

PRODUCT INFORMATION



6-Phosphoglucono- δ -lactone (ammonium salt)

Item No. 38515

Formal Name: ((2R,3S,4S,5R)-3,4,5-trihydroxy-6-oxotetrahydro-2H-pyran-2-yl)methyl dihydrogen phosphate, ammonium salt

Synonyms: δ -Gluconolactone 6-phosphate, 6-Phospho-D-glucono-1,5-lactone, 6-Phosphogluconolactone

MF: $C_6H_{11}O_9P \cdot XNH_3$

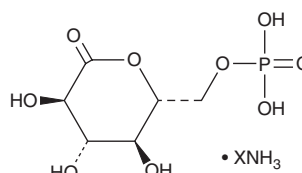
FW: 258.1

Purity: $\geq 98\%$

Supplied as: A solid

Storage: $-20^\circ C$

Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

6-Phosphoglucono- δ -lactone (ammonium salt) is supplied as a solid. A stock solution may be made by dissolving the 6-phosphoglucono- δ -lactone (ammonium salt) in the solvent of choice, which should be purged with an inert gas. 6-Phosphoglucono- δ -lactone (ammonium salt) is slightly soluble in DMSO.

6-Phosphoglucono- δ -lactone (ammonium salt) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

6-Phosphoglucono- δ -lactone is a metabolic intermediate in the pentose phosphate pathway, the main source of producing NADPH from glucose for many organisms.¹ It is produced from D-glucose-6-phosphate (Item No. 20376) by glucose-6-phosphate dehydrogenase (G6PDH) and is converted to 6-phosphogluconate by lactonase.

Reference

1. Berg, J.M., Tymoczko, J.L., and Stryer, L. *Biochemistry*, 5th edition. W. H. Freeman, New York (2002).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 03/20/2026

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM