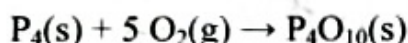


appearance, properties, and structure, black phosphorus is very much like graphite with both being black and flaky.

- Phosphorous Oxides:

Phosphorus Pentoxide is a chemical compound with molecular formula P_4O_{10} (with its common name derived from its empirical formula, P_2O_5). This white crystalline solid is the anhydride of phosphoric acid. It is a powerful desiccant and dehydrating agent.

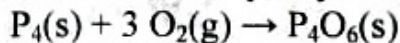
Phosphorus Pentoxide



Phosphorus pentoxide reacts with water to form phosphoric acid.



Phosphorus trioxide is the chemical compound with the molecular formula P_4O_6 . Although it should properly be named tetraphosphorus hexoxide, the name phosphorus trioxide preceded the knowledge of the compound's molecular structure, and its usage continues today. This colorless solid is structurally related to adamantane. It is formally the anhydride of phosphorous acid, H_3PO_3 , but cannot be obtained by the dehydration of the acid. It is a white, waxy, crystalline and highly toxic solid.



Phosphorus Trioxide



Phosphorus trioxide reacts with cold water to form phosphorous acid.

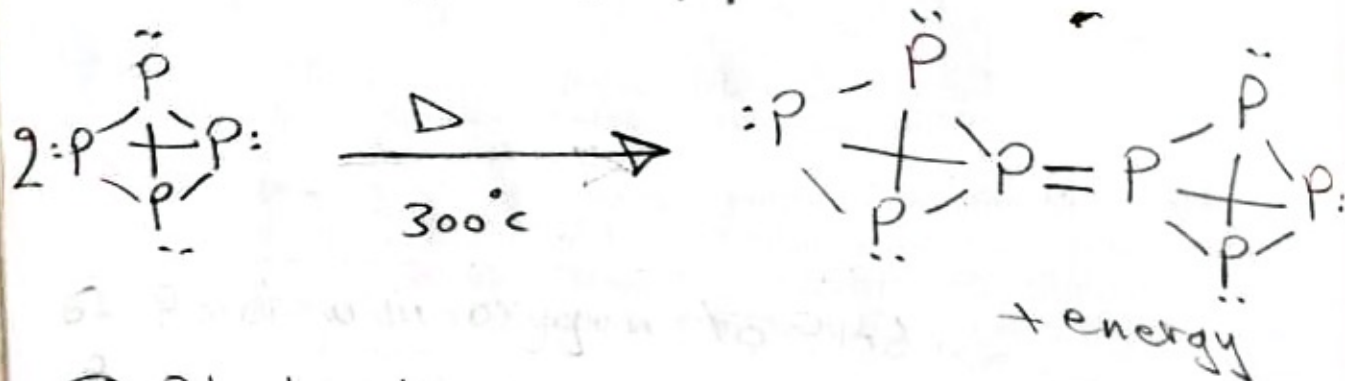
② Red phosphorous

الفوسفور الأحمر

③

Properties

- 1- More stable low active than P_4
- 2- Formula $P_4 - P_4$
- 3- Red powder
- 4- do not dissolve in water or CS_2
- 5- prepare by heat P_4 More than $300^\circ C$



③ Black phosphorus

الفوسفور الأسود

Properties

- ① More stable low active than Red & white phosphorus
- ② Like graphite with both being black, flat and classifies هَيَاقَان

