Data Sheet (Cat.No.T0416)

TargetMol

Gluconate sodium

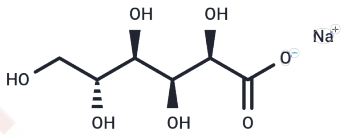
Chemical Properties

CAS No. : 527-07-1

Formula: C6H11NaO7

Molecular Weight: 218.14

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



Biological Description

Description	Gluconate sodium (Sodium D-gluconate) is the sodium salt of gluconic acid with a chelating property.
Targets(IC50)	ERK,Endogenous Metabolite,NO Synthase,Interleukin
In vitro	The inclusion of sodium gluconate in the diet enhances the retention of phosphorus and zinc. A diet comprising 2% sodium gluconate without phytase increases the retention of calcium. Additionally, a diet containing 4% sodium gluconate can reduce weight gain and improve feed efficiency.
In vivo	Sodium gluconate effectively chelates iron across a broad pH range, an attribute utilized in the textile industry to prevent iron deposition and desize polyester and polyamide fabrics. It is also employed as a concrete admixture, modulating setting times, enhancing strength and water resistance, and contributing to the manufacture of de-icing agents and the minimization of concrete cracking. Additionally, sodium gluconate serves in metallurgy for alkaline rust removal, in the cleaning of murals, and the dissolution of metal carbonate deposits without inducing corrosion. It can also be used in household cleaning compounds, including mouthwash.

Solubility Information

Solubility	DMSO: Insoluble, H2O: 10 mM,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.5842 mL	22.9211 mL	45.8421 mL
5 mM	0.9168 mL	4.5842 mL	9.1684 mL
10 mM	0.4584 mL	2.2921 mL	4.5842 mL
50 mM	0.0917 mL	0.4584 mL	0.9168 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Günal M. Animal Production Science, 2012, 53(4), 316-321