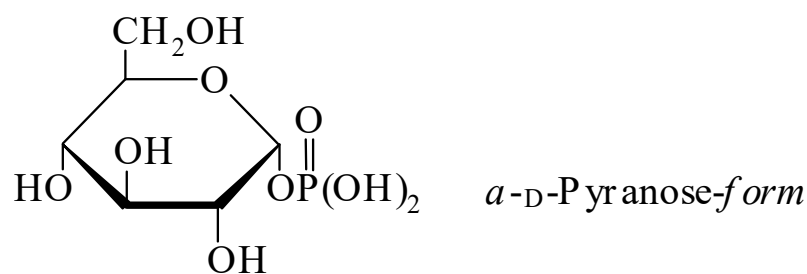




>>Entry Name: Glucose 1-dihydrogen phosphate

Synonym(s): Glucose 1-phosphate. Cori ester



Molecular Formula: C₆H₁₃O₉P

Molecular Weight: 260.137

Accurate Mass: 260.029722

Percentage Composition: C 27.70%; H 5.04%; O 55.35%; P 11.91%

>>Variant: D-form

CAS Registry Number: 59-56-3

Molecular Formula: C₆H₁₃O₉P

Molecular Weight: 260.137

Accurate Mass: 260.029722

Percentage Composition: C 27.70%; H 5.04%; O 55.35%; P 11.91%

Biological Source: Found widely in both plants and animals. A precursor of starch in plants and of glycogen in animals.

Optical Rotation: $[\alpha]_D^{25} +120$ (H₂O)

pKa Value: pK_{a2} 6.13 (30°)

>>Variant: α -D-Pyranose-form

Molecular Formula: C₆H₁₃O₉P

Molecular Weight: 260.137

Accurate Mass: 260.029722

Percentage Composition: C 27.70%; H 5.04%; O 55.35%; P 11.91%

>>Derivative: Ba salt

Optical Rotation: $[\alpha]_D^{25} +75$ (c, 1.2 in H₂O)

Other Data: Forms a trihydrate

>>Derivative: Di-K salt

CAS Registry Number: 29732-59-0

Extra CAS Registry Numbers(s): 5996-14-5

Optical Rotation: $[\alpha]_D^{20} +78$ (c, 4.0 in H₂O)

Other Data: Forms a dihydrate

>>Derivative: Brucine salt

Optical Rotation: $[\alpha]_D +0.5$ (H₂O)

>>Variant: α -L-Pyranose-form

Molecular Formula: C₆H₁₃O₉P

Molecular Weight: 260.137

Accurate Mass: 260.029722

Percentage Composition: C 27.70%; H 5.04%; O 55.35%; P 11.91%

>>Derivative: Ba salt

Optical Rotation: $[\alpha]_D -73.2$ (c, 1.0 in H₂O)

>>Derivative: Di-K salt

Optical Rotation: $[\alpha]_D -78.2$ (c, 1.0 in H₂O)