# Inorganic phosphate

2,5 - 4,5 normal values

Inorganic phosphate refers to the chemical compound containing a phosphate group, which is a molecule made up of one phosphorus atom and four oxygen atoms. Inorganic phosphate can exist in various forms, such as monophosphate (H2PO4-), diphosphate (HPO42-), and triphosphate (PO43-).

Inorganic phosphate plays a crucial role in many biological processes, including energy production and cellular signaling. For example, it is a key component of adenosine triphosphate (ATP), which is the primary energy source for many cellular processes. Inorganic phosphate is also involved in the regulation of enzyme activity and the metabolism of carbohydrates and fats.

In addition to its biological roles, inorganic phosphate is used in many industrial applications, such as in fertilizers, detergents, and food additives.

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Inorganic phosphate, also known as orthophosphate or Pi, is a molecule composed of one phosphorus atom and four oxygen atoms, represented as PO4(3-). It is an important compound in biological systems and plays a critical role in a variety of cellular processes, such as energy metabolism, nucleotide synthesis, and signal transduction. Inorganic phosphate is found in many foods, such as dairy products, meats, and whole grains, and is also present in many cellular fluids and tissues in the human body. It is tightly regulated by the body and imbalances in phosphate levels can lead to serious health conditions, such as hyperphosphatemia or hypophosphatemia.