{PO}_4)_3\text{F} + 5\text{H}_2\text{SO}_4 + n\text{H}_2\text{O} = 3\text{H}_3\text{PO}_4 + 5\text{CaSO}_4 \cdot n\text{H}_2\text{O} + \text{HF}$;
- E) $\text{Ca}_5(\text{PO}_4)_3\text{F} + 7\text{H}_3\text{PO}_4 + 5\text{H}_2\text{O} = 5\text{Ca}(\text{H}_2\text{PO}_4)_2 \cdot \text{H}_2\text{O} + \text{HF}$.

7. When sublimating phosphorus in the charge as a flux is introduced:

- A) asharites;
- B) phosphorites;