

α, α Trehalose Dihydrate

Catalog	Unit
TBS0011-10G	10 G
TBS0011-50G	50 G
TBS0011-100G	100 G
TBS0011-500G	500 G
TBS0011-1KG	1 KG

Product Details

Description: Trehalose dihydrate is a disaccharide composed of two glucose units linked by a strong α -1,1 glycosidic bond, imparting exceptional stability under acidic and high-temperature conditions.

Formal Name: α, α -Trehalose Dihydrate

Alternate Names: D(+)-Trehalose dihydrate; α, α -Trehalose dihydrate; (2R,3S,4S,5R,6R)-2-(hydroxymethyl)-6-[(2R,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)oxan-2-yl]oxyoxane-3,4,5-triol;

Molecular Formula: $C_{12}H_{22}O_{11} \cdot 2H_2O$

Formula Weight: 378.33

CAS Number: 6138-23-4

pH: 4.5-6.5

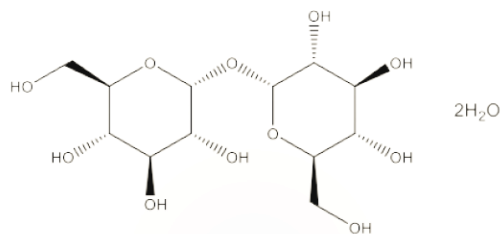
Formulation: Powder

Storage: Store in cool to room temperature, dry area

Shelf-life: 5 years

Applications

Trehalose is widely applied in the preservation of protein therapeutics, particularly in freeze-drying (lyophilization) processes. By immobilizing proteins in a glassy state below transition temperature (T_g), it reduces the risk of aggregation and denaturation, thereby maintaining the structural integrity and biological function of therapeutics during storage and transport.



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